

Course : B.Sc.(Computer Science) [2007-08 onwards]
Duration : 3 years
Medium : English
Eligibility : A pass in HSC (or) 3years Diploma
Lateral Entry II yr : 3 yr. Diploma in Computer Engineering / Information Technology/ EEE/ ECE

COURSE OF STUDY AND SCHEME OF EXAMINATIONS

Code No.	Name of the Course	Max. Mark
I Year		
1.1	Part I: Paper I: Tamil/Hindi/Communication Skills	100
1.2	Part II: Paper I: English	100
1.3	Digital Computer Fundamentals	100
1.4	Data Structures Using C	100
1.5	Discrete Mathematics	100
1.6	Computer Lab I (C and Data Structure Lab)	100
II Year		
2.1	Part I: Paper II: Tamil/Hindi/Human Skill Development	100
2.2	Part II: Paper II: English	100
2.3	Object Oriented Programming and C++	100
2.4	Scientific Computing	100
2.5	Application Programs	100
2.6	Computer Lab II (C++ Programming Lab)	100
2.7	Computer Lab III (Application Programs Lab)	100
III Year		
3.1	Computer Graphics	100
3.2	Visual Programming	100
3.3	Operating Systems	100
3.4	Internet Programming	100
3.5	RDBMS	100
3.6	Computer Lab – IV (Visual Basic and Oracle Lab)	100
3.7	Computer Lab V (Java Programming Lab)	100

Paper 1.3: DIGITAL COMPUTER FUNDAMENTALS

UNIT I

Number Systems Machine Codes: Binary, Octal, Decimal and Hexadecimal number systems - Conversion from one base to another base - Use of complements - Binary arithmetic - Number codes and Character codes.

UNIT II

Boolean Algebra and Combinational Circuits: Fundamental concepts of Boolean Algebra - De Morgan's theorems - Simplification of expressions - Sum of products and products of sums - Karnaugh map simplification - Quine-McKluskey method - Two level implementation of Combinatorial Circuits - Encoder - Decoder - Multiplexer - Demultiplexer.

UNIT III

The Arithmetic Logic Unit: Construction of ALU - Integer representation - Half Adder - Full Adder - Parallel Binary Adder - Positive and negative numbers - Addition and subtraction in a parallel arithmetic element.

UNIT IV

Sequential Circuits (Elementary qualitative treatment only) Flip-Flops - Clocks - Gated Flip-Flops - Master Slave Flip-Flops - Shift Registers - Binary Counters - BCD Counters.

UNIT V

Computer Basics - Data Representation - Input-Output Units - Computer Memory - Processor - Computer Generations and Classification.

REFERENCE BOOKS :

4. M.Morris Mano, Digital Logic and Computer Design, Prentice-Hall of India, 1979.
5. V.Rajaraman, Fundamentals Of Computers, 3rd edition, Prentice Hall, 1999.
6. Thomas C. Barte, Digital Computer Fundamentals, Ed6, McGraw Hill ISE (1985).
7. Albert Paul Malvino, Digital Computer Electronics, Tata McGraw Hill (1986).
8. Gear, C.W, Computer Organization and Programming, McGraw-Hill, (1975).

Paper 1.4: DATA STRUCTURES USING C

UNIT I

Introduction to C - Character set - Identifiers and keywords - Data types - Constants - Variables declarations - operators and Expressions - Input and Output - Entering input data - Writing output data - The gets and puts functions - Branching and Looping - Nested control structures - Switch - Break -Continue - goto.

UNIT II

Function - Accessing a Function - Passing arguments to a function - Recursion - Library function - Macros -The C preprocessor - Defining and processing an Array - Passing an array to functions - Multi dimensional array - arrays and String.

UNIT III

Pointers - Passing pointers to function - Dynamic memory allocation - Arrays of pointers - Passing functions to other functions - Defining structure - Processing structure - opening and closing a data file - creating a data file - processing a data file.

UNIT IV

Introduction to Data structures - Information and meaning - Stack structure - Definition - operations - Queue structure - representation - operations.

UNIT V

Linked list - Definition - representation - operation - Singly linked list - Doubly linked list - Trees - Binary trees - Binary tree representation - Representing list as Binary Trees - Trees and their Applications.

REFERENCE BOOKS :

1. Byron Gottfried, Programming with C, 1996, McGraw Hill International Edition,
2. Yedidyah Langsam, Moshe J.Augenstein, Aaron M.Tenenbaum, Data Structures Using C, 1990, Prentice-Hall, Second Edition.

Paper 1.5: DISCRETE MATHEMATICS

UNIT I

Propositional calculus: Propositions and compound propositions, connectives, Logical operations - Propositions and Truth tables, Tautologies and contradictions, Logical equivalence - Algebra of proposition - conditional and Bi-conditional statements – Quantifiers - Negation of quantifier statements.

UNIT II

Set Theory: Sets Basic concepts notation inclusion and equality of sets - Power set, set operations – Relations - composition of relations, Equivalence relations, partial order relation - n-ary relations.

UNIT III

Functions: one-to-one, onto and invertible functions - Mathematical functions, Exponential and Logarithmic functions - Recursively Defined functions - Algorithms and Functions - complexity of Algorithms.

UNIT IV

Algebraic systems - Examples and General properties - semi-groups and Monoids - Definitions and Examples - Groups: Definition and examples -Cosets and Lagrange's theorem -Normal subgroups - Group homomorphism.

UNIT V

Graph Theory: Graphs and multi-graphs sub-graph - Isomorphic and Homeomorphic Graphs - Paths connectivity - The Bridges of Knonigsberg, Traversable multigraphs Labeled and weight graphs - complete regular and Bipartite graphs - Tree graphs - planar graphs, Graph colorings, Representation of graph in Computer memory.

REFERENCE BOOKS

1. Venkatraman M K, Sridharan N and Chandrasekaran N, Discrete Mathematics, The National Publishing Company, 2000.
2. J.P. Tremblay and R. Manohar Discrete mathematical structures with applications to Computer Science Mc.Graw Hill Book Company, New York, 1975.

Paper 1.6 – Computer Lab I (C and DATA STRUCTURES LAB)

- 28) Write a C program to add two numbers.
- 29) Write a C program to find the Area of a circle.
- 30) Write a C program to calculate Simple Interest.
- 31) Write a C program to find square root, square and cube of any number.
- 32) Write a C program to calculate Compound Interest.
- 33) Write a C program to input a temperature in Celsius and find the corresponding temperature in Fahrenheit. Use the formula $f = 9 / 5 * C + 32$.
- 34) Write a C program to convert a given number into words for numbers 1 to 5. Ex. 1 to ONE, 2 to TWO and 5 to FIVE.
- 35) Write a C program to input a basic pay and calculate Gross pay and Net pay

INCOME:

HRA = 15% OF BASICPAY

DA = 90% OF BASICPAY

GROSSPAY = BASICPAY + DA + HRA

DEDUCTIONS :

PF = 10% OF BASICPAY

WCHARGE = 200

DEDUCTIONS = PF + WCHARGE

NET PAY = GROSS PAY – DEDUCTIONS

- 36) Write a C program to compute commission earned by a salesman according to the scheme given below:

SALES AMOUNT	COMMISSION %
Upto Rs. 1000	0
Above 1000 upto 5000	5
Above 5000	10

- 37) There are 10 students in an class. Their names and marks in three different subjects are given. If a student takes more than 40 marks in each subject, then he is declared 'PASS'. Otherwise 'FAIL'. Write a C program to do the above.
- 38) Write a C program that receives the data such as age and name of person to check the eligibility for voting. Take the condition that if a person is more than 18 years old he is eligible to vote. Else display the number of years, he has to wait for voting.
- 39) A man is paid at the hourly rate of Rs. 15/- per hour for the first 45 hours worked. Thereafter, overtime is paid at 1.5 times the hourly rate for the next 25 hours and 2

times the hourly rate for further hours worked per week, calculate and Print his gross weekly wage.

- 40) Write a C program to find the Biggest of 5 Nos. Modify the program to find the biggest of 10 Nos.
- 41) Write a C program to sort 10 numbers. in ascending order.
- 42) Write a C program to concatenate two given strings and find the length of the concatenated string.
- 43) Write a C program to find the factorial of a given number using FUNCTION declaration.
- 44) Write a C program to find Simple & Compound interests using FUNCTION declaration.
- 45) Write a C program to implement push and pop operations on stack.
- 46) Write a C program to evaluate the given mathematical expression using stack.
- 47) Write a C program to implement insert and delete operations on Linked List structure.
- 48) Write a C program to implement insert and delete operations on Queue using array concept.
- 49) Write a C program for linked list implementation of Queue operations.
- 50) Write a C program to sort 10 Nos. in Ascending order with naming of variable and the value before and after sorting.
- 51) Define Selection sort write a C program to sort a set of elements using selection sort.
- 52) Write a C program to sort a set of elements using Insertion sort.
- 53) Write a menu driven program in C to find an element using Linear and binary search methods.

Paper 2.3: OBJECT ORIENTED PROGRAMMING AND C++

UNIT-I

Introduction to C++ - Object Oriented Programming - principles - basic concepts - benefits - languages of OOP. C++ data types - operators - cin and cout streams - manipulators - functions.

UNIT-II

Objects and classes - messages - access specifier - data encapsulation -definition and declaration of member functions - constructor and destructor - inline function - friend function - static data and member function.

UNIT-III

Pointers : Pointers and references - this pointer - strings - new and delete operators - dynamic constructor - problems with pointer reference - copy constructor.

UNIT-IV

Polymorphism : compile time polymorphism - function overloading - operator overloading - overloading unary operators - overloading binary operators - pitfalls of operator overloading

UNIT-V

Reusability : Inheritance - types of inheritance - inheritance access specifier - derived and base classes - runtime polymorphism - static and dynamic binding - virtual function - pure virtual function - virtual base class - abstract class.

REFERENCE BOOKS

1. E.Balagurusamy, Object oriented programming in C++, 2002, TMH Publications Ltd.
2. Robert Lafore, Object Oriented Programming in Turbo C++, 2001, Galgotia Publ. Ltd.

Paper 2.4: SCIENTIFIC COMPUTING

Unit I

Linear System Of Equations: Solution of Systems of equations – Solution of Simultaneous linear equations – Gauss elimination methods – Gauss Jordan methods, Jacobi and Gauss Seidal iterative methods.

Unit III

Numerical Differentiation And Integration: Interpolation, Differentiation and integration – difference table – Newton's forward and backward interpolation –Lagrangian interpolation –Differentiation formulae– Trapezoidal and Simpson rule Gaussian – Quadrature

Unit III

Collection and Representation of Experimental data – Measures of Central Tendency and Location: Arithmetic Mean, Median, Mode, Position of averages – Measures of Dispersion: mean deviation, variance and standard deviation - Curve fitting by methods of least squares – Fitting of a straight line, Parabola and exponential curve.

Unit IV

Probability Distributions: Probability axioms- Bayes Theorem- Discrete random variables and Continuous random variables – Density & Distribution functions - Joint and marginal distributions – Conditional distributions - Characteristic function- moment generating function- expectation.

Unit V

Sampling - Small sample, t-test, F-test, χ^2 –test, ANOVA one way classification and two way classification

REFERENCE BOOKS

1. Grewal B.S, Numerical methods in Engineering and Science, Khanna Publishers, 1994.
2. John.E..Freund, Irwin Miller, Marylees Miller, Mathematical Statistics with Applications, Seventh Edition, Prentice Hall of India, 2004.
3. A.M.Natarajan & A.Tamilarasi, Probability Random Processes and Queuing theory, New Age International Publishers, 2nd Edition, 2005.
4. S.K. Gupta, Numerical Methods for Engineers, New age International Publishers , 1995.
5. S.C. Gupta and V.K. Kapoor, Fundamentals of Mathematical Statistics, 11th Edition, Sultan Chand & Sons, New Delhi, 2002.
6. D.W. Jordan and P. Smith, Mathematical Techniques, 3rd Edn, Oxford University Press, New Delhi, 2002.

Paper 2.5: APPLICATION PROGRAMS

UNIT I

Windows: Working with windows elements –Windows Desktop – View Drives with My Computer - Managing files with Windows Explorer – Working with multiple windows – Office Shortcut Bar – Start and Exit Office application – Menu Commands – Toolbars – Dialog boxes – Getting help in MS-Office – Creating, Opening, Saving Files.

UNIT II

MS-Word – Creating a New Word Document – Typing, Edit, Delete Text – Editing Keys – Select Text – Moving around the Document – Moving and Copying Text – Find and Replace Text – Insert Date or Time – Spell Checking – Getting often-used phrases – Table handling – Printing mailing labels – Formatting – Make Text Bold, Italic Underline – Changing Font and Size – Change default font – Copy formatting – Align Text – Indent Text – Create bullet and numbered list – Set Tabs – Using Ruler – Change margins – Change Line, paragraph spacing – Page numbering – Headers and Footers – Set up Columns – Templates and Wizards – Printing a document – Print preview – Page Orientation - Zoom in and Zoom out pages – Mailmerge – Creating form letters – Merging a form letter with data.

UNIT III

MS-EXCEL – Working with worksheets – Entering Text, Numbers, Date or Time – Formula Bar – Fill in Data – Autocomplete – Entering formulas - Absolute addresses in formulas - Working with Ranges – Functions – Editing, Deleting entries – Move and Copy data – Find and Replace Data – Insert and delete Rows and Columns – Resize Columns and Rows - Formatting – Bold, Italic, Underline, Font, Size Changes – Conditional Formatting – Change alignment – Number formatting – Borders – Headers and Footers – Creating a Chart – Working with Chart object – Change chart data, chart type – Formatting chart series – Database – Building an Excel Database – Add, Edit, Delete Records – Search database – Sort Excel database.

UNIT IV

MS-POWER POINT – Create and edit Power Point presentation – Editing Text – Add or Delete a Slide – Moving from slide to slide – Change views – Create graph chart, organization chart – Format and run a presentation – Text formatting and alignment – Drawing on slides – Color Scheme – Background – Using Design Template – Auto layout – Adding speaker notes – View Slide Show – Handouts.

UNIT V

MS-ACCESS & Sharing Office Data:- Creating a New Database - Creating and saving a table - Primary Key creation - Adding, Editing and Deleting fields - Changing the view and Moving fields - Data Entry and Editing - Adding, Inserting and Deleting Records - Adjusting Column Widths - Hiding Columns - Finding Records - Sorting Records - Creating, Saving and Editing a Query - Forms - Autoform - Using Report Wizard - Creating and Printing Reports - Sharing Office Data – Copy and Paste using Clipboard – Insert Copied data as a link – Embed copied data in another document – Combine Excel data and charts with Word Documents – Inserting Graphics - Group related documents with Binder.

REFERENCE BOOKS:

1. Jennifer fulton, Sherri Kinkoph, and Joe Kraynak, The Big Basics Book of Microsoft Office 1997, PHI, 1998.
2. Laura Acklen et al, Microsoft Office 97 Professional Essentials,EEE Que E&T, PHI (1998)

Paper 2.6 Computer Lab II (C++ Programming Lab)

1. Write a C++ program to reverse the sentence and find the given sentence is palindrome or not.
2. Write a temperature conversion program that gives the user the option of converting fahrenheit to celcius or celcius to fahrenheit. Then carry out the conversion. Use floating point numbers.
3. Create a class called TIME that has integer data elements for hours, minutes, seconds. The constructors should initialize these data elements to specified value, if given, and otherwise to 0. A member function should display it, in 11:50:45 format. The final member function should add two objects of type Time passed as arguments.
4. Using operator overloading, write a C++ program to find the different and total length of given two various tubes specified in meters and centimeters.
5. Assumes you want to generate a table of multiples of any given number. Write a program that allows the user to enter the number, and then generates the table, formatting it into ten columns and 20 lines.
6. Write a program to process students marks with the help of classes. The class has private variables, for name, mark1, mark2, mark3. It has two member functions - getdata()- to get input. - result() - to print the results. All subjects mark must be ≥ 50 for Pass otherwise Fail
7. Using dynamic constructors write a C++ program to concatenate two given strings.
8. Create a class Employee that contains a Employee number, Employee name and address. Write a Menu driven C++ program to get the 'n' number of employee details and display all details in employee name wise sorted order.
9. Using Pointers create a class and write a program to get the n names and display them in sorted order.
10. Create a class DONOR that contains donor number, donor name, age, address, sex, blood group.

Write a Menu driven C++ program to display the number, name and address of the donors for the following categories:

- (i) blood donors having the blood group O+
- (ii) blood donors in the age group between 16 to 25
- (iii) female donors having blood group A in the age between 19 and 24.

Write a menu driven C++ program to add and subtract given two matrices of order $m \times n$ defined in class, using operator overloading.

11. 12. Create a class called Employee that contains Employee number, employee name, designation, basic pay, deductions(LIC,PF). Include a member function to getdata from user for 'n' employees. Write a C++ program to prepare the payslips for 'n' number of employees using the following details:

D.A = 40% of basicpay
H.R.A = 25% of Basicpay
Gpay = Basicpay+D.A+H.R.A
Npay = Gpay-deductions

The Result of Problem is in given format:

```

-----
Emp.no Emp.name Basic D.A HRA LIC PF Gpay Npay
-----
--      --      --  --  --  --  --      --
-----

```

12. Imagine a publishing company that markets both books and audio-cassette versions of its works. Create a class publication that stores the title (a string) and price (type float) of a publication. From this class derive two classes:
 - BOOK, which adds a page count (type int).and TAPE, which adds a length count (type int). Each of these three classes should have a getdata() function to get its data from the user at the keyboard, and a putdata() function to display its data. Write a main() program to test the book and tape classes by creating instances of them, asking the user to fill in their data with getdata() and then displaying the data with putdata().
13. Raising a number n to power p is the same as multiplying by itself t times. Write a function called power() that takes a double value for n and an int value for p, and returns the result as double value. Use default argument of 2 for p, so that if this argument is omitted, the number will be squared. Write a main() function that gets values from the user to test this function.
14. Create a equivalent of a four-function calculator. The program should request the user to enter a number, an operator, and another number. It should then carry out the specified arithmetical operations: adding, multiplying, subtracting, dividing the two numbers. Finally it should display the result. When it finishes the calculation, the program should ask if the user wants to do another calculation.
15. 16. Create a class that imitates part of the functionality of the basic data type int. Call the class Int. The only data in this class is an integer variable. Include member functions to initialize an Int to zero, to initialize it to an integer value, to display it, and to add two Int values. Write a program that exercise this class by creating to initialized and one uninitialized Int values, adding these two initialized values and placing the sum in the uninitialized value, and then displaying the result.
16. Create a class called employee that contains a name and an employee number. Include a member function called getdata() to get data from the user, another function called putdata() to display the data. Write a main() program to exercise this class. It should create an array of type employee and then invite the user to input data for n employees.
17. Write a program using Polymorphism to calculate the square of any two numbers of type int, float, double and long.
18. Write a function called reversit() that reverse a string(an array of char). Use a for loop that swaps the first and last characters, then the second and next-to-last characters and so on. The string should be passed to reversit() as an argument.

Write a program to exercise `reversit()`. The program should get a string from the user, call `reversit()`, and print out the result. Use an input method that allows embedded blanks. Test the program with Napoleon's famous phrase "Able was I ere I saw Elba".

19. Create a class `Int` to Overload all five integer arithmetic operators (+,-,*,/,and %) so that they operate on objects of type `Int`. If the result of any such arithmetic operation exceeds the normal range of int's - from -32,768 ro 32,767- have the operator print a warning and terminate the program. Write a program to test this class.
20. Write a program that reads a group of numbers from the user and places them in array of type `float`. Once the numbers are sorted in the array, the program should average them and print the result. Use Pointer notation whenever possible.
21. Write a program using friend function `frifunc()` which can act on the classes `alpha` and `beta`. Using constructors fix the values for `alpha` and `beta`.
22. 23. Write a program that emulates the DOS `COPY` command. That is, it should copy the contents of a character file(such as any `cpp` file) to another file. Invoke the program with two command line arguments - the source file and the destination file. `C> copy srsfile.ext destfile.ext` In the program, check that the user has typed the correct number of command line arguments, and that the files specified can be opened. Improve on the DOS `TYPE` command by having the program signal an error if the destination file already exists.
23. Write a C++ program which will accept a string of 10 characters in length from the key board and count the occurrences of each of the five vowels in the string. The o/p should be in a (tapped) format similar to this example.

```
A  E  I  O  U
0  1  0  0  1
```

24. 25. Create a C++ class for a stock item abstract data type. It should have the attributes of stock levels(an integer) and unit price (a float). Define the methods to t return the values of these two attributes and to set them using parameters. Add two more methods to allow stock receipts and issues updating the stocklevel as appropriate. Write a menu driven c++ program to solve the problem.

Paper 2.7 Computer Lab III (Application Programs Lab)

MS-WORD

1. Prepare your resume with your photograph inserted. Use Table, bullets and different color features.
2. Prepare the First page of M.C.A. PRACTICAL RECORD NOTE book with picture insertion and alignment.
3. Prepare a news report using two columns, insert a picture in the first column and make the text flow around it.
4. Type lecture notes and provide audio explanation with the help of sound files.
5. Prepare an invitation for a function to be conducted in your institution. Use different text orientation and pictures to make it attractive.
6. Create a table of student data that contains REGNO, NAME, ENGLISH, TAMIL, and MATHS marks. Add a new column named TOTAL and find the row total for each student.

Add two rows named TOTAL, AVERAGE. Find the total and average values for each subject mark. Convert the table to text.

7. Create a form letter that informs the customer about the date of maturity of a deposit amount in a commercial bank and request the customer for renewal. Mailmerge it with an Access Database containing all the customer data. Prepare letters for customers whose due date falls in a specific range of dates.

MS-EXCEL

1. Create the following Inventory Worksheet in MS-EXCEL :

ITEMNO	NAME	PRICE	QUANTITY	STOCK	REORDER	PURCHASED	ISSUED
ON HAND	QUANTITY						

LEVEL

101	BOLTS	2.00	1000	500	300	800	200
-----	-------	------	------	-----	-----	-----	-----

- i) Enter all the data items except QUANTITY ON HAND for 10 items.
- ii) Find QUANTITY ON HAND using the formula

$$\text{STOCK QUANTITY} = \text{QUANTITY ON HAND} + \text{QUANTITY PURCHASED} - \text{QUANTITY ISSUED}$$

Find total stock value in inventory as a product of total quantity hand and total price(\sum quantity on hand * \sum price). Display all the items in red color whose quantity on hand is below reorder level.

2. Create the following worksheet in EXCEL for Electricity Bill

CONSUMER NO.	TYPE	NAME	PMR	CMR	UNITS	BILL
101	D	RAM	545	645		

i) Add data for 10 consumers with type 'D' for domestic user and type 'I' for Industrial user.

ii) Find UNITS column for each customer and calculate bill using the slab given below:

TYPE D CONSUMER

UNITS CONSUMED	RATE/UNIT Rs.
FIRST 100	0.80
NEXT 200	1.25
REMAINING	2.00

TYPE I CONSUMER

UNITS CONSUMED	RATE/UNIT Rs.
FIRST 100	1.10
NEXT 900	2.40
REMAINING	3.50

iii) All the consumers should be charged a minimum bill of Rs. 20/- even if their bill amount is below Rs. 20/-

3. Create a Worksheet in Ms-Excel with following columns:

Employee number, Employee Name, designation, Basic pay, Hra, Da, Lic, Pf, Grosspay, Netpay.

i) Type data for empno, empname, designation, Basicpay and Lic, Pf

ii) Calculate Hra = 20% of Basic

Da = 30% of Basic

Grosspay = Basic + Hra + Da

$$\text{Netpay} = \text{Grosspay} - (\text{Lic} + \text{pf})$$

- iii) Draw the bar chart between emp name and Netpay
- iv) Sort the designation column and employee column name at a time.

4. Create a Worksheet with the following columns.

Salesman number, Salesman Name, City, Product Name, Sale Amount.

Add three records for 5 different salesmen who have carried out sales of different products in different cities. Find the following:

- i) Citywise Total Sales
- ii) Salesmanwise total sales
- iii) Productwise total sales iv) Grand Total sales.

5. Create Internal Marks assessment worksheet with the following columns:

REGNO, NAME, SEX, TEST1, TEST2, TEST3, TEST AVERAGE,
ATTENDED DAYS, ATTENDANCE % , BONU MARK, INTERNAL MARK

- i) Add data for 20 students (Test marks are out of 30)
- ii) Compute TEST AVERAGE as average mark of best two out of three tests.
- iii) Maximum number of working days is 50. Each student should secure atleast 80% attendance.
- iv) Provide 1 bonus mark for each 1% attendance above eligibility limit 80%
- v) Compute Internal mark as TEST AVERAGE+Bonus Mark
- vi) Sort the data in alphabetical order of name.
- vii) Filter data for male and female students alone, who have attendance % below 80.

6. The following were the observations made in certain experiments for the values y and given the values of x.

X : 1 2 3 4 5 6 7 8 9 10

Y : 10 30 45 25 15 28 40 32 15 35

Compute the Following:

- i) Find Mean,Median and Standard deviation
- ii) Correlation coefficient between x and y.
- iii) Draw the Bar Chart and Shading cells.
- iv) Draw a Chart in Excel and Paste it an Word.

7. Create two worksheets containing day to day house hold expenses for the months January and February 2005, with the following columns:

ITEM	AMOUNT
Stationery	25.00

- i) Add 10 different items as shown above, for two months in two different worksheets.
- ii) Consolidate both the months data and find the total expenses on each item.
- iii) Find the Total expenses for two months.
- iv) Find the maximum and minimum expense amount.

8. Create a data table to create a ready reckoner table for a commercial bank that contains simple interest for Rs. 1,000/- with varying period and interest rates. Create the table as shown below:

READY RECKONER TABLE FOR INTEREST CALCULATION PER 1000

PERIOD	INTEREST RATE							
	3%	4%	5%	6%	7%	8%	9%	10%
11%								
1	30	40	50	60	70	80	90	100
110								
2								
3								
4								
5								
6								
7								
8								
9								
10								

9. Draw Line, Bar, PIE charts for the data given below:

ABC COMPANY LIMITED

YEAR	SALES	COST	PROFIT
1991	1000	400	600

Add data for 10 years from 1991 to 2000. Provide titles, legends, grids and data labels.

MS-ACCESS

Instructions: Open a New database and add tables

- 1) Create employee table with the fields EMPNO, NAME, AGE, SEX, STREET, CITY, PIN, SALARY.
 - i) Add data for 20 employees
 - ii) Write a query to display all the male employees whose salary is between 1000 and 5000 and living in city "CHENNAI".
 - iii) Write a query to display all the female employees whose ages are in the range 50-60
 - iv) Show all the records in the table for the city "TRICHY" by filtering.

- 2) Create STUDENT table with the following fields REGNO,NAME, MARK1, MARK2, MARK3. Create ADDRESS table with fields REGNO,STREET, CITY and PIN.
 - i) Write a query to display REGNO,NAME and total of all the three subject marks.
 - ii) Write a query to display REGNO,NAME, STREET, CITY, PIN and total of all the three subject marks.

- 3) Create Inventory table with fields ITEMNO,NAME,QUANTITY ON HAND, REORDER LEVEL.
 - i) Create a form in custom format.
 - ii) Create a query REORDER to show all the items
 - iii) Create a macro that executes REORDER query automatically.

- 4) Create STUDENT table with fields REGNO,I1,E1,I2,E2,I3,E3,I4,E4,I5,E5(internal and external marks in five subjects) and table SUBJECT with fields SCODE1, SNAME1,SCODE2,SNAME2,SCODE3,SNAME3,SCODE4,SNAME4,SCODE5, SNAME5 (Subject Code and Subject Names for Five subjects). Create a report to print marksheets for all the student in the following format.

ALAGAPPA UNIVERSITY, KARAIKUDI

STATEMENT OF MARKS

REGNO:05315001

NAME : RAMANA S

SUBCODE	SUBJECT NAME	INTERNAL	EXTERNAL	TOTAL	RESULT
101	SYSTEMS ANALYSIS	20	40	60	PASS
102	DBMS	22	50	72	PASS
103	VISUAL PROGRAMING	20	38	58	PASS
104	INTERNET PROGRAMMING	21	27	48	FAIL
105	COMPILER DESIGN	28	30	58	PASS
				TOTAL	248

- i) Condition for passing a subject : A minimum of 35 marks in external and 50 marks in total.
- ii) Grand total should not include total in failed subjects.
- iii) Display FAIL in red color.

5) Create two tables SALES1,SALES2 and join them to produce a Third table SALES3.

Paper 3.1: COMPUTER GRAPHICS

UNIT I

Introduction : Overview - Brief History - Applications of Computer Graphics - Video Display Generation - Input Devices - Hard copy Output Devices - Graphics System Software. Output Primitives : Point Plotting - Line Draw Algorithms - Using Equation of a Line - DDA - Bresenham's algorithm - Circle Generation Algorithms - Drawing Ellipse - Other Geometric Shapes - Region Filling Techniques.

UNIT II

Two Dimensional Transformations : Transformation Principles - Basic Transformations - Matrix Representation - Composite Transformations. Two Dimensional Viewing and Clipping : Viewing Transformations - Windows and viewports - Aspect Ratio - Clipping and Shielding : Point Clipping - Line segment clipping - Convex Polygon clipping - Sutherland Hodgman Algorithm.

UNIT III

Three Dimensional Transformations: Concepts - Basic Transformations: Translation, Scaling, Rotation and Mirror Reflection - Matrix Representation - Composite Transformations.

UNIT IV

Three Dimensional Viewing and Clipping : Viewing Process - Three Dimensional Viewing : Specifying Projection Plane and view volume - Clipping : Clipping against a finite view volume - Cohen Sutherland Algorithm - Constructing a three dimensional view - Hidden Surface Algorithm : Depth Comparison - Z-Buffer Algorithm.

UNIT V

User Interface Design : Components of User Interface - The User's Model - The Command Language - Styles of Command Language - Information Display - Feedback

REFERENCE BOOKS:

1. M. Newman and F. Sproull, Interactive Computer Graphics, 1979 McGraw Hill
2. Plastok and Gordon Kalley, Computer Graphics, 1986, McGraw Hill.

Paper 3.2: VISUAL PROGRAMMING

UNIT-I

Introduction to Windows - Windows Graphic User Interface (GUI) - Getting Started with Windows - Required Hardware and Software - Format of a Window - Icons - Selecting, Moving, Sizing Windows - Menus - Help.

UNIT-II

Program, File & Print Managers - Running Applications - Mutitasking - Clipboard - Control Panel - Print Manager - Write - Text formatting - Paintbrush - Picture Attributes - Drawing Tools - Windows Power User - Operating Modes - PIF Editor - OLE - Multimedia Windows.

UNIT-III

Visual Basic Concepts - Event-Driven Programming - Terminology - Working Screen - Controls and Events - Menu System - Programming Language - Tools: MsgBox, InputBox, Scroll Bars, Frames, CheckBox, Menus.

UNIT-IV

Program Design - Form and Controls - Writing the Code - Saving, Running and Testing - Making EXE File - Printouts - Program Flow: Logical Testing - Branching with IF, CASE, FOR..NEXT, DO Loops, WHILE..WEND.

UNIT-V

Procedures, Functions, Forms and Arrays - Creating Procedures, functions - Recursive Functions- Multiple Forms - Startup Forms - SubMain Procedure - Arrays and Loops - Control Arrays - Indexing and Event Handling - Graphics - MDI forms.

REFERENCE BOOKS:

3. AL Stevens, Teach Yourself Windows 3.1, 1994, BPB Publications.
4. P.K. McBride, Programming In Visual Basic, 1995, BPB Publications.

Paper 3.3: OPERATING SYSTEMS

UNIT I

Introduction: What is an operating system - History of Operating systems - Operating system concepts - System calls - Operating system structure.

UNIT II

Process Management: Introduction to processes - Interprocess Communication: Race conditions - Critical sections - Mutual exclusion - Semaphores - Event counters - Monitors - Message Passing - Process Scheduling - Round robin scheduling - Priority Scheduling - Multiple queues - Shortest job first - Policy driven scheduling - Two level scheduling.

UNIT III

Input/Output Management: I/O Devices - Device Controllers - Goals of I/O Software - Interrupt handlers - Device drivers - Device-independent I/O Software - User-space I/O Software - Deadlocks: Resources - Deadlock modeling - Detection and Recovery - Deadlock Prevention - Avoidance.

UNIT IV

Memory Management: Memory management without swapping or paging: Multiprogramming without swapping or paging - Multiprogramming and Memory usage - multiprogramming with fixed partitions - swapping: Multiprogramming with variable partitions - Memory management with Bit-maps, Linked-lists and Buddy System - Analysis of Swapping systems - Virtual Memory: Paging - Segmentation - Page replacement algorithms.

UNIT V

File Management: File basics - Directories - Disk space management - File storage - Directory structure - shared files - File system reliability - File system Performance - File servers - Security - Protection mechanisms.

REFERENCE BOOKS:

1. James L. Peterson and Abraham Silberschatz, Operating System Concepts, 2001, Addison Wesley.
2. Andrew S.Tanenbaum, Operating Systems Design and Implementation, 3rd edition, 2006, Prentice Hall.
3. Philippe A, Janson, Operating Systems Structures and Mechanisms, 1985, Academic Press.
4. Harvey M. Deitel, An Introduction to Operating Systems, 2003, Addison Wesley (1984).
5. Stuart E. Madnick and John J. Donovan, Operating Systems, 1974, McGraw Hill.
6. Per Brinch Hansen Operating System Principles Prentice-Hall of India (1973).

Paper 3.4: INTERNET PROGRAMMING

UNIT-I

Introduction to Networks - Network Topologies - Structure, Architecture, Design Issues, layers - Client Server Model. Protocols : TCP/IP - Importance, Terminology, Framework, protocol Stack - IP : Network layer - Internet address protocols - IP diagram, Header, Fragmentation, routing. TCP : Transport layer, ports - IP ports - TCP-Ports usage - TCP application layer.

UNIT-II

Domain Name System - Name Server Concepts - Resolver - Finger user information protocol - Internet E-mail - Mail Transfer Protocol - File Transfer Protocols - Managing Data - Telenet - HTTP - HTTP client Requests - URI - URLs - HTTP methods - Programming the WEB - Creating Web Server.

UNIT-III

Internet at Home - Entertainment on the Internet - Television and the Net, Movies and Music - At Office : Electronic Commerce - Shopping on the internet, Doing Business, Finding Job - At School : Internet Resources for K-12 Teachers, Self Education - Learning about science, Technology and the Internet Itself

UNIT-IV

Basics of Java - Object oriented programming - Principles - JAVA data types: Simple, Floating point, Character, Boolean - Variable Declaration - Dynamic Initialization - Type conversion and Casting - Arrays - One-dimensional and multidimensional. Operators and statements.

UNIT-V

Java Classes and Objects - Fundamentals - Object Reference variables - Introducing methods - Constructors - Overloading methods - Inheritance - I/O applets : I/O basics and applet fundamentals - String Handling: Constructor, length, operations, character extraction, comparison, searching and modifying.

REFERENCE BOOKS:

4. Kris Jamsa and Ken Cope, Internet Programming, 1995, Galgotia Publications Pvt. Ltd.
5. Neil Randall, Teach Yourself - The Internet in a week, Second Edition, 1996, PHI Pvt. Ltd.
6. Patrick Naughton and Herbert Schildt, Java - The Complete Reference, 2004, Tata McGraw Hill Publishing Company Ltd.

Paper 3.5: RDBMS

UNIT I

DBMS: Database - Database Management System - Features - Advantages - Data Base Scheme - Schema and Subschema - Manipulative capabilities - Guidelines - Different User Interfaces.

UNIT II

Relational Model : Concepts of Relational Model - Comments on the Relational Model: Semantic issues, Navigation, Efficiency - DBMS based on the Relational Model: The mapping operation - Data Manipulation facilities - Data Definition facilities - Data Control facilities.

UNIT III

Introduction to Oracle: Types of Databases, Relational Database properties, Benefits of Oracle, Client/Server Systems - Oracle Database Architecture: Overview of Oracle Architecture, Processes, Physical files, CPU, Network System Tables, Oracle Users, Logical Structures.

UNIT IV

Oracle Fundamentals: Elements of SQL Language: Database Objects, Data Access SQL commands, DML commands - Oracle Queries - Basic Query, Using Expressions, Working with NULL values, Joining Multiple Tables in a Query, Selecting Distinct values, Using Subqueries, Unions and Multiple part Queries.

UNIT V

Table Creation: Create Table statement, Privileges required, Describing Table Definitions, Modifying Tables, Renaming a Table, Copying another table, Dropping a Table - Other Database Objects, Reason for Database Objects, Indexes - Embedded SQL: Languages supported by Oracle Precompiler, Embedded SQL statements.

REFERENCE BOOKS:

1. Naveen Prakash, Introduction to Data Base Management, 1994, Tata McGraw-Hill Pub. Co. Ltd.
2. David Mcclanahan, Oracle Developers's Guide, 1996, Oracle Press.

Paper 3.6: Computer Lab IV (Visual Basic and Oracle Lab)

VISUAL BASIC

1) Write and test a VB Program to Print twenty address labels in a two-column format for the address

THE REGISTRAR
ALAGAPPA UNIVESITY
KARAIKUDI-630003.

2) Write and test a VB Program to read in Principal, Number of Years and Rate of Interest through INPUT Boxes, Compute and Print the Simple Interest and Compound Interest through labels.

3) Write and test a VB Program to compute the Surface area and volume of a sphere given the radius. Use Option buttons and INPUT Boxes.

[Formula: $A=4*3,14*R^2$, $V=4/3*3,14R^3$]

12) Write and test a VB Program to compute and print either the SUM or the PRODUCT of the first N natural numbers. Use option button.

13) Write and test a VB Program to compute and print either the sum of odd numbers or even numbers at the user's choice using Label, Text and Option buttons.

14) Write a VB program to do temperature conversion C to F and F to C at user's choice using Label, Text and Enter Key.

15) Write and test a VB Program that allows the user choice among four arithmetic operations of addition, subtraction, multiplication and division with two given numbers.

16) Write and test a VB program to select candidates for four posts, based on their qualifications,

MALE AND PG DEGREE	MANAGER
MALE, GRADUATE & TYPING	CLERK
FEMALE AND PG DEGREE	SECRETARY
FEMALE, GRADUATE & TYPING	STENO

17) Write and test a VB program to display the Day of the given Date and Covert Upper Case from Lower Case to given Word.

18) Write a VB program to calculate Simple Interest or Compound Interest using three command buttons namely Input, Calculate, Display.

ORACLE

2. Create table MARK with the following structure:

Fieldname	Type	Width	Decimal
REGNO	Numeric	8	

NAME	Character	20	
TAMIL	Numeric	3	
ENGLISH	Numeric	3	
MATHS	Numeric	3	
BIOLOGY	Numeric	3	

- vii) Add 5 Records.
- viii) Show data in fields REGNO, NAME, TAMIL & BIOLOGY alone on the screen.
- ix) Show data in fields REGNO, BIOLOGY & MATHS alone on the screen.
- x) Show data in fields NAME & REGNO alone on the screen.
- xi) Show all fields on the screen.

2) Create table ADDRESS with the following structure,

Fieldname	Type	Width	Decimal
NAME	character	20	
STREET	Character	20	
CITY	Character	20	
PIN	Numeric	6	

- vi) Add 5 Records.
- vii) Display the structure of the table.
- viii) Add the field DISTRICT
- ix) Fill all DISTRICT with MADURAI
- x) Change the PIN to 630003 where city is KARAIKUDI and PIN is 623003.

3) Create table RESULT with the following structure.

Fieldname	Type	Width	Decimal
REGNO	Numeric	8	
NAME	Character	20	
MARK1	Numeric	3	
MARK2	Numeric	3	
MARK3	Numeric	3	
TOTAL	Numeric	3	
RESULT	Character	4	

- iv) Add 5 records (Fill all Fields except Total & Result fields),
- v) Fill TOTAL field with the sum of MARK1, MARK2, and MARK3.
- vi) fill the RESULT field with 'PASS' if TOTAL >= 150 otherwise 'FAIL'

4) Create table PAY with the following structure,

Fieldname	Type	Width	Decimal
EMPNO	Numeric	8	
NAME	Character	25	
DOJ	Date		
BPAY	Numeric	8	2
DA	Numeric	8	2
HRA	Numeric	3	
DEDU	Numeric	3	
GPAY	Numeric	8	2
NPAY	Numeric	8	2

- viii) Add 5 Records, (Fill al fields except DA, HRA, DEDU, GPAY and NPAY)
- ix) Fill DA with 75% of BAY for all employees.
- x) Fill HRA with 300 for all employees.
- xi) Fill DEDU with 750 for all employees.
- xii) Fill GPAY with the sum of BPAY, DA and HRA.
- xiii) Fill NPAY with GPAY – DEDU.
- xiv) Display EMPNO, NAME, BAPY, DEDU, GPAY, NPAY alone.

5) Create table BIODATA with following structure,

Fieldname	Type	Width	Decimal
NAME	Character	25	
AGE	Numeric	2	
SEX	Character	1	
DEGREE	Character	8	
CITY	Character	20	

- vi) Add 5 records, (BIODATA of 5 employees)
- vii) Display all records of MALE employees.
- viii) Delete all BSC degree holders and then display the table contents.
- ix) Remove all employee records whose AGE is greater than 20.
- x) Display all records having AGE < 20 and CITY is TRICHY.

6) Create table LABEL with the following structure.

Fieldname	Type	Width	Decimal
NAME	Character	20	
STREET	Character	20	
CITY	Character	20	
PIN	Numeric	6	

- vi) Add 5 Records.
- vii) Display the contents of the table.
- viii) Display the Ascending order sorted list with NAME as primary key.

- ix) Display the Descending order sorted list with CITY as primary key.
- x) Display the contents with appropriate HEADINGS.

7) Create table PERSONAL with the following structure.

Fieldname	Type	Width	Decimal
SNO	Numeric	8	
NAME	Character	20	
CITY	Character	20	
PIN	Numeric	6	
PHONE	Numeric	6	

- viii) Add 5 Records.
- ix) Display the contents of the table.
- x) Display all names.
- xi) Display all names without duplicate.
- xii) Display all names in uppercase, lowercase and Initial Capital letters.
- xiii) Display all names and length of names.
- xiv) Display name, city in which only beginning portion of name is known.

8) Create table MARKS with the following structure.

Fieldname	Type	Width	Decimal
REGNO	Numeric	8	
NAME	Character	20	
MARK1	Numeric	3	
MARK2	Numeric	3	
MARK3	Numeric	3	
TOTAL	Numeric	3	
AVG	Numeric	6	
GRADE	Character	1	

- viii) Add 5 Records.
- ix) Replace all TOTAL with MARK1+MARK2+MARK3 and display the contents.
- x) Replace all AVG with TOTAL/3 and display the contents.
- xi) Replace GRADE with the following conditions:
 - GRADE is A if AVG is greater than or equal to 60
 - GRADE is B if AVG is 40 to 59.
 - GRADE is C if AVG is less than 40.
- xii) Display the Maximum marks in each subject.
- xiii) Display the Minimum marks in each subject.
- xiv) Count the number of records for mark1 >50.

9) Create table SALES with the following structure.

Fieldname	Type	Width	Decimal
SALENO	Numeric	5	
SALENAME	Character	20	
SALEAMT	Numeric	8	2
COMM	Numeric	6	2
SALEDATE	Date		

- vii) Add 5 Records.
- viii) Replace COMM with the following conditions:
 - If Sales amount is less than 1000 there is no commission.
 - If Sales amount is greater than or equal to 1000 but less than or equal to 5000, commission is 5% of sales amount.
 - If Sales amount is greater that 5000, commission is 10%.
- ix) Display all the records.
- x) Display the records having commission < 1000.
- xi) Display the records having commission > 1000.
- xii) Display the Average sales and Average commission.

10) Create table BLOOD with the following structure.

Fieldname	Type	Width	Decimal
DNO	Numeric	3	
DNAME	Character	20	
DOB	Date		
DAGE	Numeric	2	
DADD1	Character	15	
DADD2	Character	15	
DCITY	Character	15	
DPIN	Numeric	6	
DBLOOD	Character	3	
DSEX	Character	1	

- vii) Add 5 Records.
- viii) Display all the records.
- ix) Display the information of donors in the age group 20 to 25 using BETWEEN option.
- x) Display the information of donors having date of birth BETWEEN 01-JAN-55 and 31-DEC-75.
- xi) Display the information of donors having any of the blood group from the set of blood groups using IN option.

- xii) Display the information of female donors with age between 20 and 25 using BETWEEN option.

19) Create table NUMB with the following structure.

Fieldname	Type	Width	Decimal
NUM	Numeric	6	2
ABSNO	Numeric	6	2
SQRTNO	Numeric	6	2
ROUNDNO	Numeric	6	2
TRUNCNO	Numeric	6	2
SQRNO	Numeric	6	2
CUBENO	Numeric	6	2

- x) Add 5 Records. (Some numbers must be negative or decimal)
- xi) Display all the records.
- xii) Replace ABSNO with absolute value of given numbers.
- xiii) Replace SQRTNO with square root value of given numbers.
- xiv) Replace ROUNDNO by using ROUND function.
- xv) Replace TRUNCNO by using TRUNC function.
- xvi) Replace SQRNO with square of given numbers.
- xvii) Replace CUBNO with cube of given numbers.
- xviii) Display all the records.

Paper 3.7: Computer Lab V (Java Programming Lab)

1. Write a Java Program for Sorting a given list of names in ascending order using command line arguments.
2. Write a Java Program to multiply two given matrices.
3. Programs Illustrating Overloading & Overriding methods in Java.
4. Programs Illustrating the Implementation of Various forms of Inheritance. (Ex. Single, Hierarchical, Multilevel inheritance....)
5. Program which illustrates the implementation of multiple Inheritance using interfaces in Java.
6. Program illustrates the implementation of abstract class.
7. Programs to create packages in Java.
8. Program to Create Multiple Threads in Java.
9. Program to Implement Producer/Consumer problem using synchronization.
10. Program to Write Applets to draw the various polygons.
11. Create and Manipulate Labels, Lists, Text Fields, Text Areas & Panels
12. Handling Mouse Events & Keyboard Events.
13. Using Layout Managers.
14. Create & Manipulate the Following Text Areas, Canvas, Scroll bars, Frames, Menus, Dialog Boxes.
15. Program to count number of words & Characters in a text.
16. Programs which illustrates the use of files & Streams.
17. Program that reads on file name from the user and displays the contents of file.
18. Java Program that displays the no. of characters, lines & words in a text file.
19. Program to display the contents of file along with a line number before each line.
20. Program to read & write the data using Random Access File.



Course	:B.Sc.(Information Technology) [2007-08 onwards]
Duration	: 3 years
Medium	: English
Eligibility	: A pass in HSC (or) 3 Yr. Diploma
Lateral Entry II yr	: 3 yr. Diploma in Computer Engineering / Information Technology/ EEE/ ECE

Course of Study and Scheme of Examinations

Code No.	Name of the Course	Max. Mark
I Year		
1.1	Part I: Paper I: Tamil/Hindi/Communication Skills	100
1.2	Part II: Paper I: English	100
1.3	Digital Computer Fundamentals	100
1.4	C and Data Structures using C	100
1.5	Discrete Mathematics	100
1.6	Computer Lab I (C and Data Structures Lab)	100
II Year		
2.1	Part I: Paper II: Tamil/Hindi/Human Skill Development	100
2.2	Part II: Paper II: English	100
2.3	Internet Programming	100
2.4	Analysis and Design of Information Systems	100
2.5	Application Programs	100
2.6	Computer Lab II (Java Programming Lab)	100
2.7	Computer Lab III (Application Programs Lab)	100
III Year		
3.1	Computer Networks	100
3.2	Visual Programming	100
3.3	Principles of Information Technology	100
3.4	Mobile Computing	100
3.5	RDBMS	100
3.6	Computer Lab – IV (Visual Basic and Oracle Lab)	100
3.7	Computer Lab V (Networking Lab)	100

Paper 1.3: DIGITAL COMPUTER FUNDAMENTALS

UNIT I

Number Systems Machine Codes: Binary, Octal, Decimal and Hexadecimal number systems - Conversion from one base to another base - Use of complements - Binary arithmetic - Number codes and Character codes.

UNIT II

Boolean Algebra and Combinational Circuits: Fundamental concepts of Boolean Algebra - De Morgan's theorems - Simplification of expressions - Sum of products and products of sums - Karnaugh map simplification - Quine-McKluskey method - Two level implementation of Combinatorial Circuits - Encoder - Decoder - Multiplexer - Demultiplexer.

UNIT III

The Arithmetic Logic Unit: Construction of ALU - Integer representation - Half Adder - Full Adder - Parallel Binary Adder - Positive and negative numbers - Addition and subtraction in a parallel arithmetic element.

UNIT IV

Sequential Circuits (Elementary qualitative treatment only) Flip-Flops - Clocks - Gated Flip-Flops - Master Slave Flip-Flops - Shift Registers - Binary Counters - BCD Counters.

UNIT V

Computer Basics - Data Representation - Input-Output Units - Computer Memory - Processor - Computer Generations and Classification.

REFERENCE BOOKS :

9. M.Morris Mano, Digital Logic and Computer Design, Prentice-Hall of India, 1979.
10. V.Rajaraman, Fundamentals Of Computers, 3rd edition, Prentice Hall, 1999.
11. Thomas C. Barte, Digital Computer Fundamentals, Ed6, McGraw Hill ISE (1985).
12. Albert Paul Malvino, Digital Computer Electronics, Tata McGraw Hill (1986).
13. Gear, C.W, Computer Organization and Programming, McGraw-Hill, (1975).

Paper 1.4: DATA STRUCTURES USING C

UNIT I

Introduction to C - Character set - Identifiers and keywords - Data types - Constants - Variables declarations - operators and Expressions - Input and Output - Entering input data - Writing output data - The gets and puts functions - Branching and Looping - Nested control structures - Switch - Break -Continue - goto.

UNIT II

Function - Accessing a Function - Passing arguments to a function - Recursion - Library function - Macros -The C preprocessor - Defining and processing an Array - Passing an array to functions - Multi dimensional array - arrays and String.

UNIT III

Pointers - Passing pointers to function - Dynamic memory allocation - Arrays of pointers - Passing functions to other functions - Defining structure - Processing structure - opening and closing a data file - creating a data file - processing a data file.

UNIT IV

Introduction to Data structures - Information and meaning - Stack structure - Definition - operations - Queue structure - representation - operations.

UNIT V

Linked list - Definition - representation - operation - Singly linked list - Doubly linked list - Trees - Binary trees - Binary tree representation - Representing list as Binary Trees - Trees and their Applications.

REFERENCE BOOKS :

3. Byron Gottfried, Programming with C, 1996, McGraw Hill International Edition,
4. Yedidyah Langsam, Moshe J.Augenstein, Aaron M.Tenenbaum, Data Structures Using C, 1990, Prentice-Hall, Second Edition.

Paper 1.5: DISCRETE MATHEMATICS

UNIT I

Mathematical Logic: Statements and Notation - connectives -normal forms - The theory of inference for the statement calculus - The predicate calculus - Inference theory and predicate calculus.

UNIT II

Set theory: Sets - Basic concepts - notation - inclusion and equality of sets - the power set - relations and ordering - properties - relation matrix and graph of a relation - partition - equivalence and compatibility relations - composition – partial ordering - partially ordered set.

UNIT III

Functions - definition - composition - inverse - binary and n-ary operations - characteristic function - hashing function.

UNIT IV

Algebraic Structures: Algebraic Systems: Examples and General Properties - Semigroups and Monoids: Definitions and Examples - Homomorphism of Semigroups and Monoids - Subsemigroups and Submonoids

UNIT V

Groups: Definitions and Examples - Cosets and Lagrange's Theorem - Normal Subgroups - Algebraic Systems with two Binary Operations.

REFERENCE BOOKS:

3. Venkatraman M K, Sridharan N and Chandrasekaran N, Discrete Mathematics, The National Publishing Company, 2000.
4. J.P. Tremblay and R. Manohar Discrete mathematical structures with applications to Computer Science Mc.Graw Hill Book Company, New York, 1975.

Paper 1.6 – Computer Lab I (C and Data Structures Lab)

1. Write a C program to find the Area of a circle.
2. Write a C program to add two numbers.
3. Write a C program to calculate Simple Interest.
4. Write a C program to find square root, square and cube of any number.
5. Write a C program to calculate Compound Interest.
6. Write a C program to input a temperature in Celsius and find the corresponding temperature in Fahrenheit. Use the formula $f = 9 / 5 * C + 32$.
7. Write a C program to convert a given number into words for numbers 1 to 5. Ex. 1 to ONE, 2 to TWO and 5 to FIVE.
8. Write a C program to input a basic pay and calculate Gross pay and Net pay

INCOME:

- i. HRA = 15% OF BASICPAY
- ii. DA = 90% OF BASICPAY
- iii. GROSSPAY = BASICPAY + DA + HRA

DEDUCTIONS :

- iv. PF = 10% OF BASICPAY
- v. WCHARGE = 200
- vi. DEDUCTIONS = PF + WCHARGE

NET PAY = GROSS PAY – DEDUCTIONS

9. Write a C program to compute commission earned by a salesman according to the scheme given below:

SALES AMOUNT	COMMISSION %
Upto Rs. 1000	0
Above 1000 upto 5000	5
Above 5000	10

10. There are 10 students in an class. Their names and marks in three different subjects are given. If a student takes more than 40 marks in each subject, then he is declared 'PASS'. Otherwise 'FAIL'. Write a C program to do the above.
11. Write a C program that receives the data such as age and name of person to check the eligibility for voting. Take the condition that if a person is more than 18 years old he is eligible to vote. Else display the number of years, he has to wait for voting.

12. A man is paid at the hourly rate of Rs. 15/- per hour for the first 45 hours worked. Thereafter, overtime is paid at 1.5 times the hourly rate for the next 25 hours and 2 times the hourly rate for further hours worked per week, calculate and Print his gross weekly wage.
13. Write a C program to find the Biggest of 5 Nos. Modify the program to find the biggest of 10 Nos.
14. Write a C program to sort 10 numbers. in ascending order.
15. Write a C program to concatenate two given strings and find the length of the concatenated string.
16. Write a C program to find the factorial of a given number using FUNCTION declaration.
17. Write a C program to find Simple & Compound interests using FUNCTION declaration.
18. Write a C program to implement push and pop operations on stack.
19. Write a C program to evaluate the given mathematical expression using stack.
20. Write a C program to implement insert and delete operations on Linked List structure.
21. Write a C program to implement insert and delete operations on Queue using array concept.
22. Write a C program for linked list implementation of Queue operations.
23. Write a C program to sort 10 Nos. in Ascending order with naming of variable and the value before and after sorting.
24. Define Selection sort write a C program to sort a set of elements using selection sort.
25. Write a C program to sort a set of elements using Insertion sort.
26. Write a menu driven program in C to find an element using Linear and binary search methods.

Paper 2.3: INTERNET PROGRAMMING

UNIT-I

Introduction to Networks - Network Topologies - Structure, Architecture, Design Issues, layers - Client Server Model. Protocols : TCP/IP - Importance, Terminology, Framework, protocol Stack - IP : Network layer - Internet address protocols - IP diagram, Header, Fragmentation, routing. TCP : Transport layer, ports - IP ports - TCP-Ports usage - TCP application layer.

UNIT-II

Domain Name System - Name Server Concepts - Resolver - Finger user information protocol - Internet E-mail - Mail Transfer Protocol - File Transfer Protocols - Managing Data - Telenet - HTTP - HTTP client Requests - URI - URLs - HTTP methods - Programming the WEB - Creating Web Server.

UNIT-III

Internet at Home - Entertainment on the Internet - Television and the Net, Movies and Music - At Office : Electronic Commerce - Shopping on the internet, Doing Business, Finding Job - At School : Internet Resources for K-12 Teachers, Self Education - Learning about science, Technology and the Internet Itself

UNIT-IV

Basics of Java - Object oriented programming - Principles - JAVA data types: Simple, Floating point, Character, Boolean - Variable Declaration - Dynamic Initialization - Type conversion and Casting - Arrays - One-dimensional and multidimensional. Operators and statements.

UNIT-V

Java Classes and Objects - Fundamentals - Object Reference variables - Introducing methods - Constructors - Overloading methods - Inheritance - I/O applets : I/O basics and applet fundamentals - String Handling: Constructor, length, operations, character extraction, comparison, searching and modifying.

REFERENCE BOOKS:

- 1 Kris Jamsa and Ken Cope, Internet Programming, Galgotia Publications Pvt. Ltd. (1995)
- 2 Neil Randall, Teach Yourself The Internet in a week, Second Edition, PHI Pvt. Ltd. (1996)
- 3 Patrick Naughton and Herbert Schildt, Java - The Complete Reference, Tata McGraw Hill Publishing Company Ltd.

Paper 2.4: ANALYSIS AND DESIGN OF INFORMATION SYSTEMS

UNIT I

System Concepts and System Development Life Cycle: System Concepts - Characteristics - Elements of a system - Types of Systems: Abstract, Physical, Open, Closed and Man-made Information system - Computer Based Information Systems: MIS, DSS, TPS and OAS - System Development Life Cycle - Problem Definition - Feasibility Study - Analysis - Design - Development - Implementation - Post Implementation and Maintenance - System Analyst : Interpersonal Skills - Technical Skill - Communication Skills - Role of Systems Analyst.

UNIT II

System Analysis : Bases for planning in System Analysis - Preliminary Investigation - Determining the User's information requirements, Case Scenario, Problem Definition and Project Initiation, Background Analysis - Fact Finding Techniques : Interview - Questionnaire - Record Review - Observation. Systems Analysis: Analysing Systems data - Feasibility Study: Technical, Economical and Operational - Steps in Feasibility Analysis, Feasibility Report, Oral Presentation - Systems Costs & Benefits: Categories of Cost - Benefits - Cost Benefit Analysis: Break Even, Present Value, Pay Back and Cash Flow. Analysis Tools : Data flow concept - Data Flow Diagram - Data Dictionary - Decision Table - Decision Tree - Structured English.

UNIT III

System Design : Process and stages of System Design : Logical and Physical Design. Design Methodologies: Structured design - Form Driven Methodology - Major Development Activities - Input Output and Form Design: Input Design : Capturing Data for input - Input Validation - Input Design of on-line systems. Output Design - Printed, Display and Audio. Forms Design : Definition - Classification of Forms, Requirements of Forms Design - Types of Forms - Forms Control.

UNIT IV

File and Database Design: File concepts - Types of Files - Methods of File Organization - Sequential - Direct - Indexed - Database Design: Database concept - Types of Databases : Hierarchical, Network and Relational. System Development: Software Design - Top Down Approach - Flow Chart: System Flow Chart - Program Flow Chart - HIPO - IPO - VTOC - Warnier Orr Diagram - Structured Walkthrough - Quality Assurance - Levels of Assurance - System Testing - Special Systems Tests.

UNIT V

System Evaluation Implementation and Maintenance: Training Personnel - Training Methods - Conversion: Conversion Methods - Parallel, Direct, Pilot and Phase-in. Conversion Plan - Site Preparation - Data and File Preparation - Post Implementation Review - System Maintenance : Corrective - Adaptive - Hardware and Software Selection : Computer Industry - Software Industry - Procedure of Hardware and Software Selection: Major phases in Hardware and Software selection - Evaluation Process - Financial considerations.

REFERENCE BOOKS:

1. Elias M.Awad, Systems Analysis and Design, 1990, Galgotia Publication Pvt. Ltd.
2. James A. Sen, Analysis and Design of Information System, 1985, McGraw Hill.

Paper 2.5: APPLICATION PROGRAMS

UNIT I

Windows: Working with windows elements – Windows Desktop – View Drives with My Computer – Managing files with Windows Explorer – Working with multiple windows – Office Shortcut Bar – Start and Exit Office application – Menu Commands – Toolbars – Dialog boxes – Getting help in MS-Office – Creating, Opening, Saving Files.

UNIT II

MS-Word – Creating a New Word Document – Typing, Edit, Delete Text – Editing Keys – Select Text – Moving around the Document – Moving and Copying Text – Find and Replace Text – Insert Date or Time – Spell Checking – Getting often-used phrases – Table handling – Printing mailing labels – Formatting – Make Text Bold, Italic Underline – Changing Font and Size – Change default font – Copy formatting – Align Text – Indent Text – Create bullet and numbered list – Set Tabs – Using Ruler – Change margins – Change Line, paragraph spacing – Page numbering – Headers and Footers – Set up Columns – Templates and Wizards – Printing a document – Print preview – Page Orientation – Zoom in and Zoom out pages – Mailmerge – Creating form letters – Merging a form letter with data.

UNIT III

MS-EXCEL – Working with worksheets – Entering Text, Numbers, Date or Time – Formula Bar – Fill in Data – Autocomplete – Entering formulas – Absolute addresses in formulas – Working with Ranges – Functions – Editing, Deleting entries – Move and Copy data – Find and Replace Data – Insert and delete Rows and Columns – Resize Columns and Rows – Formatting – Bold, Italic, Underline, Font, Size Changes – Conditional Formatting – Change alignment – Number formatting – Borders – Headers and Footers – Creating a Chart – Working with Chart object – Change chart data, chart type – Formatting chart series – Database – Building an Excel Database – Add, Edit, Delete Records – Search database – Sort Excel database.

UNIT IV

MS-POWER POINT – Create and edit Power Point presentation – Editing Text – Add or Delete a Slide – Moving from slide to slide – Change views – Create graph chart, organization chart – Format and run a presentation – Text formatting and alignment – Drawing on slides – Color Scheme – Background – Using Design Template – Auto layout – Adding speaker notes – View Slide Show – Handouts.

UNIT V

MS-ACCESS & Sharing Office Data:- Creating a New Database – Creating and saving a table – Primary Key creation – Adding, Editing and Deleting fields – Changing the view and Moving fields – Data Entry and Editing – Adding, Inserting and Deleting Records – Adjusting Column Widths – Hiding Columns – Finding Records – Sorting Records – Creating, Saving and Editing a Query – Forms – Autoform – Using Report Wizard – Creating and Printing Reports – Sharing Office Data – Copy and Paste using Clipboard – Insert Copied data as a link – Embed copied data in another document – Combine Excel data and charts with Word Documents – Inserting Graphics – Group related documents with Binder.

REFERENCE BOOKS:

3. Jennifer fulton, Sherri Kinkoph, and Joe Kraynak, The Big Basics Book of Microsoft Office 1997, PHI, 1998.
4. Laura Acklen et al, Microsoft Office 97 Professional Essentials,EEE Que E&T, PHI (1998)

Paper 2.6 Computer Lab II (Java Programming Lab)

1. Write a Java Program for Sorting a given list of names in ascending order using command line arguments.
2. Write a Java Program to multiply two given matrices.
3. Programs Illustrating Overloading & Overriding methods in Java.
4. Programs Illustrating the Implementation of Various forms of Inheritance. (Ex. Single, Hierarchical, Multilevel inheritance....)
5. Program which illustrates the implementation of multiple Inheritance using interfaces in Java.
6. Program illustrates the implementation of abstract class.
7. Programs to create packages in Java.
8. Program to Create Multiple Threads in Java.
9. Program to Implement Producer/Consumer problem using synchronization.
10. Program to Write Applets to draw the various polygons.
11. Create and Manipulate Labels, Lists, Text Fields, Text Areas & Panels
12. Handling Mouse Events & Keyboard Events.
13. Using Layout Managers.
14. Create & Manipulate the Following Text Areas, Canvas, Scroll bars, Frames, Menus, Dialog Boxes.
15. Program to count number of words & Characters in a text.
16. Programs which illustrates the use of files & Streams.
17. Program that reads on file name from the user and displays the contents of file.
18. Java Program that displays the no. of characters, lines & words in a text file.
19. Program to display the contents of file along with a line number before each line.
20. Program to read & write the data using Random Access File.

Paper 2.7 Computer Lab III (Application Programs Lab)

MS-WORD

1. Prepare your resume with your photograph inserted. Use Table, bullets and different color features.
2. Prepare the First page of M.C.A. PRACTICAL RECORD NOTE book with picture insertion and alignment.
3. Prepare a news report using two columns, insert a picture in the first column and make the text flow around it.
4. Type lecture notes and provide audio explanation with the help of sound files.
5. Prepare an invitation for a function to be conducted in your institution. Use different text orientation and pictures to make it attractive.
6. Create a table of student data that contains REGNO, NAME, ENGLISH, TAMIL, and MATHS marks. Add a new column named TOTAL and find the row total for each student.

Add two rows named TOTAL, AVERAGE. Find the total and average values for each subject mark. Convert the table to text.

7. Create a form letter that informs the customer about the date of maturity of a deposit amount in a commercial bank and request the customer for renewal. Mailmerge it with an Access Database containing all the customer data. Prepare letters for customers whose due date falls in a specific range of dates.

MS-EXCEL

1. Create the following Inventory Worksheet in MS-EXCEL :

ITEMNO	NAME	PRICE	QUANTITY	STOCK	REORDER	PURCHASED	ISSUED
ON HAND	QUANTITY						

LEVEL

101	BOLTS	2.00	1000	500	300	800	200
-----	-------	------	------	-----	-----	-----	-----

- i) Enter all the data items except QUANTITY ON HAND for 10 items.
- ii) Find QUANTITY ON HAND using the formula

$$\text{STOCK QUANTITY} = \text{QUANTITY ON HAND} + \text{QUANTITY PURCHASED} - \text{QUANTITY ISSUED}$$

Find total stock value in inventory as a product of total quantity hand and total price(\sum quantity on hand * \sum price). Display all the items in red color whose quantity on hand is below reorder level.

2. Create the following worksheet in EXCEL for Electricity Bill

CONSUMER NO.	TYPE	NAME	PMR	CMR	UNITS	BILL
101	D	RAM	545	645		

i) Add data for 10 consumers with type 'D' for domestic user and type 'I' for Industrial user.

ii) Find UNITS column for each customer and calculate bill using the slab given below:

TYPE D CONSUMER

UNITS CONSUMED	RATE/UNIT Rs.
FIRST 100	0.80
NEXT 200	1.25
REMAINING	2.00

TYPE I CONSUMER

UNITS CONSUMED	RATE/UNIT Rs.
FIRST 100	1.10
NEXT 900	2.40
REMAINING	3.50

iii) All the consumers should be charged a minimum bill of Rs. 20/- even if their bill amount is below Rs. 20/-

3. Create a Worksheet in Ms-Excel with following columns:

Employee number, Employee Name, designation, Basic pay, Hra, Da, Lic, Pf, Grosspay, Netpay.

i) Type data for empno, empname, designation, Basicpay and Lic, Pf

ii) Calculate Hra = 20% of Basic

Da = 30% of Basic

Grosspay = Basic + Hra + Da

Netpay = Grosspay -(Lic + pf)

iii) Draw the bar chart between emp name and Netpay

iv) Sort the designation column and employee column name at a time.

4. Create a Worksheet with the following columns.

Salesman number, Salesman Name, City, Product Name, Sale Amount.

Add three records for 5 different salesmen who have carried out sales of different products in different cities. Find the following:

- i) Citywise Total Sales
- ii) Salesmanwise total sales
- iii) Productwise total sales
- iv) Grand Total sales.

5. Create Internal Marks assessment worksheet with the following columns:

REGNO, NAME, SEX, TEST1, TEST2, TEST3, TEST AVERAGE,
ATTENDED DAYS, ATTENDANCE % , BONU MARK, INTERNAL MARK

- i) Add data for 20 students (Test marks are out of 30)
- ii) Compute TEST AVERAGE as average mark of best two out of three tests.
- iii) Maximum number of working days is 50. Each student should secure atleast 80% attendance.
- iv) Provide 1 bonus mark for each 1% attendance above eligibility limit 80%
- v) Compute Internal mark as TEST AVERAGE+Bonus Mark
- vi) Sort the data in alphabetical order of name.
- vii) Filter data for male and female students alone, who have attendance % below 80.

6. The following were the observations made in certain experiments for the values y and given the values of x.

X : 1 2 3 4 5 6 7 8 9 10

Y : 10 30 45 25 15 28 40 32 15 35

Compute the Following:

- v) Find Mean, Median and Standard deviation
- vi) Correlation coefficient between x and y.
- vii) Draw the Bar Chart and Shading cells.
- viii) Draw a Chart in Excel and Paste it an Word.

7. Create two worksheets containing day to day house hold expenses for the months January and February 2005, with the following columns:

ITEM	AMOUNT
Stationery	25.00

- v) Add 10 different items as shown above, for two months in two different worksheets.
- vi) Consolidate both the months data and find the total expenses on each item.
- vii) Find the Total expenses for two months.
- viii) Find the maximum and minimum expense amount.

8. Create a data table to create a ready reckoner table for a commercial bank that contains simple interest for Rs. 1,000/- with varying period and interest rates. Create the table as shown below:

READY RECKONER TABLE FOR INTEREST CALCULATION PER 1000

PERIOD	INTEREST RATE							
	3%	4%	5%	6%	7%	8%	9%	10%
11%								
1	30	40	50	60	70	80	90	100
110								
2								
3								
4								
5								
6								
7								
8								
9								
10								

9. Draw Line, Bar, PIE charts for the data given below:

ABC COMPANY LIMITED

YEAR	SALES	COST	PROFIT
1991	1000	400	600

Add data for 10 years from 1991 to 2000. Provide titles, legends, grids and data labels.

MS-ACCESS

Instructions: Open a New database and add tables

- 1) Create employee table with the fields EMPNO, NAME, AGE, SEX, STREET, CITY, PIN, SALARY.
 - v) Add data for 20 employees
 - vi) Write a query to display all the male employees whose salary is between 1000 and 5000 and living in city "CHENNAI".
 - vii) Write a query to display all the female employees whose ages are in the range 50-60
 - viii) Show all the records in the table for the city "TRICHY" by filtering.

- 2) Create STUDENT table with the following fields REGNO,NAME, MARK1, MARK2, MARK3. Create ADDRESS table with fields REGNO,STREET, CITY

and PIN.

- iii) Write a query to display REGNO,NAME and total of all the three subject marks.
 - iv) Write a query to display REGNO,NAME, STREET, CITY, PIN and total of all the three subject marks.
- 3) Create Inventory table with fields ITEMNO,NAME,QUANTITY ON HAND, REORDER LEVEL.
- i) Create a form in custom format.
 - ii) Create a query REORDER to show all the items
 - iii) Create a macro that executes REORDER query automatically.

4) Create STUDENT table with fields REGNO,I1,E1,I2,E2,I3,E3,I4,E4,I5,E5(internal and external marks in five subjects) and table SUBJECT with fields SCODE1, SNAME1,SCODE2,SNAME2,SCODE3,SNAME3,SCODE4,SNAME4,SCODE5, SNAME5 (Subject Code and Subject Names for Five subjects). Create a report to print marksheets for all the student in the following format.

**ALAGAPPA UNIVERSITY, KARAIKUDI
STATEMENT OF MARKS**

REGNO:05315001

NAME : RAMANA S

SUBCODE	SUBJECT NAME	INTERNAL	EXTERNAL	TOTAL	RESULT
101	SYSTEMS ANALYSIS	20	40	60	PASS
102	DBMS	22	50	72	PASS
103	VISUAL PROGRAMING	20	38	58	PASS
104	INTERNET PROGRAMMING	21	27	48	FAIL
105	COMPILER DESIGN	28	30	58	PASS
TOTAL				248	

- iv) Condition for passing a subject : A minimum of 35 marks in external and 50 marks in total.
 - v) Grand total should not include total in failed subjects.
 - vi) Display FAIL in red color.
- 5) Create two tables SALES1,SALES2 and join them to produce a Third table SALES3.

Paper 3.1: COMPUTER NETWORKS

UNIT I

Introduction: Uses of Computer Networks - Network Hardware and Network Software - Reference Models - Example Networks - Network Standardisation. Physical Layer: Transmission Media - Telephone System - ISDN - Broadband and Narrowband ISDN - ISDN and ATM - Communication Satellites.

UNIT II

Data Link Layer: Design Issues - Error Detection and Correcting Codes - Elementary Datalink Protocols - Sliding Window Protocols - Protocol Specification and Verification: Finite State Models - Petri Net Models - Example Dlink Protocols: HDLC - SLIP - PPP - Media Access Sublayer: Multiple Access Protocols - ALOHA - Carrier Sense Multiple Access Protocols - Collision Free Protocols.

UNIT III

Network Layer: Design Issues - Routing Algorithms - Congestion Control Algorithms - Internetworking: Tunneling - Fragmentation - Firewalls - Network Layer in the Internet - IP - Subnets - Internet Control Protocols: Address Resolution Protocol - ICMP - RARP - Internet Multicasting - Network Layer in ATM Networks: Cell Format - Connection Setup - Routing and Switching - Services Categories - ATM LANs.

UNIT IV

Transport Layer: Transport Service - Elements of Transport Protocols: Addressing - Flow Control and Buffering - Multiplexing - Crash Recovery - Performance Issues - Measuring Network Performance - Internet Transport Protocols - TCP - UDP - Protocols for Gigabit Networks.

UNIT V

Application Layer: Network Security - Cryptography - Secret and Public Key Algorithms - DNS - SNMP - Electronic Mail - Electronic Mail Privacy - World Wide Web: Client Side - Server Side - Multimedia - Audio - Video - Data Compression - JPEG, MPEG Standards.

REFERENCE BOOKS:

1. Andrew S. Tanenbaum, Computer Networks, 4th Edition, 2003, Prentice Hall of India.
2. Uless Black, Computer Networks, Prentice Hall.

Paper 3.2: VISUAL PROGRAMMING

UNIT-I

Introduction to Windows - Windows Graphic User Interface (GUI) - Getting Started with Windows - Required Hardware and Software - Format of a Window - Icons - Selecting, Moving, Sizing Windows - Menus - Help.

UNIT-II

Program, File & Print Managers - Running Applications - Multitasking - Clipboard - Control Panel - Print Manager - Write - Text formatting - Paintbrush - Picture Attributes - Drawing Tools - Windows Power User - Operating Modes - PIF Editor - OLE - Multimedia Windows.

UNIT-III

Visual Basic Concepts - Event-Driven Programming - Terminology - Working Screen - Controls and Events - Menu System - Programming Language - Tools: MsgBox, InputBox, Scroll Bars, Frames, CheckBox, Menus.

UNIT-IV

Program Design - Form and Controls - Writing the Code - Saving, Running and Testing - Making EXE File - Printouts - Program Flow: Logical Testing - Branching with IF, CASE, FOR..NEXT, DO Loops, WHILE..WEND.

UNIT-V

Procedures, Functions, Forms and Arrays - Creating Procedures, functions - Recursive Functions- Multiple Forms - Startup Forms - SubMain Procedure - Arrays and Loops - Control Arrays - Indexing and Event Handling - Graphics - MDI forms.

REFERENCE BOOKS:

5. AL Stevens, Teach Yourself Windows 3.1, 1994, BPB Publications.
6. P.K. McBride, Programming In Visual Basic, 1995, BPB Publications.

Paper 3.3: PRINCIPLES OF INFORMATION TECHNOLOGY

UNIT-I

An Overview of the Revolution in Computers and Communications: From the analog to the digital age : The “ New Story” of computers and communications - The six Elements of a Computer & Communications System - Communications: Development in Computer Technology, Developments in Communications Technology - Computer and Communications Technology Combined: Connectivity and Interactivity - The Ethics of Information Technology.

UNIT-II

Application Software: Kinds of Software - The five types of applications software - Word processing - Spreadsheets - Database software - Presentation graphics software - Communications software - Desktop accessories and personal information managers - integrated software and suites - Groupware - Internet Web browsers - Specialised software - Ethics and Intellectual property rights.

UNIT-III

Communications: The practical uses of communications and connectivity - Telephone related communications services - Video/voice communication: Video conferencing and picture phones - online information services - The Internet - Shared resources : Workgroup computing, Electronic Data Interchange, and Intranets - Telecomputing and virtual offices - Using computer to communicate: Analog and Digital Signals - modems and communication Software, ISDN lines, and Cable Modems - Communications Channels: Communications Networks - Local Networks - Factors affecting Data transmission - Cyberethics: Netiquette, Controversial material and censorship, and privacy issues.

UNIT-IV

Storage And Databases: Storage fundamentals - Compression and Decompression - Criteria for Rating Secondary Storage Devices - Diskettes - Hard Disks - Optical Disks - Magnetic Tapes - Organising Data in Secondary Storage: Databases, Data Storage - Hierarchy and the concept of the key field - File Management: Basic concepts - File Management Systems - Data Management Systems - Types of Database Organization - Features of a DBMS.

UNIT-V

Information System and Software Development: Management Information Systems - The Six phases of System Analysis and Design - The Five Steps in Programming - Five Generations of Programming Languages - Programming Languages - Object Oriented and Visual Programming - Internet Programming - HTML, XML, JAVA and ActiveX.

REFERENCE BOOKS

2. Stacey C Sawyer, Brain K Williams, Sarah E Hutchinson, Using Information Technology - A Practical Introduction to Computer and Communications, ed2, The McGraw Hill Companies.
2. J Hames O'Brien, Introduction to Information System.

Paper 3.4: MOBILE COMPUTING

Unit I

Wireless and Mobile Network Architecture: Principle of Cellular Communication, Overview 1G, 2G, 2.5G and 3G and 4G technologies - GSM Architecture and Mobility management, hand off management, Network signaling - Mobile Computing fundamental challenges, Mobile Devices –PDA and mobile OS, PalmOs, Win CE and Symbian.

Unit II

Mobile IP Protocol Architecture: Mobile IP and IP v 6 and its application in mobile computing. - Cellular Digital Packet Data - CDPD, VOIP, GPRS Services, Wireless Local Loop-WLL system.

Unit III

Wireless Application Protocol (WAP): The Wireless Application Protocol application environment, wireless application protocol client software, hardware and websites, wireless application protocol gateways, implementing enterprise wireless application protocol strategy.

Unit IV

Wireless Markup Language: An Introduction to Wireless Technologies, Markup Languages , An Introduction to XML, Fundamentals of WML., Writing and Formatting Text , Navigating Between Cards and Decks, Displaying Images, Tables, Using Variables, Acquiring User Input.

Unit V

Wireless Markup Language Script: An Introduction to WMLScript, WMLScript Control Structures, Events, Phone.com Extensions, Usability.

REFERENCE BOOKS

1. Yi Bing Lin, Wireless and Mobile Networks Architecture, 2000, John Wiley.
2. MengLee et al., Beginning WAP: WML and WML Script, 2000, Wrox Publication
3. Tomasz Imielinski et.al, Mobile Computing, 1996, Kluwer Academic Press.

Paper 3.5: RDBMS

UNIT I

DBMS: Database - Database Management System - Features - Advantages - Data Base Scheme - Schema and Subschema - Manipulative capabilities - Guidelines - Different User Interfaces.

UNIT II

Relational Model : Concepts of Relational Model - Comments on the Relational Model: Semantic issues, Navigation, Efficiency - DBMS based on the Relational Model: The mapping operation - Data Manipulation facilities - Data Definition facilities - Data Control facilities.

UNIT III

Introduction to Oracle: Types of Databases, Relational Database properties, Benefits of Oracle, Client/Server Systems - Oracle Database Architecture: Overview of Oracle Architecture, Processes, Physical files, CPU, Network System Tables, Oracle Users, Logical Structures.

UNIT IV

Oracle Fundamentals: Elements of SQL Language: Database Objects, Data Access SQL commands, DML commands - Oracle Queries - Basic Query, Using Expressions, Working with NULL values, Joining Multiple Tables in a Query, Selecting Distinct values, Using Subqueries, Unions and Multiple part Queries.

UNIT V

Table Creation: Create Table statement, Privileges required, Describing Table Definitions, Modifying Tables, Renaming a Table, Copying another table, Dropping a Table - Other Database Objects, Reason for Database Objects, Indexes - Embedded SQL: Languages supported by Oracle Precompiler, Embedded SQL statements.

REFERENCE BOOKS:

1. Naveen Prakash Introduction to Data Base Management Tata McGraw-Hill Pub. Co. Ltd.
2. Singh, Leigh, Zafian, et al. Oracle 7.3 Developers's Guide Techmedia Publications.

Paper 3.6: Computer Lab IV (Visual Basic and Oracle Lab)

VISUAL BASIC

1) Write and test a VB Program to Print twenty address labels in a two-column format for the address

THE REGISTRAR
ALAGAPPA UNIVESITY
KARAIKUDI-630003.

2) Write and test a VB Program to read in Principal, Number of Years and Rate of Interest through INPUT Boxes, Compute and Print the Simple Interest and Compound Interest through labels.

3) Write and test a VB Program to compute the Surface area and volume of a sphere given the radius. Use Option buttons and INPUT Boxes.

[Formula: $A=4*3,14*R^2$, $V=4/3*3,14R^3$]

20) Write and test a VB Program to compute and print either the SUM or the PRODUCT of the first N natural numbers. Use option button.

21) Write and test a VB Program to compute and print either the sum of odd numbers or even numbers at the user's choice using Label, Text and Option buttons.

22) Write a VB program to do temperature conversion C to F and F to C at user's choice using Label, Text and Enter Key.

23) Write and test a VB Program that allows the user choice among four arithmetic operations of addition, subtraction, multiplication and division with two given numbers.

24) Write and test a VB program to select candidates for four posts, based on their qualifications,

MALE AND PG DEGREE	MANAGER
MALE, GRADUATE & TYPING	CLERK
FEMALE AND PG DEGREE	SECRETARY
FEMALE, GRADUATE & TYPING	STENO

25) Write and test a VB program to display the Day of the given Date and Covert Upper Case from Lower Case to given Word.

26) Write a VB program to calculate Simple Interest or Compound Interest using three command buttons namely Input, Calculate, Display.

ORACLE

3. Create table MARK with the following structure:

Fieldname	Type	Width	Decimal
REGNO	Numeric	8	
NAME	Character	20	

TAMIL	Numeric	3
ENGLISH	Numeric	3
MATHS	Numeric	3
BIOLOGY	Numeric	3

- xii) Add 5 Records.
- xiii) Show data in fields REGNO, NAME, TAMIL & BIOLOGY alone on the screen.
- xiv) Show data in fields REGNO, BIOLOGY & MATHS alone on the screen.
- xv) Show data in fields NAME & REGNO alone on the screen.
- xvi) Show all fields on the screen.

2) Create table ADDRESS with the following structure,

Fieldname	Type	Width	Decimal
NAME	character	20	
STREET	Character	20	
CITY	Character	20	
PIN	Numeric	6	

- xi) Add 5 Records.
- xii) Display the structure of the table.
- xiii) Add the field DISTRICT
- xiv) Fill all DISTRICT with MADURAI
- xv) Change the PIN to 630003 where city is KARAIKUDI and PIN is 623003.

3) Create table RESULT with the following structure.

Fieldname	Type	Width	Decimal
REGNO	Numeric	8	
NAME	Character	20	
MARK1	Numeric	3	
MARK2	Numeric	3	
MARK3	Numeric	3	
TOTAL	Numeric	3	
RESULT	Character	4	

- vii) Add 5 records (Fill all Fields except Total & Result fields),
- viii) Fill TOTAL field with the sum of MARK1, MARK2, and MARK3.
- ix) fill the RESULT field with 'PASS' if TOTAL >= 150 otherwise 'FAIL'

4) Create table PAY with the following structure,

Fieldname	Type	Width	Decimal
-----------	------	-------	---------

EMPNO	Numeric	8	
NAME	Character	25	
DOJ	Date		
BPAY	Numeric	8	2
DA	Numeric	8	2
HRA	Numeric	3	
DEDU	Numeric	3	
GPAY	Numeric	8	2
NPAY	Numeric	8	2

- xv) Add 5 Records, (Fill al fields except DA, HRA, DEDU, GPAY and NPAY)
- xvi) Fill DA with 75% of BAY for all employees.
- xvii) Fill HRA with 300 for all employees.
- xviii) Fill DEDU with 750 for all employees.
- xix) Fill GPAY with the sum of BPAY, DA and HRA.
- xx) Fill NPAY with GPAY – DEDU.
- xxi) Display EMPNO, NAME, BAPY, DEDU, GPAY, NPAY alone.

5) Create table BIODATA with following structure,

Fieldname	Type	Width	Decimal
NAME	Character	25	
AGE	Numeric	2	
SEX	Character	1	
DEGREE	Character	8	
CITY	Character	20	

- xi) Add 5 records, (BIODATA of 5 employees)
- xii) Display all records of MALE employees.
- xiii) Delete all BSC degree holders and then display the table contents.
- xiv) Remove all employee records whose AGE is greater than 20.
- xv) Display all records having AGE < 20 and CITY is TRICHY.

6) Create table LABEL with the following structure.

Fieldname	Type	Width	Decimal
NAME	Character	20	
STREET	Character	20	
CITY	Character	20	
PIN	Numeric	6	

- xi) Add 5 Records.
- xii) Display the contents of the table.
- xiii) Display the Ascending order sorted list with NAME as primary key.
- xiv) Display the Descending order sorted list with CITY as primary key.
- xv) Display the contents with appropriate HEADINGS.

7) Create table PERSONAL with the following structure.

Fieldname	Type	Width	Decimal
SNO	Numeric	8	
NAME	Character	20	
CITY	Character	20	
PIN	Numeric	6	
PHONE	Numeric	6	

- xv) Add 5 Records.
- xvi) Display the contents of the table.
- xvii) Display all names.
- xviii) Display all names without duplicate.
- xix) Display all names in uppercase, lowercase and Initial Capital letters.
- xx) Display all names and length of names.
- xxi) Display name, city in which only beginning portion of name is known.

8) Create table MARKS with the following structure.

Fieldname	Type	Width	Decimal
REGNO	Numeric	8	
NAME	Character	20	
MARK1	Numeric	3	
MARK2	Numeric	3	
MARK3	Numeric	3	
TOTAL	Numeric	3	
AVG	Numeric	6	
GRADE	Character	1	

- xv) Add 5 Records.
- xvi) Replace all TOTAL with MARK1+MARK2+MARK3 and display the contents.
- xvii) Replace all AVG with TOTAL/3 and display the contents.
- xviii) Replace GRADE with the following conditions:
 - GRADE is A if AVG is greater than or equal to 60
 - GRADE is B if AVG is 40 to 59.
 - GRADE is C if AVG is less than 40.
- xix) Display the Maximum marks in each subject.
- xx) Display the Minimum marks in each subject.
- xxi) Count the number of records for mark1 >50.

9) Create table SALES with the following structure.

Fieldname	Type	Width	Decimal
SALENO	Numeric	5	
SALENAME	Character	20	

SALEAMT	Numeric	8	2
COMM	Numeric	6	2
SALEDATE	Date		

- xiii) Add 5 Records.
- xiv) Replace COMM with the following conditions:
 - If Sales amount is less than 1000 there is no commission.
 - If Sales amount is greater than or equal to 1000 but less than or equal to 5000, commission is 5% of sales amount.
 - If Sales amount is greater that 5000, commission is 10%.
- xv) Display all the records.
- xvi) Display the records having commission < 1000.
- xvii) Display the records having commission > 1000.
- xviii) Display the Average sales and Average commission.

10) Create table BLOOD with the following structure.

Fieldname	Type	Width	Decimal
DNO	Numeric	3	
DNAME	Character	20	
DOB	Date		
DAGE	Numeric	2	
DADD1	Character	15	
DADD2	Character	15	
DCITY	Character	15	
DPIN	Numeric	6	
DBLOOD	Character	3	
DSEX	Character	1	

- xiii) Add 5 Records.
- xiv) Display all the records.
- xv) Display the information of donors in the age group 20 to 25 using BETWEEN option.
- xvi) Display the information of donors having date of birth BETWEEN 01-JAN-55 and 31-DEC-75.
- xvii) Display the information of donors having any of the blood group from the set of blood groups using IN option.
- xviii) Display the information of female donors with age between 20 and 25 using BETWEEN option.

27) Create table NUMB with the following structure.

Fieldname	Type	Width	Decimal
NUM	Numeric	6	2
ABSNO	Numeric	6	2

SQRTNO	Numeric	6	2
ROUNDNO	Numeric	6	2
TRUNCNO	Numeric	6	2
SQRNO	Numeric	6	2
CUBENO	Numeric	6	2

- xix) Add 5 Records. (Some numbers must be negative or decimal)
- xx) Display all the records.
- xxi) Replace ABSNO with absolute value of given numbers.
- xxii) Replace SQRTNO with square root value of given numbers.
- xxiii) Replace ROUNDNO by using ROUND function.
- xxiv) Replace TRUNCNO by using TRUNC function.
- xxv) Replace SQRNO with square of given numbers.
- xxvi) Replace CUBNO with cube of given numbers.
- xxvii) Display all the records.

Paper 3.7: Computer Lab V (Networking Lab)

- 1) Write a Java program to add two numbers using RMI client, server technique.
- 2) Write a Java program find factorial of given number using RMI client, server technique.
- 3) Write a Java program to find factorial of given number using FACTORIAL INTERFACE technique.
- 4) Write a Java program to setup a chat server and chat client.
- 5) Write a Java program to setup echo server and echo client.
- 6) Write a Java program to display the users and their IP addresses logged in the network.
- 7) Write a Java program to ENCRYPT given word
- 8) Write a Java program to setup Time server and Time client.
- 9) Write a Java program to send message from one system to another system.
- 10) Write a program to read a file from the remote system.



Course (BBA)	:	Bachelor of Business Administration
Mode	:	Distance Education
Duration	:	Three Years
Eligibility	:	Pass in Higher Secondary / 3 year Diploma
Lateral Entry to II Year	:	3 Year Diploma in Modern Office Practise
Medium	:	English and Tamil

COURSE OF STUDY & SCHEME OF EXAMINATIONS

Subject Code	Title	Marks
I YEAR		
1.1	Business Communication	100
1.2	Principles of Economics	100
1.3	Principles of Management	100
1.4	Business Environment	100
1.5	Financial Accounting	100
II YEAR		
2.1	Banking Theory Law and Practice	100
2.2	Company Law	100
2.3	Business Statistics	100
2.4	Business Law	100
2.5	Cost Accounting	100
III YEAR		
3.1	Production and Materials Management	100
3.2	Elements of Marketing	100
3.3	Management Accounting	100
3.4	Financial Management	100
3.5	Principles of Personnel Management	100
Total		1500

Paper 1.1: BUSINESS COMMUNICATION

UNIT-I

Structure of Business Letters: Layout of business letter – Types of business letter – Enquiry, Offers, Quotations and Orders.

UNIT-II

Trade references and status enquires – Confirmation and execution of orders – Refusal and cancellation of orders – Acknowledging receipts of goods and making payments.

UNIT-III

Complaints and settlements – Collection letters – Circular letters.

UNIT-IV

Agency letters – Banking letters – Insurance letters.

UNIT-V

Drafting of Agenda and Minutes: Meaning – Types – Methods.

UNIT-VI

Reports: Types and preparation – Speech drafting – Occasions – Application for a situation.

REFERENCE BOOKS:

1. Bhal and Nagamiah, Modern Business Correspondence
2. Majumdar, Commercial Correspondence
3. Reddy & Appannaiah, Essentials of Business Communication
4. Rajendra Paul, Business Correspondence.

Paper 1.2: PRINCIPLES OF ECONOMICS

UNIT-I

Law of demand – Consumer’s surplus – Indifference curve analysis – Concept of elasticity – Limitations of consumer’s sovereignty.

UNIT-II

Firm in the economy – External and internal economics – Factors limiting the size of the firm – The law of returns – Marginal revenue and Marginal cost – Optimum firm and Representative firm.

UNIT-III

Nature of costs in economics – Opportunity cost Vs Real cost – Fixed costs Vs Variable costs – Notion of marginal cost – Equilibrium of industry – Conditions of competitive equilibrium.

UNIT-IV

Markets – Nature of competition – Types of competition: Monopoly, Duopoly, Bilateral monopoly, Monopolistic competition.

Price theory and practices: Price discrimination under perfect competition – Price determination under monopoly – Price discrimination – Pricing under monopolistic competition – Pricing under oligopoly.

UNIT-V

Distribution: Wages – Marginal productivity – Theory of wages – Collective bargaining – Wage differentials – Wages and productivity – Wage regulation.

UNIT-VI

Rent – Scarcity Vs Differential rents – Quasi rent – Rent as surplus over transfer earnings – Rent as economic surplus.

Interest – Interest as reward for waiting – Liquidity preference theory.

Profit – Risk and uncertainty – Normal profits – Marginal productivity and profits.

REFERENCE BOOKS :

1. Stonier & Hage, Economic Theory
2. Samuelson Paul A, Economics
3. Edward Nevin, Text book of Economic analysis
4. Mehta P L, Managerial Economics.

Paper 1.3: PRINCIPLES OF MANAGEMENT

UNIT-I

Management: Concepts – Nature – Importance – Modern Management approaches

UNIT-II

Planning: Nature and importance – Forms – Strategic and tactical – Types of Plans – Steps in Planning. Decision-making – Types of decisions – Decision-making process – Rationality in decision-making.

UNIT-III

Organisation: Process of organisation – Organisation structure – Departmentalisation – Span of management – Delegation – Authority, responsibility – Accountability – Decentralisation.

UNIT-IV

Directing: Principles – Elements – Motivation – Maslow, Herzberg, Vroom models – Communication process – Forms – Barriers – Overcoming barriers.

UNIT-V

Leadership Theories: Styles – Managerial grid. Co-ordination: Meaning – Need – Types.

UNIT-VI

Control: Controlling – Need for Control – Control Process – Control Techniques.

REFERENCE BOOKS :

1. Prasad L N, Reddy & Appanniah, Essentials of Management
2. Lallan Prasad, Koontz, O'Donnel, Essentials of Management
3. Koontz & O' Donnel, Essentials of Management

Paper 1.4: BUSINESS ENVIRONMENT

UNIT I

Business Environment – Concept – Significance – Factors – Environmental influence on Business.

UNIT II

Social and Cultural Environment – Demographic Trend – Indian Social Structure – Caste and Communal Systems – Interplay of Various Systems – Impact on Business.

UNIT III

Political Environment - Directive Principles of State Policy – Centre – State Relations – Impact of Political Environment on Business.

UNIT IV

Economic Environment – Sectors of Economy and their significance – Agriculture, Industry, Service – Multinational Corporations – Meaning, Importance Advantages, Weakness.

UNIT V

Technological Environment – choice of Technology – Problems in Selecting Appropriate Technology – Importance to Business.

UNIT VI

Social responsibility – Responsibility towards various interest groups.

REFERENCE BOOKS:

- 1 Francis Cherunilam, Business Environment
- 2 Aswathappa K, Essentials of Business Environment
- 3 Garg V K, Economic Environment of Business
- 4 Sherlekar S A, Modern Business Organization and Management

Paper 1.5: FINANCIAL ACCOUNTING

UNIT I

Rules for Journalizing – Posting of Accounts – Writing of different types of Cash Books – Writing of Purchase and sales Journals – Preparation of Trial Balance and Trading and Profit & Loss account and Balance Sheet of a Sole Proprietorship – Bank Reconciliation Statement.

UNIT II

Bills of Exchange and the treatment thereof – Average due date – Account Current – Consignment and Joint Venture Accounts.

UNIT III

Accounts of Non-Trading Concerns – Receipts and Payment Accounts, Income and Expenditure Accounts and Balance Sheet.

UNIT IV

Partnership: Fixed and Fluctuating Capitals – Current and Drawing Accounts – Interest on Capital and Drawings and Salary and Commission – Revaluation of Assets – Treatment of Goodwill – Admission – Retirement – Death of a Partner – Dissolution Excluding Garner Vs Murrey Decision and Sale to a Company – final Accounts.(Simple Problems Only)

UNIT V

Company Accounts: Issue of Shares and Debentures at Par, Premium and Discount – Forfeiture of Shares and Re-Issue of forfeited Shares – Simple Cases of Final Accounts.

UNIT VI

Final Accounts of Banking Companies – Prudential Accounting Norms: Capital, Adequacy, Income Recognition, Asset Classification and Provisioning.

REFERENCE BOOKS:

- 1 Gupta R L, Advanced Accounting
- 2 Arulanandam M A, Raman K S, Advanced Accounting
- 3 Shukla M C & Grewal T S, Advanced Accounting

Paper 2.1: BANKING THEORY, LAW AND PRACTICE

UNIT I

Commercial Banking – Functions of Commercial Banks – Balance Sheet – Credit Creation by Commercial Banks.

UNIT II

Central Banks – Functions – Credits Control Measures of the Central Bank.

UNIT III

Unit Banking – Branch Banking – Indian Commercial Banks, Nationalization of Major Commercial Banks – Objects – Place of Private Sector Banks.

UNIT IV

Indian Money Market – Different components – Backwardness of the Indian Money Market – Role of Commercial Banks in the Indian Money Market.

UNIT V

Law and Practice – Banker and Customer – General and Special Relationship – Bankers as Borrowers – Precautions to be taken before opening accounts – Legal significance of Fixed Deposit Receipts.

UNIT VI

Cheque – Requisites – Paying Banker – Collecting Banker – Pass Book – Closing of Accounts – Loans and Advances – Legal formalities and precautions.

REFERENCE BOOKS:

1. Basu, Theory and Practice of Development Banking
2. Muranjan S K, Modern Banking in India
3. Reddy, Appannah, Natarajan & Gordon, Banking Theory and Practice.

Paper 2.2: COMPANY LAW

UNIT I

Company: Meaning and Characteristics – Types of Companies – Private Company Vs Public Company, Formation of Company: Incorporation – Documents to be filed with the Registrar – Certificate of Incorporation - Promoter

UNIT II

Memorandum of Association – Contents – Alteration – Doctrine of Ultra-Vires – Articles – Alteration – Doctrine of Indoor Management, Prospectus: Definition, Contents of Prospects; Misrepresentation in prospectus – Statement in Lieu of Prospectus.

UNIT III

Share Capital and Membership in a Company: Share – Meaning and Types, allotment of Shares, transfer and transmission of shares.

UNIT IV

Company Management: Director – Definition – Qualification – Disqualification – Power – Duties and Liabilities of Directors.

UNIT V

Company Meetings: Statutory Meeting – Annual General Meeting – Extra-Ordinary General Meeting Requisites of a valid meeting – Board Meeting – Resolution – Types – Chairman – Duties and Powers

UNIT VI

Winding Up: Meaning – Modes of Winding up – Winding up by the Court Official Liquidator – Liquidator – Provisional Liquidator – Liquidator's Duties, Powers and Liabilities – Statement of affairs – Voluntary winding up – Types of voluntary winding up, Members and Creditors voluntary winding up – winding up subject to supervision of court.

REFERENCE BOOKS:

- 1 Kapoor N D, and Sen Gupta, Company Law
- 2 Shah S M, Lectures on Company Law

Paper 2.3: BUSINESS STATISTICS

UNIT I

Meaning and Scope of Statistics with Special Reference to Commercial Problems.

UNIT II

Measures of Central Tendency: Arithmetic, Geometric and Harmony Means – Median and Mode – weighted Average – Characteristics of Different Averages.

UNIT III

Measures of Dispersion – Range – Inter Quartile Range – Mean Deviation and the Standard Deviation, Skewness: Different Measures of Skewness.

UNIT IV

Correlation(Linear Correlation Only), Interpolation.

UNIT V

Index Number: Definition of Index Numbers – Use of index numbers – Cost of Living Index – Index numbers of Wholesale Prices.

UNIT VI

Time Series: Seasonal, Cyclical and Irregular Fluctuations: Methods of Eliminating their influence – secular Trend.

REFERENCE BOOKS:

1. Elhance D N, Fundamentals of Statistics
2. Gupta S P, Statistics for Commerce Students
3. Gupta S P, Statistical methods

Paper 2.4: BUSINESS LAW

UNIT I

Indian Contract Act 1872: Meaning and Essentials of a valid Contract – formation of contract.

UNIT II

Performance of Contract – Termination and discharge of Contract – Remedies for Breach of Contract – Quasi Contract.

UNIT III

Special Contracts: Indemnity and guarantee – Bailment – Agency.

UNIT IV

Sale of Goods Act, 1930: contract of Sale – Conditions and Warranties – Transfer of Property – Performance of the contract of sale, right of an unpaid seller.

UNIT V

Indian Partnership Act, 1932: Meaning and Test of Partnership – Registration of firms – Relations of Partners – Dissolution of firms.

Arbitration Act, 1940: Arbitration – arbitration without Intervention of Court Arbitration in suits.

UNIT VI

Carriage of Goods: Classification of common carriers – Rights, Duties and Liabilities of common carrier – Carriage by Rail – Contract of Affreightment – Charter Party – Bill of Lading – Carriage by air – Documents relating thereto – Liability of the air carrier.

Contract of Insurance – Basic Elements, kinds of Insurance – Fire Insurance – Marine Insurance.

REFERENCE BOOKS:

1. Kapoor N D, Elements of Mercantile Law
2. Sen and Mitra, Commercial Law
3. Shukla M C, Mercantile Law

Paper 2.5: COST ACCOUNTING

UNIT I

Cost Accounting – Elements of Cost – Cost Concepts, Accounting and Control of Material Cost.

UNIT II

Labour – Wage Payment and Incentives – Labour Cost Control – Labour turnover.

UNIT III

Overhead – Classification – Allocation, Apportionment and Absorption of overhead.

UNIT IV

Process Costing – Process Losses – Inter-Process Profits.

UNIT V

Standard Costing – Variance Analysis.

UNIT VI

Cost Ledgers – Reconciliation of Cost and Financial Profits – Integral Accounting.

REFERENCE BOOKS:

1. Jain and Narang, Advanced Cost Accounting
2. Prasad N K, Iyengar S P and Nigam and Sharma Cost Accounting
3. Ratnam P V, Costing Adviser.

Paper 3.1. PRODUCTION AND MATERIALS MANAGEMENT

UNIT I

Introduction – Production Function – Design of Production – Systems – Types of Process – Productivity – Ergonomics.

UNIT II

Plant Location and layout – Factors influencing Plant location – Relocation – Types of layouts – Process and Product layout – Layout of service facilities.

UNIT III

Production Planning and control – Planning – Routing – Scheduling – Despatching – Inspection – Gantt Charts – Make or buy decisions.

UNIT IV

Materials Management – Concept – Purchasing – Vendor rating – Material Handling – Importance – Selection of material handling equipments.

UNIT V

Stores Management – Functions – Stores location – Stores layout – Essentials of a good layout – Stock verification.

UNIT VI

Inventory Management – Concept – Importance – Techniques.

REFERENCE BOOKS:

1. Buffa E S, Modern Production Management
2. Lundy J L, Effective Industrial Management
3. Bunga, Sharma, and Samuel Eliot, Production Management

Paper 3.2: ELEMENTS OF MARKETING

UNIT I

Modern Marketing concept – Approaches to the study of Marketing – Features of Industrial, Consumer and Services Marketing.

UNIT II

Consumer Behaviour – Meaning – Factors influencing consumer behaviour – Market Segmentation Strategies – Marketing mix.

UNIT III

Product Planning and development – Product positioning – Product Life Cycle – Branding and Packaging.

UNIT IV

Pricing – Factors affecting pricing – Pricing objectives – Methods.

UNIT V

Physical Distribution – Middlemen functions – factors deciding choice of Channel.

UNIT VI

Promotional Mix: Personal Selling – Salesmanship – Sales Force – Selection, Training and Compensation – Evaluation of performance of Sale Force – Advertisement and Publicity – Meaning – Objectives – Copy – Media – Evaluation – Sales promotion: Methods and their uses.

REFERENCE BOOKS:

1. William J Stanton, Fundamental of Marketing
2. Mamoria C B & Satish Mamoria, Marketing Management
3. Gandhi J C, Rajan Nair, Marketing
4. Sherlekar S A, Essentials of Marketing Management

Paper 3.3: MANAGEMENT ACCOUNTING

UNIT I

Management Accounting – Scope and importance – Management Accounting Vs Financial Accounting and Cost Accounting.

UNIT II

Ratio Analysis

UNIT III

Fund Flow and Cash flow Analysis.

UNIT IV

Budgeting and Budgetary Control – Sales Budget – Cash Budget – Operating Budget – Master Budget – Flexible Budget – Zero Base Budgeting – Performance Budgeting – Programme Budgeting.

UNIT V

Marginal Costing – Break Even Analysis – Differential Costing.

UNIT VI

Capital Budgeting – Nature and Significance – Methods of evaluation of Alternative Capital Expenditure Programme.

REFERENCE BOOKS:

1. Maheswari S N, Management Accounting and Financial Control
2. Man Mohan and Goyal, Management Accounting
3. Hingorani, Ramanathan, and Katyal, Management Accounting

Paper 3.4: FINANCIAL MANAGEMENT

UNIT I

Meaning and Classification of Finance Function – Scope of Corporate Finance – Financial Organization – Objectives of Financial Management – Importance of Financial Management – Functions of Financial Controller.

UNIT II

Financial Planning – Meaning of Financial Planning – Characteristics of a Sound Financial Plan – Factors Affecting Financial Plan – Need of Financial Plan.

UNIT III

Capitalization – Over Capitalization and under capitalization – Watered Capital – Capital Structure – Determinants of Optimum Capital Structure

UNIT IV

Corporate Share Capital – Type of Securities – Preference Shares – Equity Shares, Corporate Debt – Meaning, Significance and limitations of Debentures – Debt Financing – Its uses and limitations – Plough back of profits – Its merits and limitations.

UNIT V

Term Loans – Institutional Finance – Public Deposits – Intercorporate Investments.

UNIT VI

Working Capital – Meaning – Classification of Working Capital – Importance of Working Capital – Determinants of Working Capital- Sources of Working Capital.

REFERENCE BOOKS:

1. Kuchal S C, Corporation Finance
2. Kulkarni P, Financial Management
3. Pandey I M, Financial Management

Paper 3.5: PRINCIPLES OF PERSONNEL MANAGEMENT

UNIT I

Personnel Management – Definition – Objectives and functions – Role and Structure of Personnel Function in Organizations – Personnel Principles and Policies.

UNIT II

Human Resource Planning – Need for Planning – HRP Process – Job Analysis – Job Description – Job specification.

UNIT III

The selection process – Placement and induction – Training and development – Promotion – Demotions – Transfers – Separation.

UNIT IV

Performance Appraisal – Objectives – Methods.

UNIT V

Wage and salary administration – Factors – Principles – Compensation plan – Individual – Group – Incentives – Bonus – Fringe Benefits – Job evaluation Systems.

UNIT VI

Employee Maintenance and integration – Welfare and safety – Employee Discipline – Principles of discipline – Grievances – Causes – Principles of Grievances handling.

REFERENCE BOOKS:

1. Venkataratnam C S, and Srivastava, Personnel Management and Human Resources, Tata McGraw Hill, 1991.
2. Arun Monappa, Industrial Relations, Tata McGraw Hill, 1987.
3. Dale Yodder and Paul D, Standohar, Personnel Management and Industrial Relations, Sterling Publishers, 1990.
4. David A Decenzo and Stephen P Robbins, Personnel/Human Resource Management, Prentice Hall, 1955.

B.B.A. (Banking)

Mode	:	Distance Education
Duration	:	Three Years
Eligibility	:	Pass in Higher Secondary / 3 year Diploma
Lateral Entry to II Year	:	3 Year Diploma in Modern Office Practise
Medium	:	English only

COURSE OF STUDY & SCHEME OF EXAMINATIONS

<i>Subject Code</i>	<i>Title</i>	<i>Total Marks</i>
I YEAR		
1.1	Business Communication	100
1.2	Principles of Economics	100
1.3	Money and Banking	100
1.4	Rural Banking	100
1.5	Financial Accounting	100
II YEAR		
2.1	Practice and Law of Banking-I	100
2.2	Management Practice	100
2.3	Business Statistics	100
2.4	Business Law	100
2.5	Foreign Exchange and Financing of Foreign Trade	100
III YEAR		
3.1	Practice and Law of Banking-II	100
3.2	Marketing of Banking Services	100
3.3	Management Accounting	100
3.4	Computers and Banking	100
3.5	Development Banking	100
Total		1500

Paper 1.1: BUSINESS COMMUNICATION

UNIT-I

Structure of Business Letters: Layout of business letter – Types of business letter – Enquiry, Offers, Quotations and Orders.

UNIT-II

Trade references and status enquires – Confirmation and execution of orders – Refusal and cancellation of orders – Acknowledging receipts of goods and making payments.

UNIT-III

Complaints and settlements – Collection letters – Circular letters.

UNIT-IV

Agency letters – Banking letters – Insurance letters.

UNIT-V

Drafting of Agenda and Minutes: Meaning – Types – Methods.

UNIT-VI

Reports: Types and preparation – Speech drafting – Occasions – Application for a situation.

REFERENCE BOOKS:

1. Bhal and Nagamiah, Modern Business Correspondence
2. Majumdar, Commercial Correspondence
3. Reddy & Appannaiah, Essentials of Business Communication
4. Rajendra Paul, Business Correspondence

Paper 1.2: PRINCIPLES OF ECONOMICS

UNIT-I

National Income – Significance of National Income – Methods of measuring National Income – National Income in India.

Organization of production – Agents of production – Factors affecting the growth of population – The Malthusian Theory – Optimum population – Division of Labour – Role of capital in production – Mobility of factors and its significance.

UNIT-II

Consumer Behavior – Law of Demand – Consumer's surplus – Indifference Curve Analysis – Concept of Elasticity – Limitations of consumer's sovereignty.

UNIT-III

The Firm in the Economy – External and Internal Economies – Factors limiting the size of a firm – The law of Returns – Marginal Revenue and Marginal Cost – Optimum Firm and Representative Firm.

UNIT-IV

Nature of costs in Economics – Opportunity Cost Vs Real Cost – Fixed Costs Vs Variable Costs – Notion of Marginal cost – Equilibrium of Industry – Conditions of Competitive Equilibrium.

Markets – Nature of Competition – Types of Competition: Monopoly, Duopoly, Bilateral Monopoly, Monopolistic Competition, Oligopoly.

UNIT-V

Price Theory and practices : Price Determination under perfect Competition – Price Determination under monopoly – Price Discrimination – Pricing under Monopolistic Competition – Pricing under Oligopoly.

Distribution: Wages – Marginal Productivity Theory of Wages – Collective Bargaining – Wage Differentials – Wages and productivity – Wage Regulation

UNIT-VI

Rent – Scarcity Vs Differential Rents - Quasi Rent – Rent as surplus over transfer earnings – Rent as Economic Surplus.

Interest – Interest as Reward for waiting – Liquidity Preference Theory.

Profit – Risk and uncertainty – Normal Profits – Marginal Productivity and profits.

REFERENCE BOOKS:

1. Stonier & Hague, Economy theory
2. Samuelson Paul A, Economics.
3. Edward Nevin, Text Book of Economic Analysis.
4. Mehta P L, Managerial Economics

Paper 1.3: MONEY AND BANKING

UNIT-I

Nature and functions of money: Barter System – What is money? - Evolution of money – Characteristics of money – Functions of money – Role and importance of money in a modern economy.

UNIT-II

Value of Money and its Measurement: Concept of value of money – Measurement of changes in the value of money – Construction of Price Index Number – Quantity theory of money – Inflation and Deflation.

UNIT III

Financial Markets: Money market – Its meaning – Constituents of the money market – Characteristics of developed and under developed money markets – Indian money market – Its characteristics and structure – Capital market.

UNIT IV

Commercial Banking: Evolution – Definition of banking – Functions of commercial banks – Credit creation – Balance sheet of Commercial Banks – Organization and structure of banks – Types of banks.

UNIT V

Commercial Banking in India: Structure of the commercial banking system –Scheduled Vs non scheduled commercial banks – State Bank of India – Its evolution and functions – SBI and rural financing – SBI and industrial development – Role of Public sector banks – Indian Private sector banks – Their present position, problems and prospects – Exchange banks in India – Their role in financing of foreign trade – Financial sector reforms and commercial banks.

UNIT VI

Central Banking: Evolution – Definition of a central bank Functions of a Central Bank – Role of the Central Bank in a developing economy – Monetary policy.

Reserve Bank of India: Evolution and organization of the RBI – Functions of the RBI – Monetary policy of the RBI.

REFERENCE BOOKS:

1. D.M. Mithani, Money, Banking, International Trade and Public Finance, Himalaya Publishing House, Bombay.
2. KPM Sundaram, Monetary Theory and Practice, Sultan Chand & Sons, New Delhi.
3. P. Subha Rao, Currency and Banking
4. M. Madhusudhana Rao & V. Surya, Tata McGraw Hill Publishing Company
5. Dhingra & Garg, Monetary Theory & Practice, Sultan Chand & Co., New Delhi.

Paper 1.4: RURAL BANKING

UNIT-I

Indian Rural Economy: Features and Composition – Sources of Rural Finance in India – Requisites of a Good Rural Finance System.

UNIT-II

Institutional Infrastructure for Rural Finance: Co-operative Banks, Commercial Banks and Regional Rural Banks: Their Evolution, Structure and Functions.

UNIT-III

Priority Sector Credit: Concept and Components – Rural Development Programmes: Integrated Rural Development Programme (IRDP), Bio-gas Programme, New 20-points Economic Programme, Prime Minister's Rozgar Yojana (PMRY) – Scavengers Rehabilitation Programme (SRP) – Their features – Self Help Groups.

UNIT-IV

Management of Rural Development Projects – Project Dimension, Identification and formulation – Project Appraisals: Technical Feasibility, Economic Viability and Financial Feasibility – Planning and Management of Project Implementation – Monitoring Development Project – Project Evaluation.

UNIT V:

Credit Planning at the Gross Root Level: Lead Bank Scheme and Service Area Approach.

UNIT VI:

Institutions supporting Rural Development: Reserve Bank of India (RBI), National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI), District Industries Centre (DIC), Khadi Village Industries Commission (KVIC), Tamilnadu Adivasi Housing & Development Corporation (TAHDCO) and Non-Governmental Organizations (NGOs) – Their role.

REFERENCE BOOKS:

1. I.C. Dhingra, Rural Banking in India, Sultan Chand & Sons, New Delhi.
2. N.S.Bhat, Aspects of Rural Banking, Common Wealth Publishers, New Delhi.
3. D.P. Sarda, Hand book on Lending to Priority Sector, Govind Prakashan Publications, Jaipur.

Paper 1.5: FINANCIAL ACCOUNTING

UNIT I

Rules for Journalizing – Posting of Accounts – Writing of different types of Cash Books – Writing of Purchase and Sales Journals – Preparation of Trial Balance and Trading and Profit & Loss Account and Balance Sheet of a Sole proprietorship – Bank Reconciliation Statement.

UNIT II

Bills of Exchange and the treatment thereof – Average Due Date – Account Current – Consignment and Joint Venture Accounts.

UNIT III

Accounts of non-trading concerns – Receipts and Payment Accounts, Income and Expenditure Accounts and Balance Sheet.

UNIT IV

Simple Partnership Accounts – Fixed and Fluctuating Capitals – Current and Drawing Accounts – Interest on Capital and Drawings and Salary and Commission – Revaluation of Assets – Treatment of Goodwill – Admission – Retirement – Death of a Partner – Dissolution excluding Garner Vs Murray Decision and Sale to a Company – Final Accounts.

UNIT V

Company Accounts: Issue of Shares and debentures at par, premium and discount – Forfeiture of Shares and re-issue of for-feinted shares – simple cases final Accounts.

UNIT VI

Final Accounts of Banking Companies – Prudential Accounting Norms: Capital Adequacy, Income Recognition, Asset Classification & Provisioning.

REFERENCE BOOKS:

1. Gupta, R.L., Advanced Accounting.
2. Shukla, M.C. & Grewal, T.S., Advanced Accounting.
3. Arulanandam, M.A. & Raman, K.S., Advanced Accounting.

Paper 2.1: PRACTICE AND LAW OF BANKING - I

UNIT I

Definition of banking – Relationship between banker and customer – General relationship – Obligations of a banker: Obligation to honour cheques and to maintain secrecy of accounts – Banker's rights: Right of general lien, set-off, appropriation and to charge interest and incidental charges.

UNIT II

Negotiable Instruments – Definition – Characteristics features – Distinguishing features of cheque, bill and promissory note – Types of bills of exchange – Trade bills and accommodation bills – Discounting of bills – Due date of bills – Dishonour of bills – Noting and protesting – Holder and Holder in due course of negotiable instruments – Payment in due course – Return of cheques.

UNIT III

Endorsements – Definition – Kinds – Crossing – Types – MICR Cheques – Paying banker; Precautions to be taken before a cheque for payment and statutory protection – Collecting banker Duties and Statutory Protection.

UNIT IV

Types of customers and account holders – Procedure and practice in opening and conducting the accounts of customers viz., Minors, Joint account holders, Partnership firms, Joint stock companies, Executors and Trustees, Clubs and Associations, Joint Hindu Family etc – Non-Resident Accounts.

UNIT V

Different types of accounts in a bank: Savings, Current and Fixed deposit accounts – Opening, Operation and Closing of such accounts – Legal aspects of entries in the Pass Book.

UNIT VI

Services to customers: Remittance of funds, Safe Deposit Lockers, Guarantee, Letters of credit, Travellers cheques, Gift cheques, Credit Cards, Merchant Banking Services, Investment Counseling, carrying out standing instructions and other miscellaneous services.

REFERENCE BOOKS:

1. Tannan, M.L, Banking Law and Practice in India, Thacker & Co. Ltd., Bombay, Latest Edn.
2. Sundaram & Varshney, Banking Theory, Law and Practice, Sultan Chand & Sons, New Delhi, Latest Edn.
3. Indian Institute of Bankers, Mumbai , Commercial Banking Volume I, II and III.

Paper 2.2: MANAGEMENT PRACTICE

UNIT I

Importance of Management – Definition of Management – Management Functions – Roles of a Manager – Managerial Skills – Management and Administration – Evolution of Management – Early Management Approaches: Scientific Management – Administrative Management – Human Relations Movement – Modern Management Approaches: Behavioral Approach – Quantitative Approach – Systems Approach – Contingency Approach.

UNIT II

Planning: Nature – Importance – Types of Plans: Objectives – Strategies – Standing Plans – Policies – Procedures – Methods – Rules – Single Use Plans – Programmes – Budgets – Performance Budgeting. Planning in Banks: Deposit Planning – Credit Planning – Profit Planning – Operational Planning – Steps in Planning – Limitations of Planning – Making Planning Effective – Decision Making: Decision – Types of Decisions – Rational Decision Making – Difficulties in Decision Making – Decision Making at branch level bank.

UNIT III

Organizing: Meaning – Formal and Informal Organizations – Process of Organising – Span of Management – Departmentalisation – Organization Structure: Tall Organization – Flat Organization. Organization in a Bank: Head Office Organization – Zonal/Regional Office Organization – Organizing a Bank Branch – Delegation: Meaning – Advantages – Barriers – Guidelines for effective delegation – Decentralisation: Meaning – Advantages – Determinants of decentralization.

UNIT IV

Staffing: Principles of Manpower Planning – Recruitment, Selection and Placement Practices in Indian Banks – Need for Training – Training Methods – Training Practices in Banks – Performance Evaluation: Purpose – Criteria – Methods. Job Rotation – Job Enlargement – Job Enrichment – Job Satisfaction.

UNIT V

Directing: Effective Direction – Motivation – Communication Process – Forms of Communication – Principles of Effective Communication. Functions of a Leader – Branch Manager as a leader.

UNIT VI

Controlling: Control Process – Need for Control – Control Techniques: Budgetary Control – Standard Costing – Responsibility Accounting – Financial Statements and Ratio Analysis – Internal and External Audit – Reports – PERT and CPM – Human Resources Accounting.

REFERENCE BOOKS:

1. P.C. Tripathi and P.N. Reddy, Principles of Management, Tata McGraw Hill Publishing Company Limited, New Delhi.
2. Dr. C.B. Gupta, Principles of Management for Bankers, Sultan Chand & Sons, New Delhi – 110 002.
3. Koontz, Harold and Cyril O'Donnell, Essentials of Management, Tata McGraw Hill Publishing Company Limited, New Delhi.

Paper 2.3: BUSINESS STATISTICS

UNIT I

Meaning and scope of statistics with special reference to commercial problem.

Measures of Central Tendency: Arithmetic, Geometric and Harmonic Means – Median and Mode-Weighted Average – Characteristics of different averages.

UNIT II

Measures of Dispersion – The Range – The Interquartile Range – The Mean Deviation and The Standard Deviation.

UNIT III

Skewness: Different Measures of skewness (Karl Pearson's Bowley's and Kelly's Coefficient of Skewness).

UNIT IV

Correlation: Karl Pearson's Coefficient of Correlation – Spearman's Rank Correlation.

UNIT V

Interpolation: Newton's Method – Lagrange's Method.

UNIT VI

Index Number: Definition and Use – Cost of Living Index – Index Numbers of wholesale prices.

Time Series: Seasonal, Cyclical and Irregular fluctuations – Methods of eliminating their influence – Secular trend.

REFERENCE BOOKS:

1. D.N. Elhance, Fundamentals of Statistics.
2. S.P. Gupta, Statistics for Commerce Students
3. S.P. Gupta, Statistical Methods.

Paper 2.4: COMMERCIAL LAW

UNIT I

Formation of a Contract – Essentials of a valid contract – Void – and Voidable Contracts – Capacity of Contract – Appropriation of Payments – Rule in Clayton's Case – Quasi Contract – Frustration of Contract – Novation of Contract – Breach of Contract. Indemnity and Guarantee – Bailment and Pledge – Agency.

UNIT II

Sale of Goods: Documents of title to goods – Formation of a Contract of Sale – Sale and Hire Purchase – Mercantile Agent – Sale and Agreement to Sell – Conditions and Warranties – Sale by description – Passing of title to goods – Duties of Buyer and Seller and Unpaid Vendor.

UNIT III

Partnership: Formation – Registration of Firms – Relationship between Partners – Minor as a Partner – Rights and Liabilities of a Partner – Individual debts of partner and partnership debts – Dissolution of Partnership.

UNIT IV

Companies Act: Kinds of Companies – Special Advantages of Establishing a business as a Company – Incorporating a Company – Memorandum and Articles of association – Manner of amending Memorandum and Articles – Powers of Directors and Limitations thereon – Meetings of Shareholders – Registration of Charges – Winding up and preferential payments – Doctrine of Indoor Management – Doctrine of Ultravires.

UNIT V

Indian Stamp Act: Reasons for variations in Stamp duty from State to State – Stamping of documents – Alteration of Stamped.

Document: Document executed outside India and brought into India and also document executed in one State and to be acted upon in another State in India – Effect of document not being duly stamped.

UNIT VI

Registration Act: Procedure for registration of documents – Priorities – Effect of Registration. Limitation: Rational behind prescribing period of limitation – Acknowledgement of debts and confirmation of balances – Part Payment – Time limit for filing suit in certain specific cases of special interest to bankers like recovery of monies, mortgages, sureties and guarantees.

REFERENCE BOOKS:

1. N.D. Kapoor, Mercantile Law
2. D.F. Mulla V.J. Mattoo, The Indian Contract Act
3. Pollock & Mulla, Sale of Goods and Partner-ship Act.
4. S.M. Shah, Lectures on Company Law

Paper 2.5: FOREIGN EXCHANGE AND FINANCING OF FOREIGN TRADE

UNIT I

Foreign Trade: Meaning – Commercial terms used in the delivery of goods and for payments (Incoterms) – Balance of Trade – Balance of Payments; Components – Balance of payments disequilibrium – Correction of disequilibrium.

Documents used in foreign trade: Bill of exchange – Marine insurance policy – Invoices – Certificates and other documents – Transport documents: Bill of lading, Multimodal transport documents, Airway bill, Other transport documents.

UNIT II

Foreign exchange: Meaning – Administration of foreign exchange – Functions of the foreign exchange department of a bank – Foreign exchange market in India – Exchange Control: Objectives and methods – Exchange Control Regulations relating to exports and imports.

Exchange Arithmetics: Nostro and Vostro Accounts: Spot and Forward Deals for the purchase and sale of Foreign currencies – Selection of buying and selling rates and Calculation of appropriate forward rates.

UNIT III

Export Financing: Packing Credit Advances, Advances against duty drawback, Other services to exporters – Post – Shipment finance: Purchase/Negotiation of export bills, Scrutiny of bills drawn under letter of credit, collection of export bills, Advance against bills under collection, and Consignment exports.

UNIT IV

Project exports: Definitions, Financing Project exports, Joint Ventures abroad and Export guarantees.

UNIT V

Export – Import Bank of India: Lending to Indian exporters, Lending to foreign governments and companies, Loans to commercial banks in India, non-lending services and Forfeiting.

Export Credit Guarantee Corporation of India Limited: Standard Policies, Specific Policies and Guarantees to banks.

UNIT VI

Import Financing: Import licenses – Letter of Credit: Mechanism and types – Opening of a letter of credit – Payment of import bills – Import trust receipt – Deferred payment imports – Foreign Currency loans.

REFERENCE BOOKS:

1. Francis Cherunilam, International Trade and Export Management
2. C. Jeevanandam, Foreign Exchange – Practice, Concepts and Control
3. Reserve Bank of India, Exchange control Manual – Vol. I & II
4. S.K. Verghese, Financing Foreign Trade

Paper 3.1: PRACTICE AND LAW OF BANKING - II

UNIT I

Lending of money by banks: Principles of sound lending – forms of advances such as Cash credit, Overdraft, Loan, Purchase and Discounting of bills – borrower study.

UNIT II

Secured advances: Different types of securities viz., Government securities, Corporate securities, Life Insurance Policies. Goods, Document of Title to Goods, Real estate and Book debts, Modes of creating charges viz., Lien, Pledge, Hypothecation and Mortgage.

UNIT III

Guarantees: Definition – Essential features of a contract of guarantee – Liability of the surety – Rights of surety – Obligations of creditor towards surety Rights of creditor.

UNIT IV

Loan appraisal: Managerial appraisal, Technical appraisal, Commercial appraisal and Financial appraisal – Follow up and supervision – NPAs.

UNIT V

Documentation: Meaning – Documentation in respect of various types of borrowers and securities – Essential clauses – Indian Stamp Act – Limitation Act.

UNIT VI

Industrial Sickness: Definition – Causes – Rehabilitation of Sick units.

REFERENCE BOOKS:

1. Bedi H.L. and Hardikar V.K., Practical Banking Advances.
2. Kannan M.L., Banking law and Practice in India, Thacker & Co.
3. Commercial Banking 4 Volumes.

Paper 3.2: MARKETING OF BANKING SERVICES

UNIT I

Marketing – Meaning – Importance of Marketing – Modern Marketing Concept – Features of the Modern Marketing Concept – Marketing and Selling Social Marketing – Demarketing – Remarketing.

UNIT II

Relevance of marketing to banking – Marketing environment for a banker – Marketing Mix of a banker – Marketing Plan: Bank's business objectives, Marketing Audit, SWOT Analysis, Marketing Objectives and Marketing.

Market Segmentation – Bases – Marketing outlet for a banker – Suitable location for a bank branch – Branch Layout.

UNIT III

Product Mix: Product Line of a banker, New Product Development, Constraints on Product Development, Product Management, Non Fund Based Business.

UNIT IV

Price Mix: Meaning, Importance, Factors affecting price of a product, pricing objectives, Pricing Policies, Deregulation of Interest rates, Service Charges.

UNIT V

Promotion Mix: Meaning, Objectives, Methods, Factors affecting Promotion Mix of a Banker: Personal Promotional Efforts, Direct Marketing Public Relations, Societal Banking, Customers Meets, Customer Service, Advertising, Publicity – Good Promotional.

UNIT VI

Bank Marketing Personnel – Selection – Motivation – Training and Development.

REFERENCE BOOKS:

1. Ramasamy and Namakumari, Marketing Management.
2. Gupta and Rajan Nair, Marketing Management.
3. Madhukar, Dynamics of Bank Marketing.
4. Kenneth Andrew, The Bank Marketing Handbook.

Paper 3.3: MANAGEMENT ACCOUNTING

UNIT I

Management accounting – Concept, functions, scope and limitations of management accounting, financial accounting Vs management accounting, functions of financial controller and his place in the organization.

UNIT II

Business Budgets and Budgetary Control – Objectives, advantages and limitations of budgets and budgetary control, essentials for effective budgeting, classifications of budgets – sales budget, production budget, purchases budget cash budget, flexible budget.

UNIT III

Capital budgeting – meaning and need of Capital budgeting, methods of ranking investment proposals – Payback period method. Discounted Cash Flow method, Average Rate of Return method, limitations of Capital budgeting.

UNIT IV

Marginal Costing and Break-even analysis – Concept, basic characteristics, advantages and limitations of marginal costing, meaning of break-even analysis, application of break-even analysis, limitations of break-even analysis.

UNIT V

Analysis and interpretation of financial statements – nature and limitations of financial statements, types of financial analysis, comparative financial statements, common size statement, trend percentages, Ratio analysis – nature, utility and limitations of ratio analysis, analysis for solvency, liquidity and profitability, fund flow analysis, Cash flow analysis.

UNIT VI

Reporting to Management – Objects and types of reports, general principles of reporting, use of reports of management.

REFERENCE BOOKS:

1. S.N. Maheswari, Principles of Management Accounting, Sultan Chand & Sons, New Delhi
2. Hingorani and Chawla, Management Accounting, Himalaya Publishing House
3. Murthy and Guruprasad, Management Accounting, Himalaya Publishing House
4. John N. Myer, Financial Statement Analysis.

Paper 3.4: COMPUTERS AND BANKING

UNIT I

Introduction of Computers: What is a computer? Brief history of computers – Early computers – Generations of computers – Uses of computers.

UNIT II

Data representation: Simple computer system – Basic concepts of data processing – Binary number system – Octal and hexadecimal – Representation of non-numeric data.

UNIT III

Hardware: Anatomy of computers – CPU – Main memory – Peripheral controllers – Peripherals.

UNIT IV

Software: Need for software – What is software? Types of software – System software – Operating systems – language translators – Programming languages.

UNIT V

Computerisation in banks: Stand alone computer system – LAN – Local processing with batch updates – AIMS – Home banking – EFT – MICR.

UNIT VI

Inter branch reconciliation Security considerations – Accidental damage, power failures and malicious damage – Operational problems.

REFERENCE BOOKS:

1. Bajwa K.S., Bank Mechanization, Skylark Publications
2. Srivatsava, Computer Applications in Banks, BTC, RBI
3. Sanjay Soni and Vinayak Aggarwal, Computers and Banking Sultan Chand & Sons.

Paper 3.5: DEVELOPMENT BANKING

UNIT I

Development Banking in India: Need – Evolution – Objectives – Industrial Finance Corporation of India (IFCI): Objectives – Functions – Forms of assistance.

UNIT II

Industrial Development Bank of India (IDBI): Objectives – Functions – Schemes of Direct Assistance: Project finance, Technical Development Fund and Venture Capital Fund – Schemes of indirect assistance: Refinance Schemes, Bills rediscounting, Facility and seed capital assistance – Technical Consultancy Organization (TCOs) – Fee based activities of the IDBI.

UNIT III

Industrial Credit and Investment Corporation of India (ICICI): Objectives – Functions.

Small Industries Development Bank of India (SIDBI): Functions – Forms of assistance – National Small Industries Corporation (NSIC): Functions – Forms of assistance.

UNIT IV

State Financial Corporations (SFCs): Objectives – Functions – Forms of Assistance – Export Import Bank of India (EXIM Bank): Functions – National Housing Bank (NHB): Objectives – Functions.

UNIT V

Unit Trust of India (UTI): Objectives – Resources – Activities of the Trust – Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC): Their role in industrial development.

UNIT VI

Credit Rating Agencies in India: Credit Rating Information Services of India Limited (CRISIL) – Investment Information and Credit Rating Agency of India Limited (ICRA) – Credit Analysis and Research Limited (CARE) – Their role.

REFERENCE BOOKS:

1. Institutional Framework for Industry – Vol. I & II – Vasant Desai, Himalaya Publishing House, Mumbai.
2. Development Banking in India, Vol. I & II – Vasant Desai, Himalaya Publishing House, Mumbai.
3. How to borrow from Financial and Banking Institutions? Edited by: Ajay Marg, Deepak SK. Kochhar and SN. Sharma Nabhi Publications, New Delhi.
4. Annual Report of Development Banking Institutions.



Course	:	Bachelor of Commerce (B.Com)
Mode	:	Distance Education
Duration	:	Three Years
Eligibility	:	Pass in Higher Secondary / 3 year Diploma
Lateral Entry to II Year	:	3 Year Diploma in Modern Office Practise
Medium	:	English and Tamil

COURSE OF STUDY & SCHEME OF EXAMINATIONS

Subject Code	Title	Total Marks
I YEAR		
1.1	Business Communication	100
1.2	Basic Financial Accounting	100
1.3	Principles of Management	100
1.4	Business Organisation	100
1.5	Business Environment	100
II YEAR		
2.1	Managerial Economics	100
2.2	Commercial Law	100
2.3	Business Statistics	100
2.4	Advanced Accountancy	100
2.5	Elements of Marketing	100
III YEAR		
3.1	Company Law	100
3.2	Auditing	100
3.3	Banking Theory, Law and Practice	100
3.4	Cost Accounting	100
3.5	Management Accounting	100
Total		1500

Paper 1.1: BUSINESS COMMUNICATION

UNIT-I

Structure of Business Letters: Layout of business letter – Types of business letter – Enquiry, Offers, Quotations and Orders.

UNIT-II

Trade references and status enquires – Confirmation and execution of orders – Refusal and cancellation of orders – Acknowledging receipts of goods and making payments.

UNIT-III

Complaints and settlements – Collection letters – Circular letters.

UNIT-IV

Agency letters – Banking letters – Insurance letters.

UNIT-V

Drafting of Agenda and Minutes: Meaning – Types – Methods.

UNIT-VI

Reports: Types and preparation – Speech drafting – Occasions – Application for a situation.

TEXT AND REFERENCE BOOKS:

- | | |
|-----------------------|--|
| 1. Bhal and Nagamiah | : Modern Business Correspondence |
| 2. Majumdar | : Commercial Correspondence |
| 3. Reddy & Appannaiah | : Essentials of Business Communication |
| 4. Rajendra Paul | : Business Correspondence. |

Paper 1.2: BASIC FINANCIAL ACCOUNTING

UNIT-I

Introduction: Need for accounting, definition, Advantages of Accounting, Methods of Accounting, the Journal, Transaction analysis of Journal entries, Ledger, Posting, Maintaining Purchase books, Trail balance – Meaning, definition, Methods of preparation, Final Accounts, Manufacturing Accounts, Trading profit and loss Accounts, Balance Sheet – Adjustments.

UNIT-II

Bills of exchange and the treatment: Average due date, Meaning, Uses: Determination of due date, Average due date for calculation of interest – Determination of due date.

UNIT-III

Final accounts of non-trading concern:- Introduction, Final Accounts, Final accounts for non profit organization, Receipts and Payment accounts, Income and Expenditure Accounts, Balance sheet.

UNIT-IV

Single Entry:- Meaning, definition, features, limitations, difference between double and single entry system.

UNIT-V

Consignment: Meaning, Features of Consignment transaction, distinction between consignment and sale, Accounting treatment of consignment transactions – Joint Venture, meaning, features, difference between Joint venture and Partnership, Joint Venture and Consignment.

UNIT-VI

Self-balancing Ledgers: Introduction – Debtors ledger – Creditors ledger – General ledger – Procedure of self-balancing – Adjustment accounts – Journal entries of self balancing – Different methods of depreciation.

TEXT AND REFERENCE BOOKS:

1. Dr.M.A. Arulanandam & K.S. Raman : Advanced Accountancy
2. M.C.Sukhla and T.S. Grewal : Advanced Accountancy
3. Jain & Narang : Advanced Accounts
4. R.L. Gupta : Advanced Accounting

Paper 1.3: PRINCIPLES OF MANAGEMENT

UNIT-I

Management: Concepts – Nature – Importance – Approaches to modern management – Contributors to management sector.

UNIT-II

Planning: Nature – Purpose and importance – Premises of planning – Types of plans – Steps in Planning: Decision-making – Types – Process – Emotionality Vs Rationality in decision-making.

UNIT-III

Organising: Principles and process of organisation – Types – Structure – Centralisation Vs Decentralisation – Departmentalisation – Span of management – Delegation – Authority – Responsibility – Accountability.

UNIT-IV

Staffing: Man power planning – Job analysis – Selection technique – Analysis – Planning and implementation.

UNIT-V

Directing: Principles – Elements – Motivation – Maslow, Herzberg, Vroom models – Communication process – Forms – Barriers – Overcoming barriers – Leadership: Managerial grid – Styles.

UNIT-VI

Co-ordination: Meaning – Importance – Types – Control: Meaning – Need for Control – Control Process – Control Techniques.

TEXT AND REFERENCE BOOKS :

1. Essentials of Management : L.N. Prasad
2. Essentials of Management : Reddy & Appanniah
3. Essentials of Management : Lallan Prasad
4. Essentials of Management : Koontz & O' Donnel

Paper 1.4: BUSINESS ORGANISATION

UNIT-I

Business Organisation: Meaning – Scope – Types – Sole Trader – Partnership – Company – Cooperatives – Advantages and Disadvantages.

UNIT-II

Location and size of business units – Concept of optimum firm – Factors governing the size of an optimum business unit.

UNIT-III

Large scale and Small scale business units – Merits and limitations.

UNIT-IV

Scientific Management: Meaning – Principles – Criticism – Rationalisation: Meaning – Advantages and disadvantages – Difference between Scientific Management and Rationalisation.

UNIT-V

Business Combinations: Meaning - Significance – Forms – Merits and limitations.

UNIT-VI

State and Industry: Industrial Policy of India – Public Enterprises: Importance – Forms – Functions.

TEXT AND REFERENCE BOOKS:

1. Bhushan, 'Business Organisation and Management'.
2. Shukla, 'Business Organisation and Management'.
3. Chatterjee, 'Modern Business'.
4. Davar, 'Business Organisation and Industrial Management'.
5. Bhowse, 'Business Organisation'.

Paper 1.5: BUSINESS ENVIRONMENT

UNIT-I

Business Environment: Concept – Significance – Factors – Environmental influence on business.

UNIT-II

Social and Cultural Environment: Demographic trend – Indian social structure – Caste and communal systems – Interplay of various systems – Impact on business.

UNIT-III

Political Environment: Directive Principles of State Policy – Centre-State relations – Impact of political environment on business.

UNIT-IV

Economic Environment: Sectors of economy and their significance – Agriculture, industry – Service – Multinational Corporations: Meaning – Importance – Advantages – Weakness.

UNIT-V

Technological Environment: Choice of technology – Problems in selecting appropriate technology – Importance to business.

UNIT-VI

Social Responsibility: Meaning – Importance – Responsibility towards various interest groups.

TEXT AND REFERENCE BOOKS:

1. Francis Cherunilam, 'Business Environment'.
2. Aswathappa K, 'Essentials of Business Environment'.
3. Garg V K, 'Economic Environment of Business'.
4. Sherlekar S A, 'Modern Business Organisation and Management'.

Paper 2.1: MANAGERIAL ECONOMICS

UNIT-I

Managerial Economics: Concept – Nature – Scope – Functions – Concepts of scarcity – Marginalism – Equi marginalism.

UNIT-II

Opportunity costs – Time perspective – Risk and uncertainty.

UNIT-III

Demand Function: Concept – Types of demand – Determinants – Cardinal and ordinal utility analysis.

UNIT-IV

Demand Curves – Demand elasticity – Demand forecasting.

UNIT-V

Production Function: Cost concepts – Total, average and marginal cost analysis – Returns to scale – Cobb-Douglas production function.

UNIT-VI

Price-output Function: Output and price decisions under perfect competition, monopolistic competition, monopoly and duopolistic conditions – Pricing strategies.

TEXT AND REFERENCE BOOKS:

1. Mehta P L, 'Managerial Economics'.
2. Adhikary M, 'Managerial Economics'.
3. Gupta M & Samuel Paul, 'Managerial Economics'.
4. Chopra O P, 'Managerial Economics'.

Paper 2.2: COMMERCIAL LAW

UNIT-I

Indian Contract Act 1872: Meaning and essentials of a valid contract – Formation of contract – Performance of contract – Termination and discharge of contract – Remedies for breach of contract – Quasi contract.

UNIT-II

Special Contracts: Indemnity and guarantee – Bailment – Agency.

UNIT-III

Sale of goods act.1930: Contract of sale – Conditions and warranties – Transfer of property – Performance of the contract of sale. Rights of an unpaid seller.

UNIT-IV

Negotiable Instruments Act,1881: Negotiable instruments – parties to a negotiable instrument – Material alteration – crossing of cheques – Endorsement – Payment and collection of cheques.

UNIT-V

Indian Partnership Act ,1932: Meaning and test of partnership – Registration of firms - Relations of partners – Dissolution of firms.

Arbitration Act, 1940: Arbitration – arbitration without intervention of court – Arbitration in suits.

UNIT-VI

Carriage of Goods: Classification of common carriers – rights, duties and liabilities of common carrier – Carriage by rail – Contract of affreightment – Charter party – Bill of lading – Carriage by air – Documents relating thereto – Liability of the air carrier.

Contract of insurance - Basic elements, kinds of insurance – Fire insurance – Marine insurance.

TEXT AND REFERENCE BOOKS:

1. Kapoor, N.D. : Elements of Mercantile law
2. Sen and Mitra : Commercial Law
3. Shukla,M.C. : Mercantile law
4. Relevant bare acts.

Paper 2.3: BUSINESS STATISTICS

UNIT-I

Business Statistics: Meaning – Scope.

UNIT-II

Measures of Central Tendency: The arithmetic, geometric and harmony means – Median and mode – Weighted average – Characteristics of different averages.

UNIT-III

Measures of Dispersion: The Range – The Inner Quartilerange – The Mean deviation and the Standard deviation.

UNIT-IV

Skewness: Different measures of skewness – Correlation (Linear Correlation only) – Interpolation.

UNIT-V

Index Number: Definition – Use of the index number – Cost of living index – Index numbers of wholesale prices.

UNIT-VI

Time Series: Seasonal cyclical and irregular fluctuations – Methods of eliminating their influence – Secular trend.

TEXT AND REFERENCE BOOKS:

1. Elhance D N, 'Fundamentals of Statistics'.
2. Gupta S P, 'Statistics for Commerce Students'.
3. Gupta S P, 'Statistics Methods'.

Paper 2.4: ADVANCED ACCOUNTANCY

UNIT-I

Partnership Accounts: Partner's admission – Retirement of a partner – Death of a partner.

UNIT-II

Joint life policy – Amalgamation of firms – Dissolution of a partnership firm – Insolvency of a partner – Garner Vs. Murray – Piecemeal distribution – Sale to a company.

UNIT-III

Company Accounts: Issue of shares – Issue of redeemable preference shares – Forfeiture and re-issue of shares – Redemption on redeemable preference shares – Issue of debentures – Redemption of debentures.

UNIT-IV

Company final accounts – Profits prior to incorporation.

UNIT-V

Amalgamation – Absorption – Reconstruction.

UNIT-VI

Department and Branch accounts – Hire purchase and instalment systems – Royalties – Fire claims.

TEXT AND REFERENCE BOOKS:

1. M.A. Arulanandam & K.S. Raman : Advanced Accounting
2. M.C.Shukla & T.S. Grewal : Advanced Accounting
3. R.L.Gupta : Advanced Accounting
4. Jain & Narang : Advanced Accounting

Paper 2.5: ELEMENTS OF MARKETING

UNIT-I

Modern Marketing: Concept – Approaches to study of marketing – Features of Industrial , Consumer and Services Marketing.

UNIT-II

Consumer Behaviour: Meaning – Their relevance to marketing – Market segmentation strategies – Marketing mix.

UNIT-III

Product – Meaning – Product mix – Product planning and implementation – PLC – Branding – Packaging.

UNIT-IV

Pricing: Policies and methods – New product pricing – Government control on pricing.

UNIT-V

Physical Distribution: Meaning – Importance – Types.

UNIT-VI

Promotion Mix: Advertisement: Meaning – Objectives – Copy – Media – Budget - Evaluation – Sales Promotion: Objectives – Types and Importance – Personal Selling: Process – Importance.

TEXT AND REFERENCE BOOKS:

- | | |
|---------------------------------------|---------------------------------|
| 1. Fundamentals of marketing | : William J. Stanton |
| 2. Marketing management | : C.B. Mamoria & Satish Mamoria |
| 3. Marketing | : J.C. Gandhi |
| 4. Marketing | : Rajan Nair |
| 5. Essentials of marketing management | : S.A. Sherlekar |

Paper 3.1: COMPANY LAW

UNIT-I

Company: Meaning – Characteristics – Types – Corporate personality – Corporate veil – Lifting of corporate veil – Incorporate – Documents to be filed – Preliminary contracts – Promoter – Duties.

UNIT-II

Memorandum of Association: Meaning – Purpose – Contents – Doctrine of ultra vires – Effects – Alteration – Articles of Association: Purpose – Contents – Alteration – Doctrine of Constructive notice and Indoor management – Prospectus: Definition – Registration – Contents – Misrepresentation in prospectus – Consequences.

UNIT-III

Share Capital and Membership of Company: Share – Meaning – Kinds – Allotment of shares – Forfeiture and reissue of shares – Transfer and transmission of shares – Alteration of share capital.

Membership: Types – Methods of creation of membership.

UNIT-IV

Company Management: Director: Meaning – Appointment – Qualification – Disqualification – Vacation – Removal – Powers, duties and liabilities.

UNIT-V

Company Meetings: Requisites of valid meeting – Types – Statutory, AGM, EGM, Board Meetings – Minutes – Chairman: Duties – Resolutions – Kinds of resolutions.

UNIT-VI

Winding up: Meaning – Modes of winding up – Compulsory winding up – Voluntary winding up – Winding up subject to the supervision of the Court – Liquidation – Powers and duties.

TEXT AND REFERENCE BOOKS:

1. Kapoor N D, 'Company Law'.
2. Sen Gupta B K, 'Company Law', Eastern Law Book House.
3. Shah S M, 'Lectures on Company Law', N.M. Tripathi P. Ltd., Mumbai.

Paper 3.2: AUDITING

UNIT-I

Definition – Meaning – Objectives of Auditing – Errors – Frauds – Continuous audit and periodical audit – Audit programmes.

UNIT-II

Internal check and internal control – Definition – Schemes of internal check for wage payments, petty cash, purchases and sales – Vouching of cash transaction – Vouching of trade transaction.

UNIT-III

Verification and valuation of stock – Methods of stock valuation – Verification and valuation of assets and liabilities.

UNIT-IV

Audit of limited companies – Qualifications, appointment and removal of auditors – Rights and powers – Share capital audit – Share transfer audit.

UNIT-V

Divisible profits – Capital profits and dividend – Depreciation of fixed assets and dividend – Dividends – Interim and final.

UNIT-VI

Investigation – Distinction between investigation and audit – Investigation on behalf of a lender of money, incoming partner – Investor in shares – Investigation under the companies act.

TEXT AND REFERENCE BOOKS:

1. Tandon : Practical Auditing

Paper 3.3: BANKING – THEORY, LAW AND PRACTICE

UNIT-I

Evolution of banks – Commercial banking – Mixed banking functions of commercial banks - Their balance sheet – Credit creation by commercial banks - Central Banks – Its functions – Credit control measures of the central banks.

UNIT-II

Unit banking – Branch banking – Indian commercial banks. Nationalisation of major commercial banks – Objects – Place of private sector banks.

UNIT-III

Indian money market – Different components – Backwardness of the Indian money market – Role of commercial banks in the Indian money market.

UNIT-IV

Law and practice – Banker and customer – General and special relationship – Banks as borrowers – Precautions to be taken before opening accounts – Legal significance of fixed deposit receipts – cheque – its requisites – Paying banker - Collecting banker – Pass book – Closing of accounts – Loans and advances – Legal formalities and precautions.

UNIT-V

Crossing of cheques – Endorsements – holder in Due course – Payment in due course and special features of negotiable instruments.

TEXT AND REFERENCE BOOKS:

1. Basu : Theory and Practice of Development Banking
2. Muranjan S.K. : Modern Banking in India
3. Reddy & Appanniah : Banking Theory and Practice
4. Natarajan & Gordon : Banking Theory and Practice

Paper 3.4 COST ACCOUNTING

UNIT-I

Cost accounting – Elements of cost – Cost concepts.

UNIT-II

Accounting and control of material cost.

UNIT-III

Labour – Wage payment and incentives – Labour cost control – Labour turnover.

UNIT-IV

Process costing – Process losses – Inter-process profits.

UNIT-V

Standard costing – Variance analysis.

UNIT-VI

Cost ledgers – Reconciliation of cost and financial profits – Integral accounting.

Note: Theory 40%; Problems 60%.

TEXT AND REFERENCE BOOKS:

- | | |
|-----------------------------|--------------------|
| 1. Advanced cost accounting | : Jain and Narang. |
| 2. Cost accounting | : N.K. Prasad |
| 3. Cost accounting | : S.P.Lengar |
| 4. Cost accounting | : Nigam and Sharma |
| 5. Cost accounting | : P.V. Ratnam |

Paper 3.5: MANAGEMENT ACCOUNTING

UNIT-I

Management Accounting – Scope And Importance – Management Accounting Vs Financial Accounting And Cost Accounting.

UNIT-II

Ratio Analysis.

UNIT-III

Fund Flow Analysis – Cash Flow Analysis.

UNIT-IV

Budgeting And Budgetary Control – Sales Budget – Cash Budget – Operating Budget – Master Budget – Flexible Budget – Zero Base Budgeting – Performance Budgeting – Programme Budgeting.

UNIT-V

Marginal Costing – Break Even Analysis – Differential Costing.

UNIT-VI

Capital Budgeting – Nature And Significance – Methods of Evaluation of Alternative Capital Expenditure Programme.

Note : Atleast 60% of the Total Marks be Allotted for problems.

TEXT AND REFERENCE BOOKS:

1. Maheswari S N, 'Management Accounting and Financial Control'.
2. Man Mohan and Goyal, 'Management Accounting'.
3. Hingorani and Ramanathan, 'Management Accounting'.
4. . Katyal, 'Management Accounting'.



Course	:	B.Com (Computer Applications)
Mode	:	Distance Education
Duration	:	Three Years
Eligibility	:	Pass in Higher Secondary / 3 year Diploma
Lateral Entry to II Year	:	3 Year Diploma in Modern Office Practise / Computer / EEE
Medium	:	English only

COURSE OF STUDY & SCHEME OF EXAMINATIONS

Subject Code	Title	Total Marks
I YEAR		
1.1	Business Communication	100
1.2	Basic Financial Accounting	100
1.3	Principles of Management	100
1.4	Office Automation	100
1.5	Lab – I: MS-Office	100
II YEAR		
2.1	Elements of Marketing	100
2.2	Commercial Law	100
2.3	Banking Theory, Law and Practice	100
2.4	C Programming	100
2.5	Lab – II: C Programming	100
III YEAR		
3.1	Advanced Accountancy	100
3.2	Auditing	100
3.3	Cost Accounting	100
3.4	Web Designing and its Applications	100
3.5	Lab – III: Accounting Package	100
Total		1500

Paper 1.1: BUSINESS COMMUNICATION

UNIT-I

Structure of Business Letters: Layout of business letter – Types of business letter – Enquiry, Offers, Quotations and Orders.

UNIT-II

Trade references and status enquires – Confirmation and execution of orders – Refusal and cancellation of orders – Acknowledging receipts of goods and making payments.

UNIT-III

Complaints and settlements – Collection letters – Circular letters.

UNIT-IV

Agency letters – Banking letters – Insurance letters.

UNIT-V

Drafting of Agenda and Minutes: Meaning – Types – Methods.

UNIT-VI

Reports: Types and preparation – Speech drafting – Occasions – Application for a situation.

TEXT AND REFERENCE BOOKS:

- | | |
|-----------------------|--|
| 1. Bhal and Nagamiah | : Modern Business Correspondence |
| 2. Majumdar | : Commercial Correspondence |
| 3. Reddy & Appannaiah | : Essentials of Business Communication |
| 4. Rajendra Paul | : Business Correspondence. |

Paper 1.2: BASIC FINANCIAL ACCOUNTING

UNIT-I

Introduction :- Need for accounting, definition, Advantages of Accounting , Methods of Accounting , the Journal, Transaction analysis of Journal entries, Ledger, Posting, Maintaining Purchase books, Trail balance – Meaning, definition, Methods of preparation, Final Accounts, Manufacturing Accounts, Trading profit and loss Accounts, Balance Sheet – Adjustments.

UNIT-II

Bills of exchange and the treatment: Average due date ,Meaning, Uses: Determination of due date, Average due date for calculation of interest – Determination of due date.

UNIT-III

Final accounts of non-trading concern:- Introduction, Final Accounts, Final accounts for non profit organization, Receipts and Payment accounts, Income and Expenditure Accounts, Balance sheet.

UNIT-IV

Single Entry:- Meaning, definition, features, limitations, difference between double and single entry system.

UNIT-V

Consignment ,Meaning, Features of Consignment transaction, distinction between consignment and sale, Accounting treatment of consignment transactions – Joint Venture, meaning, features , difference between Joint venture and Partnership,. Joint Venture and Consignment.

UNIT-VI

Self-balancing Legers: Introduction – Debtors ledger – Creditors ledger – General ledger – Procedure of self-balancing – Adjustment accounts – Journal entries of self balancing – Different methods of depreciation.

TEXT AND REFERENCE BOOKS:

- | | |
|-------------------------------------|------------------------|
| 1. Dr.M.A. Arulanandam & K.S. Raman | : Advanced Accountancy |
| 2. M.C.Sukhla and T.S. Grewal | : Advanced Accountancy |
| 3. Jain & Narang | : Advanced Accounts |
| 4. R.L. Gupta | : Advanced Accounting |

Paper 1.3: PRINCIPLES OF MANAGEMENT

UNIT-I

Management: Concepts – Nature – Importance – Approaches to modern management – Contributors to management sector.

UNIT-II

Planning: Nature – Purpose and importance – Premises of planning – Types of plans – Steps in Planning: Decision-making – Types – Process – Emotionality Vs Rationality in decision-making.

UNIT-III

Organising: Principles and process of organisation – Types – Structure – Centralisation Vs Decentralisation – Departmentalisation – Span of management – Delegation – Authority – Responsibility – Accountability.

UNIT-IV

Staffing: Man power planning – Job analysis – Selection technique – Analysis – Planning and implementation.

UNIT-V

Directing: Principles – Elements – Motivation – Maslow, Herzberg, Vroom models – Communication process – Forms – Barriers – Overcoming barriers – Leadership: Managerial grid – Styles.

UNIT-VI

Co-ordination: Meaning – Importance – Types – Control: Meaning – Need for Control – Control Process – Control Techniques.

TEXT AND REFERENCE BOOKS :

1. Essentials of Management : L.N. Prasad
2. Essentials of Management : Reddy & Appanniah
3. Essentials of Management : Lallan Prasad
4. Essentials of Management : Koontz & O' Donnel

Paper 1.4: OFFICE AUTOMATION

UNIT-I

Introduction - Working with Windows - Working with Office Programs - Title Bar, Status Bar, Menu bar and Tool bars - Using the Office Assistant - Using the Help window - Creating a Shortcut icon - Starting a Program and Opening a Document - Saving and Naming the Document - Using Favourite Folders - Closing, Deleting and Undeleting a Document - Renaming, Copying and Moving a Document - Finding the Document.

UNIT-II

WORD - Working with Word Documents - Moving, Correcting and Inserting Text - Printing a Document - Editing a Document - Selecting and Copying Text - Formatting - Changing Margins, Line spacing, Text Alignment, Font and Font size - Indenting - Inserting Page Numbers and Breaks - Using Tables and Graphics - Creating Tables - Auto formatting Table Text - Inserting, Moving and Resizing pictures - Spell Checking.

UNIT-III

EXCEL - Building a Worksheet - Selecting worksheet items - Using Autofill - Adding and Removing rows and columns - Copying and Moving information - Creating and Copying formulas - Naming ranges - Using Functions - Improving the appearance of worksheet - Changing Column Width - Formatting Text and Numbers - Using Autoformat - Spell Checking - Using Chart Wizard - Creating, Enhancing and Printing a Chart.

UNIT-IV

ACCESS - Creating a New Database - Creating and Saving a table - Primary key creation - Adding, Editing and Deleting fields - Changing the view and Moving fields - Data Entry and Editing - Adding, Inserting and Deleting Records - Adjusting Column widths - Hiding Columns - Finding Records - Sorting Records - Creating, Saving and Editing a Query - Forms - Autoform - Using Report Wizard - Creating and Printing Reports.

UNIT-V

POWER POINT: Creating a PowerPoint Presentation - Integrating office applications - Merging an access table with a word letter - Creating an access report from an Excel List - Creating PowerPoint Presentation from a word outline - Creating a word handout from a PowerPoint Presentation - Creating and printing Binders.

UNIT-VI

MS OUTLOOK: Starting outlook - Outlook window – Using menus and dialog boxes - Exiting outlook.

TEXT AND REFERENCE BOOKS:

1. Laura Acklen et al, Microsoft Office 97 Professional Essentials, Prentice-Hall India (1998).
2. Shelley O'Hara, Discover Office 97, Comdex Computer Publishing (1997)

Paper 2.1: ELEMENTS OF MARKETING

UNIT-I

Modern Marketing: Concept – Approaches to study of marketing – Features of Industrial , Consumer and Services Marketing.

UNIT-II

Consumer Behaviour: Meaning – Their relevance to marketing – Market segmentation strategies – Marketing mix.

UNIT-III

Product – Meaning – Product mix – Product planning and implementation – PLC – Branding – Packaging.

UNIT-IV

Pricing: Policies and methods – New product pricing – Government control on pricing.

UNIT-V

Physical Distribution: Meaning – Importance – Types.

UNIT-VI

Promotion Mix: Advertisement: Meaning – Objectives – Copy – Media – Budget - Evaluation – Sales Promotion: Objectives – Types and Importance – Personal Selling: Process – Importance.

TEXT AND REFERENCE BOOKS:

- | | |
|---------------------------------------|---------------------------------|
| 1. Fundamentals of marketing | : William J. Stanton |
| 2. Marketing management | : C.B. Mamoria & Satish Mamoria |
| 3. Marketing | : J.C. Gandhi |
| 4. Marketing | : Rajan Nair |
| 5. Essentials of marketing management | : S.A. Sherlekar |

Paper 2.2: COMMERCIAL LAW

UNIT-I

Indian Contract Act 1872: Meaning and essentials of a valid contract – Formation of contract – Performance of contract – Termination and discharge of contract – Remedies for breach of contract – Quasi contract.

UNIT-II

Special Contracts: Indemnity and guarantee – Bailment – Agency.

UNIT-III

Sale of goods act.1930: Contract of sale – Conditions and warranties – Transfer of property – Performance of the contract of sale. Rights of an unpaid seller.

UNIT-IV

Negotiable Instruments Act,1881: Negotiable instruments – parties to a negotiable instrument – Material alteration – crossing of cheques – Endorsement – Payment and collection of cheques.

UNIT-V

Indian Partnership Act ,1932: Meaning and test of partnership – Registration of firms - Relations of partners – Dissolution of firms.

Arbitration Act, 1940: Arbitration – arbitration without intervention of court – Arbitration in suits.

UNIT-VI

Carriage of Goods: Classification of common carriers – rights, duties and liabilities of common carrier – Carriage by rail – Contract of affreightment – Charter party – Bill of lading – Carriage by air – Documents relating thereto – Liability of the air carrier.

Contract of insurance - Basic elements, kinds of insurance – Fire insurance – Marine insurance.

TEXT AND REFERENCE BOOKS:

1. Kapoor, N.D. : Elements of Mercantile law
2. Sen and Mitra : Commercial Law
3. Shukla,M.C. : Mercantile law
4. Relevant bare acts.

Paper 2.3: BANKING – THEORY, LAW AND PRACTICE

UNIT-I

Evolution of banks – Commercial banking – Mixed banking functions of commercial banks - Their balance sheet – Credit creation by commercial banks - Central Banks – Its functions – Credit control measures of the central banks.

UNIT-II

Unit banking – Branch banking – Indian commercial banks. Nationalisation of major commercial banks – Objects – Place of private sector banks.

UNIT-III

Indian money market – Different components – Backwardness of the Indian money market – Role of commercial banks in the Indian money market.

UNIT-IV

Law and practice – Banker and customer – General and special relationship – Banks as borrowers – Precautions to be taken before opening accounts – Legal significance of fixed deposit receipts.

UNIT-V

Cheque – its requisites – Paying banker - Collecting banker – Pass book – Closing of accounts – Loans and advances – Legal formalities and precautions.

UNIT-VI

Crossing of cheques – Endorsements – holder in Due course – Payment in due course and special features of negotiable instruments.

TEXT AND REFERENCE BOOKS:

1. Basu : Theory and Practice of Development Banking
2. Muranjan S.K. : Modern Banking in India
3. Reddy & Appanniah : Banking Theory and Practice
4. Natarajan & Gordon : Banking Theory and Practice

Paper 2.4: C PROGRAMMING

UNIT-I

Program Development: Top down approach - Modularity - Stepwise refinement - Pseudocode selection - iteration - control structures - Loops - Structured programming - procedures and recursion - Exchanging the values - Factoring methods - Array techniques - Basics of sorting - Text processing .

UNIT-II

Overview of C data types, operators and expressions: History of C ANSI standard - Anatomy of C program - Coding style - Sample C programs - Executing simple programs - Character set - Key words and Identifiers - Constants ,variables and data types - Symbolic constants - Operators - Expressions - Evaluation of expressions- Precedence of operators - Type conversions in expressions -Associativity and precedence - some computational problems.

UNIT-III

I/O operations ,control flow and arrays : Reading and writing a character-Formatted input and output - Conditional branching - Switch statement - Looping - Nested loops - The Break and continue statements - The Goto statement - Infinite loops - Declaring arrays - Storing arrays in memory - Initialising arrays - Strings -Two dimensional arrays - Multidimensional arrays.

UNIT-IV

Functions, pointers, storage classes, structures and unions: Need for user defined functions - The form of C functions - Return values and their types - calling a function - Category of functions - Recursion - Functions - Functions with arrays - The scope and lifetime of variables in functions.

UNIT-V

Understanding pointers - pointer arithmetic and expressions - Pointer and arrays - Array of pointers - pointers to pointers - Passing pointers as arguments to functions - Different storage classes -extern, static, auto, register - Structure - Definition - Structures within structures - Structures and functions - Unions - Dynamic storage allocation - Linked allocations.

UNIT-VI

File management and preprocessors : Streams, Buffering, Error handling, Opening and closing a file, Reading and writing data, Selecting an I/O method - Random access - Macro substitution – Conditional substitution - Conditional compilation - Include facility, line control.

TEXT AND REFERENCE BOOKS :

14. Byron S Gottfried, "Programming with C", Schaums outline series, McGraw Hill Book company, 1996.
15. B.W.Kerningham and D.Ritchie, "The C Programming Language", PHI, 1988.
16. D.Ravichandran, "Programming in ANSI C", New Age International(P) ltd, 1989.
17. E.Balagurusamy, "Programming in ANSI C", TMH, 1995.

Paper 3.1: ADVANCED ACCOUNTANCY

UNIT-I

Partnership Accounts: Partner's admission – Retirement of a partner – Death of a partner.

UNIT-II

Joint life policy – Amalgamation of firms – Dissolution of a partnership firm – Insolvency of a partner – Garner Vs. Murray – Piecemeal distribution – Sale to a company.

UNIT-III

Company Accounts: Issue of shares – Issue of redeemable preference shares – Forfeiture and re-issue of shares – Redemption on redeemable preference shares – Issue of debentures – Redemption of debentures.

UNIT-IV

Company final accounts – Profits prior to incorporation.

UNIT-V

Amalgamation – Absorption – Reconstruction.

UNIT-VI

Department and Branch accounts – Hire purchase and instalment systems – Royalties – Fire claims.

TEXT AND REFERENCE BOOKS:

1. M.A. Arulanandam & K.S. Raman : Advanced Accounting
2. M.C.Shukla & T.S. Grewal : Advanced Accounting
3. R.L.Gupta : Advanced Accounting
4. Jain & Narang : Advanced Accounting

Paper 3.2: AUDITING

UNIT-I

Definition – Meaning – Objectives of Auditing – Errors – Frauds – Continuous audit and periodical audit – Audit programmes.

UNIT-II

Internal check and internal control – Definition – Schemes of internal check for wage payments, petty cash, purchases and sales – Vouching of cash transaction – Vouching of trade transaction.

UNIT-III

Verification and valuation of stock – Methods of stock valuation – Verification and valuation of assets and liabilities.

UNIT-IV

Audit of limited companies – Qualifications, appointment and removal of auditors – Rights and powers – Share capital audit – Share transfer audit.

UNIT-V

Divisible profits – Capital profits and dividend – Depreciation of fixed assets and dividend – Dividends – Interim and final.

UNIT-VI

Investigation – Distinction between investigation and audit – Investigation on behalf of a lender of money, incoming partner – Investor in shares – Investigation under the companies act.

TEXT AND REFERENCE BOOKS:

1. Tandon : Practical Auditing

Paper 3.3 COST ACCOUNTING

UNIT-I

Cost accounting – Elements of cost – Cost concepts.

UNIT-II

Accounting and control of material cost.

UNIT-III

Labour – Wage payment and incentives – Labour cost control – Labour turnover.

UNIT-IV

Process costing – Process losses – Inter-process profits.

UNIT-V

Standard costing – Variance analysis.

UNIT-VI

Cost ledgers – Reconciliation of cost and financial profits – Integral accounting.

Note: Theory 40%; Problems 60%.

TEXT AND REFERENCE BOOKS:

- | | |
|-----------------------------|--------------------|
| 1. Advanced cost accounting | : Jain and Narang. |
| 2. Cost accounting | : N.K. Prasad |
| 3. Cost accounting | : S.P.Lengar |
| 4. Cost accounting | : Nigam and Sharma |
| 5. Cost accounting | : P.V. Ratnam |

Paper 3.4: WEB DESIGNING AND ITS APPLICATIONS

UNIT-I

Introduction to internet – Types of browsers – Browsing through the web – creating E-mail id-connecting to the dial-up network – Interconnecting Lan and internet using proxy server – URL-FTP basic concepts.

UNIT-II

Introducing Mark Up Languages – HTTP – An Introduction – Introduction to HTML – Html basic Tags – Images, Links – Text formatting Tags – Ordered, Unordered & Definition List.

UNIT-III

Creating tables – Frames – Forms – Adding External linked objects – Dynamic web page – An introduction – Introducing cascading style sheets.

UNIT-IV

MS Frontpage 2000-Features – Front Page Toolbar – Creating and editing web pages using frontpage

UNIT-V

Explorer and Editor – Adding links, images to web pages & Modify image properties – Formatting text – Build a table creating links, images – Frames.

UNIT-VI

Form features in front page – Working with themes – Adding page element – Graphics and multimedia – Usage of templates – Creating dynamic pages using CSS.

TEXT AND REFERENCE BOOKS:

1. C. Xavier, “World Wide Web Design with HTML” T.M.H, 2000.
2. Neil Randall, “The Internet”, Second Edition, PHI, 1996.
3. Janifer Niederst, “Web Design in a Nutshell”, O reilly Publications, 1999.

Course : **Bachelor of Library and Information Science(BLIS)**
Mode : Distance Education
Duration : One year
Eligibility : Any degree from a recognised University
Medium : English only

COURSE OF STUDY & SCHEME OF EXAMINATIONS

Subject Code	Title	Total Marks
1	Library and Society	100
2	Information Sources and Services	100
3	Information Processing-I: Classification (Theory)	100
4	Information Processing-II: Cataloguing and Indexing (Theory)	100
5	Information Technology	100
6	Library Administration and Management	100
7	Information Processing-III: Classification (Practice)	100
8	Information Processing-IV: Cataloguing (Practice)	100
Total		800

Paper 1: LIBRARY & SOCIETY

UNIT I

Libraries and Information Centres – Definition – Modern concept – Importance – The impact of Social, Cultural, Educational, Economic and Technological changes on library & information services & Vice-versa – Five Laws of Library Science – Their relevance – Library extension activities – Outreach programmes – Rural Development – Gender Equity – Environment protection.

UNIT II

Historical development of Libraries in USA, UK(brief study) and India (detailed study) – Types of Libraries – National, Public, Academic, Special – Their functions – National Library of India – Functions.

UNIT III

Library Legislation – Model State and Central Library Act – Tamilnadu Public Library Act, Andhra Public Library Act 1960 and Karnataka Public Library Act 1965 – Delivery of books and News papers Act 1954 – Copyright act.

UNIT IV

Library Co-operation resource sharing – Definition, need and uses – Areas of Co-operation – Networking of Libraries – Types of Networks.

UNIT V

Librarian and Librarianship – Qualities of good librarian – Professional associations.

UNIT VI

Role of FID, IFLA, ILA, MALA – Library activities of UNESCO

REFERENCE BOOKS:

5. Chaturvedi D D, Academic Libraries (New Delhi: Anmol,1993)
6. Ekbote, Gopal Rao, Public Library System(Hydrabad: Ekbote Bros, 1987)
7. Jefferson G, Libraries & Society (Cambridge: James Clarke & Co., 1969)
8. Jefferson G, Libraries Co-operation (London: Library Deutsh, 1977)
9. Panda B D, Handbook of Public Library System, History of Library Development,(New Delhi:Anmol, 1992)
10. Ranganathan S R, Five Laws of Library Science, Public Library System, India, Srilanka, UK, USA, (Bombay: Asia Publishing House), Library Manual, (Bangalore: S.R.Endowment, 1988)
11. Rout R K, Library Legislation in India(New Delhi: Reliance, 1986)
12. Viswanathan C G, Public Library Operations and Services: A Short Manual (Lucknow Print House).

Paper 2: INFORMATION SOURCES AND SERVICES

UNIT I

Information, Information explosion & information environment – Nature and characteristics of information – Information transfer – Means & methods – Formal & informal – Barriers to Communication.

UNIT II

Sources of information – Documentary – Non-documentary – Published and unpublished – Types of information sources – Primary, Secondary, Tertiary sources – Illustrations.

UNIT III

Categories of information sources – Encyclopedias – Dictionaries, Directories, Handbooks & Manuals – Biographical sources – Geographical sources – Bibliographies, Almanacs, Year Books – General evaluation of information sources – Authority scope, arrangement, treatment, etc – Abstracting and indexing periodicals.

UNIT IV

Information services – Reference service – Definition, need and types – Ready reference service – Long range reference service – User needs – User Education.

UNIT V

Documentation services – Current awareness service, SDI – Bibliographical services – Types of Bibliographies - INB and BNB – Planning, Compilation of Bibliography.

UNIT VI

Translation services – Need and importance – Functions of INSDOC, DESIDOC, SSDS, NASSDOC & British Library.

REFERENCE BOOKS:

1. Chhotey Lal, Information Sources in Science and Technology (Delhi: Bharati Pub, 1986)
2. Doyle, Lauren B, Information Retrieval & Processing (Los Angels: Meville Pub. Co. 1975)
3. Guha B, Documentation & Information: Systems, Techniques & Services (Calcutta: World Press, 1983)
4. Karz, William A, Introd to Reference Work Ed2(NewYork: McGraw-Hill, 1974)
5. Krishan Kumar, Reference Service Ed2(New Delhi: Vikas, 1980)
6. Renganathan, Documentation and Its Facets(Bombay: Asia, 1963), Library Manual Ed2(Bangalore: S.R. Endowment, 1988)
7. Sharma, JS & Grover, DR, Reference Service and Sources of Information (New Delhi: Ess Ess Publications, 1987).

Paper 3: INFORMATION PROCESSING-ICLASSIFICATION(Theory)

UNIT I

Need and Purpose of classification – Basic concepts Terminology – Knowledge classification – Universe of subjects – Development and modes of formation of subjects.

UNIT II

Knowledge Classification and document classification – Physical arrangement of documents in open access libraries – Notation – Functions – Canons devices.

UNIT III

Schemes of Library classification – Historical development – Lay-out and salient features of major schemes – DDC, UDC, CC – Enumerative and Analytico Synthetic schemes – General comparative study of DDC & CC.

UNIT IV

General theory of classification – Normative principles – Planes of work – Fundamental categories – Facet analysis – Principles of inversion and facet sequence – Principles of helpful sequence.

UNIT V

Canons of classification – Postulates and Postulational Procedures.

UNIT VI

Various aspects of classification – Zone analysis, system and special phase analysis – Common isolates.

REFERENCE BOOKS:

1. Krishnan Kumar, Theory of Classification (Delhi: Vikas, 1979)
2. Mills, Modern Outline of Library Classification (London Chapman & Hall, 1962)
3. Ranganathan SR, Descriptive Account of the Colon Classification(Bombay: APH, 1967),
4. Elements of Library Classification (Bombay: Asia 1962),
5. Sayers, Introduction to Library Classification(Bombay: Asia, 1967)
6. Sehgal RL, Handbook to Colon Classification(New Delhi: Ess Ess Publications), Introduction to Dewey Decimal Classification

Paper 4:
INFORMATION PROCESSING-II CATALOGUING & INDEXING
(THEORY)

UNIT I

Library catalogue – Definition, need, purpose and functions –Physical forms.

UNIT II

Types of Library Catalogue – Subject catalogues – Classified, dictionary, alphabetic – Subject, alphabetical, class – Functions of subject catalogues and comparative study of different types – Indexing – Sear’s List of subject headings – Subject headings- Chain procedure – Brief account of PRECIS, POPSI and Uniterm Indexing.

UNIT III

Catalogue codes – Origin, growth and development since 1930 – Classified catalogue code CCC and AACR 2 – Choice and rendering the entries – Single, Multiple, Corporate authors.

UNIT IV

Normative principles, canons and laws of cataloguing – their implications.

UNIT V

Co-operative and centralized cataloguing – Role of library of congress, CIP, NPAC, MARC, LC accession list – Centralized cataloguing in India – Problems and prospects – Union catalogue, Limited cataloguing – Descriptive cataloguing – Standardization at International level – ISBD, ISBN, ISSN – registrar of news-papers – CODEN.

UNIT VI

Symbiosis between classification and cataloguing.

REFERENCE BOOKS:

1. Chhotey Lal, Information Sources in Science and Technology (Delhi: Bharati Pub, 1986)
2. Doyle, Lauren B, Information Petrieval & Processing (Los Angels: Meville Pub. Co. 1975)
3. Guha B, Documentation & Information: Systems, Techniques & Services (Calcutta: World Press, 1983)
4. Karz, William A, Introd to Reference Work Ed2(NewYork: McGraw-Hill, 1974)
5. Krishan Kumar, Reference Service Ed2(New Delhi: Vikas, 1980)
6. Renganathan, Documentation and Its Facets(Bombay: Asia, 1963), Library Manual Ed2(Bangalore: S.R. Endowment, 1988)
7. Sharma, JS & Grover, DR, Reference Service and Sources of Information (New Delhi: Ess Ess Publications, 1987)
8. Viswanathan, Elements of Information Science(Delhi: Today & Tommorrow, 1976).

Paper 5: INFORMATION TECHNOLOGY

UNIT I

Introduction to Computer & its components – Historical development – Hardware and Software – Operating Systems – Ms-Dos – Compilers – Software Package and utilization – WordStar.

UNIT II

Use of Dbase III Plus & CDS-ISIS in Library Automation – Database management system concepts – Creating database – Search retrieval and report generation.

UNIT III

Information Technology in Information storage and transfer – Reprography and Micrography – Microfilm & Microfiche – CD ROM.

UNIT IV

Electronic Transmission of Information – E-Mail – Fax – Teleconferencing.

UNIT V

National & International Information systems & services – Definition, need and purpose – Their services and products – INIS, AGRIS, DEVSIS, NISSAT – Commercial databases – DIALOG, STN – On-line information retrieval – MEDLINE.

UNIT VI

Communication networks – INTERNET, NICNET, INDONET, ERNET, INFLIBNET, RENNIC.

REFERENCE BOOKS:

1. Doyle, Lauren B, Information Retrieval & Processing(Los Angeles: Melville Pub. Co. 1975)
2. Grogan(Denis), Science & Technology: An Introd to Lit. Ed2(London: Clive Binseley, 1976)
3. Krishan Kumar, Reference Service Ed2(New Delhi: Vikas, 1980)
4. Meadow, Charles T, Analysis of Information Systems(London: Butterworth, 1974)
5. Presher R G, Information & Its communication:(New Delhi: Medallion Press, 1991), Introd to Reprography(New Delhi: Medallion, 1975)
6. Sharma J S & Gover D R, Reference service & sources of information (New Delhi Ess Ess Publications, 1987)
7. Somnath madan, Computer and Library Services(Delhi: Commonwealth Pubcns. 1987)
8. UNESCO/UNISIST, Guidelines for the Planning of National Scientific & Technical Information System(Paris: UNESCO 1974)
9. Ravichandra Rao I K, Library Automation Ed2(New Delhi: Wiley Eastern, 1990)
10. Vickery B C, Information Systems(London: Butterworths, 1973)
11. Viswanathan C G, Elements of Information Science(Delhi: Today & Tomorrow 1976)

Paper 6: LIBRARY ADMINISTRATION & MANAGEMENT

UNIT I

General principles of management – Scientific management – MBO theory – Systems theory – Library management – Definition – Functions and principles – Application of general theories of management to libraries and information centres – POSDCORB.

UNIT II

System approach to library – Various Sub-systems – Routines of library administration – Acquisition – Technical – Maintenance, circulation – Periodical sections – Their functions in detail.

UNIT III

Personnel Management – Definition – Functions & importance – Job analysis, Job description & Job evaluation – Staffing in public and academic libraries in India – Ranganathan's Staff Formula – Training – recruitment, Selection and Salary pattern.

UNIT IV

Fiscal management – Sources of finance – Public libraries and academic libraries – Budgeting methods/types – Performance, PPBS – Zero based.

UNIT V

Library authorities – Library committees –Public & Academic libraries – Statistics – Library Rules & Regulations.

UNIT VI

Stock verification – Weeding out – Annual report – Library building planning – Furniture and equipment.

REFERENCE BOOKS:

1. Chakrabarti AK, Treatise on Book selection Delhi: D.K. Publications, 1983)
2. Davar R S, The Management Process(Bombay: Progressive)
3. Godden, Library Technical Services (Newyork: Academic Press, 1984)
4. Ivancevich, John M, Management: Principles and Functions(Delhi: All India Traveller, 1991)
5. Krishan Kumar, Library Administration and Management Ed3(New Delhi: Vikas, 1980), Library Organization(New Delhi:Vikas)
6. Mittal RL, Library Administration: Theory and Practice Ed5(New Delhi: Metropolitan Book Co., 1984)
7. Nair Ahmed V S, Handbook of Library Administration(Madras:IIT, 1985)
8. Prasher RG, Managing University Libraries(New Delhi: Today & Tomorrow 1991)
9. Ranganathan SR and Gopinath, Library Administration, Library Book Selection, (Bombay:Asian Publishing House, 1959).

Paper 7: INFORMATION PROCESSING-III CLASSIFICATION (Practice)

Classification of Documents according to Colon Classification (CC).

Classification of Documents according to abridged Dewey Decimal Classification (DDC) 19th edition.

For details refer Course material.

**Paper 8: INFORMATION PROCESSING-IV
CATALOGUING (Practice)**

Cataloguing of books, Serials and Non Nook material according to AACR-II and Sears list of Subject Headings.

For details refer Course material.



B.Com Cooperation

Course	-	B.Com Cooperation
Pattern	-	Non-Semester
Duration	-	Three Years
Eligibility	-	A Pass in HSC or 3 Years Diploma
Medium	-	English
Passing Minimum	-	40% Marks

Course of Study & Scheme of Examinations

Paper Code	Subjects	Marks
I Year		
1.1	Principles of Management	100
1.2	Busienss Environment	100
1.3	Business Communication	100
1.4	Theory of Cooperation	100
1.5	Financial Accounting	100
II Year		
2.1	Managerial Economics	100
2.2	Cooperative Banking and Financial Institutions	100
2.3	Business Statistics	100
2.4	Modern Cooperation	100
2.5	Cost Accounting	100
III Year		
3.1	Cooperative Management	100
3.2	General and Cooperative Audit	100
3.3	Production and Processing Cooperatives	100
3.4	Cooperative Marketing	100
3.5	Management Accounting	100

Paper 1.1: PRINCIPLES OF MANAGEMENT

UNIT-I

Management: Concepts – Nature – Importance – Approaches to modern management – Contributors to management sector.

UNIT-II

Planning: Nature – Purpose and importance – Premises of planning – Types of plans – Steps in Planning: Decision-making – Types – Process – Emotionality Vs Rationality in decision-making.

UNIT-III

Organising: Principles and process of organisation – Types – Structure – Centralisation Vs Decentralisation – Departmentalisation – Span of management – Delegation – Authority – Responsibility – Accountability.

UNIT-IV

Staffing: Man power planning – Job analysis – Selection technique – Analysis – Planning and implementation.

UNIT-V

Directing: Principles – Elements – Motivation – Maslow, Herzberg, Vroom models – Communication process – Forms – Barriers – Overcoming barriers – Leadership: Managerial grid – Styles.

UNIT-VI

Co-ordination: Meaning – Importance – Types – Control: Meaning – Need for Control – Control Process – Control Techniques.

TEXT AND REFERENCE BOOKS :

1. Essentials of Management : L.N. Prasad
2. Essentials of Management : Reddy & Appanniah
3. Essentials of Management : Lallan Prasad
4. Essentials of Management : Koontz & O' Donnel

Paper 1.2: BUSINESS ENVIRONMENT

UNIT I

Business Environment – Concept – Significance – Factors – Environmental influence on Business.

UNIT II

Social and Cultural Environment – Demographic Trend – Indian Social Structure – Caste and Communal Systems – Interplay of Various Systems – Impact on Business.

UNIT III

Political Environment - Directive Principles of State Policy – Centre – State Relations – Impact of Political Environment on Business.

UNIT IV

Economic Environment – Sectors of Economy and their significance – Agriculture, Industry, Service – Multinational Corporations – Meaning, Importance Advantages, Weakness.

UNIT V

Technological Environment – choice of Technology – Problems in Selecting Appropriate Technology – Importance to Business.

UNIT VI

Social responsibility – Responsibility towards various interest groups.

REFERENCE BOOKS:

1. Francis Cherunilam, Business Environment
2. Aswathappa K, Essentials of Business Environment
3. Garg V K, Economic Environment of Business
4. Sherlekar S A, Modern Business Organization and Management

Paper 1.3: BUSINESS COMMUNICATION

UNIT-I

Structure of Business Letters: Layout of business letter – Types of business letter – Enquiry, Offers, Quotations and Orders.

UNIT-II

Trade references and status enquires – Confirmation and execution of orders – Refusal and cancellation of orders – Acknowledging receipts of goods and making payments.

UNIT-III

Complaints and settlements – Collection letters – Circular letters.

UNIT-IV

Agency letters – Banking letters – Insurance letters.

UNIT-V

Drafting of Agenda and Minutes: Meaning – Types – Methods.

UNIT-VI

Reports: Types and preparation – Speech drafting – Occasions – Application for a situation.

BOOKS RECOMMENDED:

1. Bhal and Nagamiah, Modern Business Correspondence
2. Majumdar, Commercial Correspondence
3. Reddy & Appannaiah, Essentials of Business Communication
4. Rajendra Paul, Business Correspondence.

PAPER 1.4: THEORY OF COOPERATION

Unit I

Co-operation: Concept – Features - Benefits of Cooperation, Co-operative Principles: Meaning-Evolution of Cooperative Principles – Rochdale Principles-Reformulation of Cooperative Principles by International Cooperative Alliance 1937 and 1966 – ICA Cooperative Identity Statement 1995: Definition, Vision and Mission, Values and Principles.

Unit II

Cooperative Thoughts: Pre-Rochdale Cooperative Thought –Thought of Robert Owen, Dr.William King and Charles Fourier – Rochdale Model – Post-Rochdale Cooperative Thought – Dr.Gadgil-Raiffesion and Schulz – Different Schools of Cooperative Thought-Concepts only.

Unit III

Cooperation and Other Forms of Economic Organizations: Co-operation and Corporate Concerns: Joint stock Company and Partnership Firm, Co-operation and Public Utility Concerns, Trade Union, Self-Help Groups and Cooperatives.

Unit IV

Cooperative and Other Forms of Economic System: Capitalism, Socialism and Co-operation-Co-operation as a Balancing Sector, Cooperation as a System, a Sector and a Movement – Place of Cooperation in Open, Closed and Mixed Economics.

Unit V

Strategies Choices for Cooperative Development – Concept of Cooperative development – Strategic Choices for Cooperative Development - Cooperative Extension, Cooperative Education and Training – Need and Importance.

Unit VI

Arrangements for Cooperative Education and Training in India at Different Levels through ICA, NCCE and NCCT - Sectoral Organizations for Training and Development, like Cooperative Urban Banks, Cooperative Super Markets, Cooperative Sugar Mills, etc.

BOOKS RECOMMENDED:

1. Dubashi P.R - Principles and Philosophy of Co-operation
2. John Winfred A. and V.Kulandaiswamy - History of Co-operation
3. Krishnaswami O.R - Fundamentals of Co-operation
4. Bedi R.D - Theory ,History & Practice of Co-operation
5. Krishnaswami O.R and Dr.V.Kulandaiswamy - Co-operative-Concept and Theory
6. V.Saradha - Theory of Co-operation
7. T.N Hajela - Co-operation (Principles , Problems and Practice)
8. www.ica.coop

Paper 1.5: Financial Accounting

UNIT I

Rules for Journalizing – Posting of Accounts – Writing of different types of Cash Books – Writing of Purchase and sales Journals – Preparation of Trial Balance and Trading and Profit & Loss account and Balance Sheet of a Sole Proprietorship – Bank Reconciliation Statement.

UNIT II

Bills of Exchange and the treatment thereof – Average due date – Account Current – Consignment and Joint Venture Accounts.

UNIT III

Accounts of Non-Trading Concerns – Receipts and Payment Accounts, Income and Expenditure Accounts and Balance Sheet.

UNIT IV

Partnership: Fixed and Fluctuating Capitals – Current and Drawing Accounts – Interest on Capital and Drawings and Salary and Commission – Revaluation of Assets – Treatment of Goodwill – Admission – Retirement – Death of a Partner – Dissolution Excluding Garner Vs Murrey Decision and Sale to a Company – final Accounts.(Simple Problems Only)

UNIT V

Company Accounts: Issue of Shares and Debentures at Par, Premium and Discount – Forfeiture of Shares and Re-Issue of forfeited Shares – Simple Cases of Final Accounts.

UNIT VI

Final Accounts of Banking Companies – Prudential Accounting Norms: Capital, Adequacy, Income Recognition, Asset Classification and Provisioning.

BOOKS RECOMMENDED:

1. Gupta R L, Advanced Accounting
2. Arulanandam M A, Raman K S, Advanced Accounting
3. Shukla M C & Grewal T S, Advanced Accounting

PAPER 2.1: MANAGERIAL ECONOMICS

UNIT-I

Managerial Economics: Concept – Nature – Scope – Functions – Concepts of scarcity – Marginalism – Equi marginalism.

UNIT-II

Opportunity costs – Time perspective – Risk and uncertainty.

UNIT-III

Demand Function: Concept – Types of demand – Determinants – Cardinal and ordinal utility analysis.

UNIT-IV

Demand Curves – Demand elasticity – Demand forecasting.

UNIT-V

Production Function: Cost concepts – Total, average and marginal cost analysis – Returns to scale – Cobb-Douglas production function.

UNIT-VI

Price-output Function: Output and price decisions under perfect competition, monopolistic competition, monopoly and duopolistic conditions – Pricing strategies.

BOOKS RECOMMENDED:

5. Mehta P L, 'Managerial Economics'.
6. Adhikary M, 'Managerial Economics'.
7. Gupta M & Samuel Paul, 'Managerial Economics'.
8. Chopra O P, 'Managerial Economics'.

PAPER 2.2: COOPERATIVE BANKING AND FINANCIAL INSTITUTIONS

Unit I

Origin and Development of credit Movement in India: During Pre-Independence Period- Classification of Cooperatives as Agriculture and Non-Agricultural Institutions – Cooperative Credit/Banking Structure: Principles of Good Credit System – Short, Medium and Long Term Financing by Cooperative Institutions.

Unit II

Co-operative Development: Meaning, Economic, Planning and Cooperatives – Co-operations in Totalitarian and Democratic Planning - Place of Co-operation in Five Year Plans-Recommendations of important Committees: All India Rural Credit Survey Committee, All India Rural Credit Review Committee, Credit Review Arrangement for Institutional Credit and Rural Development, Agricultural Credit Review Committee, Task Force on Short Term and Long Term Cooperative Credit Structure (Vaidhyanathan Committee).

Unit III

Short Term Credit Institutions: Primary Agricultural Cooperative Banks (PACBs) Constitution and Working, Crop Loan, Re-Organization of PACBs, Short Term Loan Policy and Procedure - Linking of Credit with Marketing – Short Term Loan facility through District Central Cooperative Banks, Urban Cooperative Banks – Policy, Procedure and Growth.

Unit IV

Medium Term Credit: Purpose, Types and Procedure - Micro Credit – District Central Cooperative Banks: Significance in the Credit Structure-Constitution and Working - Mobilization of Deposits-Lending Operations- Overdues and Non Performing Assets - Apex Banks: Need, Functions - Problems and Sinking Fund-National Federation of State Cooperative Banks.

Unit V

Long Term Credit: Need for a Separate Agency to provide Long term Credit - Constitution and working of Primary and State Co-operative Agricultural and Rural Development Bank - Sources of Funds – Capital and Debentures – Types of loan procedures – Multiagency approach – Single Window Cooperative Credit Delivery System.

Unit VI

Other Institutions: Employees Co-operative Credit Societies - Cooperative Housing Societies – Industrial Cooperative Banks – National Bank for Agricultural Rural Development Bank – Reserve Bank of India for overall monitoring and supervising of cooperative bank and Financial Institutions.

BOOKS RECOMMENDED:

- | | |
|---|-------------------------------|
| 1. Co-operative Banking in India | - S.Nakkiran & A.John Winfred |
| 2. Co-operation in India | - B.S. Mathur |
| 3. The Practice of Co-operative Banking | - A.P.Sivasubramaniam |
| 4. Co-Operation Principles, Problems and Practice | - T.N.Hajela |
| 5. Co-operative Credit Institutions | - Abdul Kuddus. |

PAPER 2.3: BUSINESS STATISTICS

UNIT-I

Business Statistics: Meaning – Scope.

UNIT-II

Measures of Central Tendency: The arithmetic, geometric and harmony means – Median and mode – Weighted average – Characteristics of different averages.

UNIT-III

Measures of Dispersion: The Range – The Inner Quartilerange – The Mean deviation and the Standard deviation.

UNIT-IV

Skewness: Different measures of skewness – Correlation (Linear Correlation only) – Interpolation.

UNIT-V

Index Number: Definition – Use of the index number – Cost of living index – Index numbers of wholesale prices.

UNIT-VI

Time Series: Seasonal cyclical and irregular fluctuations – Methods of eliminating their influence – Secular trend.

BOOKS RECOMMENDED:

4. Elhance D N, 'Fundamentals of Statistics'.
5. Gupta S P, 'Statistics for Commerce Students'.
6. Gupta S P, 'Statistics Methods'.

PAPER 2.4: MODERN COOPERATION

Unit I

Cooperation in the Globalized Era: New Economic Policies - Performance of Cooperatives in the primary, secondary and tertiary sectors – challenges and opportunities for cooperatives – New generation Cooperatives – Exploring the Cooperative economy: Report 2014 – Blue Print for Cooperatives: Vision and Perspective plan.

Unit II

Cooperative Finance and Banking: Structure and Functions – Industrial Cooperative Banks – Repatriate Cooperative Banks (Repo Banks).

Unit III

Cooperatives Production and Processing: Structure, Functions and Performance of the Cooperative Production and Processing Cooperatives – Weavers and Handloom Cooperatives – Cooperative Tea Factories – Fisheries Cooperatives – Cooperative Sugar Mills – Cooperative Spinning Mills – Indian Farmers Fertilizer Cooperative, Krishak Bharathi Cooperative.

Unit IV

Cooperative Trading & Services: Structures, Functions and Performance of Consumer Cooperative stores – Primary stores, District Consumer Cooperative Whole Sale Stores – Competitive Strategies to face Private Sector Retailing.

Unit V

Special Type of Cooperatives: Agricultural Marketing Cooperatives – Cooperative Hospitals - Educational Institutions – Cooperative Printing Press- Horticulture, Floriculture and Nursery Cooperatives.

Unit VI

Cooperative Governance: Concept of Governance – components of Good Governance – Governance Structure: Department of Cooperative of Government of Tamilnadu – Cooperative audit Department of Tamilnadu – Functions and Role – Personnel Audit Process – Audit of Personnel – Qualifications of Cooperative Audit Personnel.

Books Recommended:

1. Hadela T.N (2000) Principles, Problems and Practices of cooperative , Konank Publishers, New Delhi.
2. Mathur B.S (1989) Cooperative in India, SBPD Publications, Agra.
3. Nokkiran (2009) Cooperation Theory and Practices , Abjit Publications, Delhi.

PAPER 2.5: COST ACCOUNTING

UNIT I

Cost Accounting – Elements of Cost – Cost Concepts, Accounting and Control of Material Cost.

UNIT II

Labour – Wage Payment and Incentives – Labour Cost Control – Labour turnover.

UNIT III

Overhead – Classification – Allocation, Apportionment and Absorption of overhead.

UNIT IV

Process Costing – Process Losses – Inter-Process Profits.

UNIT V

Standard Costing – Variance Analysis.

UNIT VI

Cost Ledgers – Reconciliation of Cost and Financial Profits – Integral Accounting.

BOOKS RECOMMENDED:

4. Jain and Narang, Advanced Cost Accounting
5. Prasad N K, Iyengar S P and Nigam and Sharma Cost Accounting
6. Ratnam P V, Costing Adviser.

PAPER 3.1: COOPERATIVE MANAGEMENT

Unit I

Management: Concept and Features, Functions of Management: Objectives of Cooperative Management – Applications of Principles of Management and Principles of Cooperation.

Unit II

Democratic Control: Democratic Structure –General Body: Functions- Authority – The Board and the Chief Executive – Leadership: Concepts – Types of Leadership, Cooperative Leadership- Development of Professional Management in Cooperatives.

Unit III

Functional Areas of Management in Cooperatives: Production – Marketing – Finance - Personnel and Materials Management.

Unit IV

Evaluation of Performance of Cooperatives: Key Results Areas- Performance Evaluation –Mid Term review – Criteria for Measuring the Operational Efficiency in Cooperatives – Bench-marks and Standards for Performance in Physical and Financial terms.

Unit V

Cooperative Administrative Structure: Role of Registrar of Cooperative Societies at different levels – Cooperative Department Setup at District Level: Joint Registrar of Cooperatives – Deputy Registrar of Cooperatives, Cooperative Sub Registrars Senior Inspector of Cooperatives – Joint Inspector of Cooperatives: Role and Functions.

Unit VI

Cooperative Management Process: Planning and Budgeting – Delegation of Powers - Functional Registrars and their Functions - Cooperative Audit – Departmental Setup of Cooperative Audit - Comparison between Cooperative Audit and Commercial Audit and Government Audit.

BOOKS RECOMMENDED:

1. Management in Cooperative Societies – T.E.Stephenson
2. Cooperative Management – V.Kulandaiswamy
3. Cooperative Management: Principles, Powers and Problems- R.D.Agarwal
4. Treatise on Cooperative Management –S.Nakkiran
5. Functional Cooperative Management –A.K.Shah

PAPER 3.2: GENERAL AND COOPERATIVE AUDIT

Unit I

Audit: Commercial & Cooperative Audit: Origin and Definition of audit – Objectives - Advantages - Nature and Scope of Audit of Commercial and Cooperative Audits.

Unit II

Commercial and Co-operative Audit: Rights, Duties and Responsibilities of Commercial and Cooperative Auditors – Audit Programme – Vouching of Cash and Trade Transactions – Routine Checking – Importance of Routine Checking: Differences between Cooperative and Commercial audits in respect of the above.

Unit III

Verification and valuation Assets and Liabilities: Meaning - Verification – Mode of Valuation Various Assets and Liabilities – Depreciation – Definition – Methods of Audit, Auditors duty as to Reserve: Meaning - Definition – Various Reserves – Audit of Final Accounts: Profits and Loss Account – Balance Sheet – Differences between Commercial and Cooperative audits in respect of the above.

Unit IV

Rights, Duties and Responsibilities of Co-operative Auditor: Auditor's Responsibility in Cooperatives – Distinctive Features of Audit from Inspection and Supervision, commencement of Cooperative Audit – Management Audit.

Unit V

Embezzlement and Fraud: Various Methods – Methods of their detection – safeguard to empty in internal checking and internal audit – Auditor's Special responsibility in devising a foolproof system.

Unit VI

Audit Programme for Selected Co-operatives: Audit of Co-operative Credit Institutions (PACBs and DCCBs) and Non-Credit Co-operatives (Marketing Cooperatives, Consumers Cooperatives, Dairy Cooperatives and Industrial Cooperatives) – Classifications of Audit – Preparation of Final Audit Memorandum and its Enclosures – Schedule of Audit defects.

BOOKS RECOMMENDED:

1. Government of Tamilnadu - Dept. of Cooperation, Cooperative Audit Manual
2. Cooperative Audit - Krishnaswami O.R,
3. Principles & Practice of Auditing - Tandon, S. Chand & Company
4. Principles & Practice of Auditing - Dinker Pagare, S. Chand & Co.

PAPER 3.3: PRODUCTION AND PROCESSING COOPERATIVES

Unit I

Introduction to production and processing activities: Role of Cooperatives in the production and processing economic spheres – Requirements for competitive edge in this area- National and Regional trust and Trust for Cooperative Institutions in production and processing industries.

Unit II

Production and Processing Cooperatives: Origin and Development of Cooperatives in India – Constitution and Working – Various forms of assistance from Government and NCDC- Processing for Food grains, Oil seeds, Plantain Crops and Fruits and Vegetables.

Unit III

Dairy Cooperatives: Place of Dairying in the Indian National Economy - Structure of Dairy Cooperatives – National Dairy Development Board- Anand Milk Union Limited Pattern - Working and Functions of National Dairy Cooperative Federation – State Cooperative Milk Producers Federation - District Cooperative Milk Producers Union Ltd. - Primary Cooperative Milk Producers Society - Operation flood Schemes - Recent Developments and problems as to Dairy Cooperatives.

Unit IV

Common Property (CPR) Cooperatives: Life Irrigation Societies: Need and Functions - Fisheries Cooperatives and Forest Product Cooperatives: Role and Functions – Large Adivasi Multipurpose Society (LAMPS).

Unit V

Industrial and Processing Cooperatives: Origin, Types and Development of Industrial Co-operatives in India. Handlooms weavers Cooperatives: Constitution and Working of Primary Societies and Apex Societies - Processing Cooperative – Need, Importance, Spinning Mills, Sugar Factories and Tea Factories.

Unit VI

Recent Trends: Role of Production and Processing Cooperatives in Millennium Development Goal (MDG) of United National Organization (UNO) – New Generation Cooperatives (NGC) in Production and Processing – Cooperative format in SEWA and SHGS.

BOOKS RECOMMENDED:

- | | | |
|--|---|-------------------------|
| 1. Co-operation in India | - | Dr. B.S. Mathur |
| 2. Cooperative Movement in India | - | Dr. B.S. Mathur |
| 3. Co-operation Principles, Problems and Practices | - | T.N. Hajela |
| 4. Theory, History and Practice of Co-operation | - | R.D. Bedi |
| 5. Industrial Co-operation in India | - | S.C. Metha |
| 6. Co-operation in Foreign Lands | - | C.B. Memoria and Saxene |
| 7. Dairy Cooperatives in India | - | Dr. V. Kulandaisamy |
| 8. Cooperative Sector in India | - | Sami uddin and others |
| 9. Consumer Cooperative in India | - | Dr. R. Perumal |

PAPER 3.4: COOPERATIVE MARKETING

Unit I

Marketing Concept and Core Activities in Marketing: Market – Marketing and Marketing Management – Market Functions-Marketing System and its Role in the Economy - Problems and Prospects in Rural Marketing.

Unit II

Marketing Environment: Marketing Segments - Target Marketing - Market Positioning – Consumer Psychology and Motivation; Consumer Behaviour and Buying Process.

Unit III

Co-operative Marketing: Meaning and Main Features – Aims and Objectives – Marketing Organizational Structure: Need and Importance- Marketing Mix: Product, Pricing, Place and Promotion applied to Cooperatives.

Unit IV

Warehousing and Storage: Warehousing: Meaning and Types – Storage – Functions – Components for Ideal Storage Systems – Value Chain Management – Supply Chain Management – Logistics.

Unit V

Consumer Cooperative Stores: District Consumer Cooperative Whole Sale Stores – State Consumer Cooperative Federation – Supermarket – Hypermarket – Modern Trends in marketing and adaptation by Cooperatives.

Unit VI

Marketing Efficiency Cooperatives: Need and Importance – Marketing Promotion to match Competition – Consumer attraction and retention efforts – Respecting Consumer Rights – Marketing audit.

BOOKS RECOMMENDED:

1. Philip Kotler (2010) Marketing Management Pearson Prentice Hall, New Delhi
2. Chandrasekar K.S (2010) Marketing Management – Text and Cases ,Tata McGrawHill Publications
3. Singh L.P (2008) Cooperative Marketing in India and Abroad ,Himalaya Publishing House,Mumbai.
4. Mathur B.S (1973), Cooperative Marketing in India ,Pitambar Patalistak Bhandar,Delhi.

PAPER 3.5: MANAGEMENT ACCOUNTING

UNIT I

Management Accounting – Scope and importance – Management Accounting Vs Financial Accounting and Cost Accounting.

UNIT II

Ratio Analysis

UNIT III

Fund Flow and Cash flow Analysis.

UNIT IV

Budgeting and Budgetary Control – Sales Budget – Cash Budget – Operating Budget – Master Budget – Flexible Budget – Zero Base Budgeting – Performance Budgeting – Programme Budgeting.

UNIT V

Marginal Costing – Break Even Analysis – Differential Costing.

UNIT VI

Capital Budgeting – Nature and Significance – Methods of evaluation of Alternative Capital Expenditure Programme.

BOOKS RECOMMENDED:

4. Maheswari S N, Management Accounting and Financial Control
5. Man Mohan and Goyal, Management Accounting
6. Hingorani, Ramanathan, and Katyal, Management Accounting

Course	:	Bachelor of Economics (B.A., Economics) (2016-17 onwards)
Mode	:	Distance Education
Duration	:	Three Years
Eligibility	:	A Passing HSC (or) 3 years Diploma
Medium	:	English and Tamil

COURSE OF STUDY & SCHEME OF EXAMINATIONS

Code No.	Subjects	Marks
I Year		
1.1	Part-I: Tamil/Hindi Paper-I/Communication Skills	100
1.2	Part II: English Paper-I	100
1.3	Micro Economics	100
1.4	Indian Economy	100
1.5	Elements of Statistics	100
II Year		
2.1	Part-I: Tamil/Hindi Paper-II/Human Skills Development	100
2.2	Part II: English Paper-II	100
2.3	Macro Economics	100
2.4	Fiscal Economics	100
2.5	Economics for Competitive Examinations	100
III Year		
3.1	Development Economics	100
3.2	Money and Banking	100
3.3	Agricultural Economics	100
3.4	History of Economic Thought	100
3.5	Computers and Data Processing	100
	Total	1500

தமிழ்த் தாள் 1.1 - தமிழ்ச் செய்யுள்

கூறு-1

1. கண்ணதாசன் – ஸ்ரீகிருஷ்ண கானம்
 1. புல்லாங்குழல் கொடுத்த
 2. குருவாயுருக்கு வாருங்கள்
 3. கோகுலத்துப் பசுக்கள்
 4. கோகுலத்தில் ஒரு நாள் ராதை
 5. ஆயர்பாடி மாளிகையில்
2. பட்டுக்கோட்டை கல்யாண சுந்தரம்
 1. நெஞ்சில குடியிருக்கும்
 2. செய்யும் தொழிலே தெய்வம்
3. பாரதியார்
 1. கண்ணன் என் விளையாட்டுப் பிள்ளை
 2. பாரத மாதா திருப்பள்ளி எழுச்சி
4. பாரதிதாசன் – உலகப்பன் பாட்டு(5)
5. நாமக்கல் கவிஞர் – நோயற்ற வாழ்வு 7 பாட்டு
6. பெ.தூரன் – நிலாப்பிஞ்சு

கூறு-2

7. வல்லிக் கண்ணன் – வெறும் புகழ்
8. கு.ப. இராஜகோபாலன் – எதற்காக?
9. மீரா – பதினைந்து
10. சிற்பி – சர்ப்ப யாகம்
11. ஞானக்கூத்தன் – தோழர் மோசி கீரனார்
12. அப்துல் ரகுமான் – கண்ணும் எழுதேம்
13. சண்முக சுப்பையா – வயிறு

கூறு-3

14. சிலப்பதிகாரம் – வழக்குரை காதை
15. கம்பராமாயணம் – அயோத்தியா காண்டம்
16. சீறாப்புராணம் – ஈத்தங்குலை வரவழைத்த படலம்(1)
17. தேம்பாவணி – காட்சிப்படலம்

கூறு 4

பாடல்

1. இன்னவாயில்
2. கொழுந்துறும்
3. பஞ்ச) அரங்கில்

4. எண்ணுளே
5. ஒண்தலங்கள்
6. இரவி வேய்ந்த கஞ்சக்
7. கன்னியாயதாயும்
8. ஏந்தி லுங்கு உளத்து
9. ஆவ தேமுனர்
10. கொல்லும் வேலொடும்
11. என்ற வாசகம்
12. அம்பினால்
13. அவண்டும் ஓர் வினை
14. சொல் தவிர்ந்த
15. அன்னை
16. அஞ்சுவார்
17. சொல்லக் கேட்டனர்
18. மற்செய்கை
19. மண்கனியப்
20. அழுது ஆர்ந்த
21. பொய் பொதுளும்
22. இன்பு அருந்து
23. வழுதாயின இன்பு
24. மறம் ஏவினார்
25. மண்ணோர்கள்
26. பொய்யா விதிபோய்
27. விடியா இருள்
28. அழுவார் எவரும்

கூறு-5 சிறுகதை

1. நீலபத்மநாபன் - வான வீதியில்

கூறு-6 உரைநடை

1. கம்பன் புறத்திணை தி. சொக்கலிங்கம்

இலக்கணம் எழுத்தும், சொல்லும்

கூறு-7

1. முதலெழுத்துக்கள், சார்பெழுத்துக்கள்.
2. மொழி முதலெழுத்துக்கள், மொழி இறுதி எழுத்துக்கள்.
3. ஒற்றெழுத்து மிகலும் மிகாமையும்
4. ஆகு பெயர், அன்மொழித் தொகை.
5. வினா - விடை வகைகள்.

கூறு-8

1. தமிழ்ச் சொல்லமைப்பின் சிறப்பு - பெயர், வினை, இடை, உரி வடிவங்கள்.
2. புறமொழிச் சொற்களைத் தமிழில் ஆளும் முறைகள்.
3. அல் வழி, வேற்றுமைப் புணர்ச்சிகள்.
4. திணை, பால், எண், இட இயைபு.

தமிழ் இலக்கிய வரலாறு

கூறு-9

1. இக்கால இலக்கிய வகைகள்:
அ. மரபுக் கவிதை
ஆ. புதுக் கவிதையின் தோற்றமும் வளர்ச்சியும்
2. உரை நடை இலக்கியங்கள் - தோற்றமும் வளர்ச்சியும்
அ. கட்டுரை ஆ. சிறுகதை இ. புதினம் ஈ. நாடகம்

கூறு-10

1. இக்கால இலக்கியக் களங்கள்:
திரைப்படம், தொலைக் காட்சி, வானொலி, இதழ்கள் தமிழுக்கு ஆற்றி வரும் பணிகள்.
2. தமிழும் சமயமும்:
அ. சைவம் ஆ. வைணவம் இ. சமணம் ஈ. பௌத்தம்
உ. இசுலாம் ஊ. கிறித்துவம்
3. பிற்காலக் காப்பியங்கள்:
அ) கம்பராமாயணம்
ஆ) பெரியபுராணம்
4. இணையம் - பற்றிய செய்திகள்:

PART-I
Paper 1.1 - HINDI Paper I

UNIT I

Poetry: Kabirdas – Soordas – Bihari – Jaya Sankar Prasad – Suryakanth Tripadi Nirala – Maha Devi Varma – Ramadhari Singh Dinkar – Nagaurjan – Dharmaveera Bharathi – Dhoomil – Poets – Poems.

UNIT II

One Act Plays: Sooryodaya by Kamalakanth Varma – Udayan by Dr. Ramakumar Varma – Mayopiya by Udayasankar Bhatt – Bujhata Deepak by Bhagavathicharan Varma – Vishakanya by Govinda Vallabh Pant.

UNIT III

Grammar : Noun – Gender – Number – Case – Pronoun and Adjective.

UNIT IV

Official Correspondence : Padadikariyom Se Patra Vevahar – Vyavasayika Patra – Sampadak Ke Nam Patra – Sarkari Patra.

BOOKS RECOMMENDED:

5. Ram Kishor Sharma, *Padhya Pravah*, Loka Bharathi Prakashan, Allahabad.
6. *Sooryodaya*, Dakshina Bharat Hindi Prachar Sabha, Chennai.
7. *Sugam Hindi Vyakarana*, Vanshi Dhar and Dharmapal Shastri, Delhi.
8. Viraj M A, *A Manual of Office Correspondence – Drafting and Noting in Hindi*, Rajpal and Sons, Delhi.

PART-II

PAPER 1.2: ENGLISH Paper-I

Prose: Water-the Elixir of Life – On Letter Writing – Mrs. Packletide’s Tiger – The Cat – A Deed of Bravery – Our Civilization – Food – A Hero on Probation – Dangers of Drug Abuse – Our Ancestors.

Grammar : Articles – Gerunds – Infinitives – Participles – Auxiliaries – Modals – Prepositions – Tenses – Transformation of Sentences – Direct – Indirect Speech.

Composition: Developing hints – Letter writing – Paragraph writing – Dialogue writing – Precis writing.

BOOKS RECOMMENDED:

3. Sebastian D K, *Prose for the Young Reader*, Macmillan.
4. *Active English Grammar*, Ed. by Board of Editors, Macmillan.

Paper 1.3: MICRO ECONOMICS

Unit - I

Basic Economic Problem - Choice and Scarcity; Distinction between Micro and Macro Economics – Deductive and Inductive Methods of Analysis - Economic Statics and Dynamics.

Unit - II

Consumer Behaviour - Cardinal and Ordinal Utility - Law of Diminishing Marginal Utility - Law of Equi-marginal Utility – Demand: Demand Schedule and Demand Curve - Determinants of Demand.

Unit - III

Elasticity of Demand - Definition and Types of Elasticity of Demand - Measurement of Price Elasticity of Demand: Determinants of Price Elasticity of Demand - Demand and Supply Equilibrium.

Unit - IV

Factors of Production - Production Function - Short Run and Long Run Production Function - Law of Variable Proportions - Laws of Returns - Iso-Quants - Producer's Equilibrium - Cost and Revenue functions.

Unit - V

Market Structure: Characteristics - Pricing under Perfect Competition – Monopoly – Monopolistic Competition – Duopoly and Oligopoly – Features.

REFERENCE BOOKS

1. Jhingam, M.L. (2011), *Micro Economic Theory*, Vikas Publishing House, Delhi.
2. Dewett, K.K.1985), *Modern Economic Theory*, S.Chand and Company, Delhi.
3. Ahuja, H.L. (2004) *Micro Economics*, S.Chand and Company, Delhi.
4. Koutsoyiannis, A. (2000), *Modern Microeconomics*, (2nd Edition), Macmillan press, London.
5. Layard, P.R.G. and A.W. Walters (1978), *Microeconomic Theory*, McGraw Hill, London.
6. Sen A. (1999), *Microeconomics: Theory and Application*, Oxford University Press, New Delhi.
7. Stigler, G. (1996), *Theory of Price*, PHI, New Delhi.
8. Varian, H.R. (2000), *Microeconomic Analysis*, W.W.Norton, NewYork.

Paper 1.4: INDIAN ECONOMY

Unit - I

Features of Less Developed and Developing Economies - Economic and Non-Economic Factors impeding Economic Development - Concept of Economic Growth and Development - Factors Determining Economic Development.

Unit – II

Planning and Economic Development - Objectives of Planning- Agricultural and Industrial development under the Plans- an Appraisal of India's Economic Reforms - NITI Aayog.

Unit – III

Capital Formation - Human and Physical - Savings and Investment - National Income - Methods - Recent Trends in National Income - Human Resources - Population Growth - Population Policy.

Unit – IV

Infrastructure Development - Transport (Road, Railways, Shipping and Civil Aviation) - Importance of Transport to Economic Growth - Transport Co-ordination.

Unit – V

Poverty in India - Poverty and Unemployment Eradication Programmes - India's Foreign Trade and Balance of Payments - EXIM Policy - 12th Finance Commission - National Agricultural Policy - GATT, WTO and India's Foreign trade.

REFERENCE BOOKS

1. Dutt and Sundaram (2014), *Indian Economy*, S.Chand and Company, New Delhi.
4. Misra, S. K and V. K. Puri (2014), *Indian Economy*, Himalaya Publishing House, New Delhi.
5. Kapila, Uma (2012), *Indian Economy since Independence*, Academic Foundation, New Delhi.
6. Joshi, Vijay and I.M.D. Little (1996), *India's Economic Reforms: 1991-2001*, Oxford University Press, New Delhi.
7. Economic Survey (2014-15), Government of India, New Delhi.

Paper 1.5: ELEMENTS OF STATISTICS

Unit – I

Definition – Nature – Scope – Role and Importance of Statistics – Qualitative and Quantitative – Classification and Tabulation of data.

Unit – I

Measures of Central Tendency: Median – Mode - Range – Quartiles – Deciles – Percentiles – Quartile Deviation – Mean Deviation – Standard Deviation.

Unit – III

Index Numbers: Simple and Weighted - Laspeyer's and Paache's Index Numbers - Fishers Ideal Index Number - Marshall and Edgeworths Index Numbers.

Unit – IV

Census and Sampling: Population and Sample - Types of Sampling - Design of Questionnaire - Sampling Errors - Sampling Design.

Unit – V

Diagrammatic and Graphic Representation - Bar Diagrams - Pie Diagrams - Histograms - Pictograms - Cartograms - Frequency Graphs - Ogives - Lorenz Curve.

REFERENCE BOOKS

1. Gupta, S.P. (1993), *Introduction to Statistical Methods* S.Chand and Company, New Delhi.
2. Gupta, S.C. (1993), *Fundamentals of Applied Statistics*, S.Chand and Company, New Delhi.
3. Pillai, R.S.N. and Bagavathi (2014), *Statistics: Theory and Practices* S.Chand and Company, New Delhi.
4. Nagar. A.L and R.K. Das (1983), *Basic Statistics*, Oxford University Press, Bombay.
5. Speigal, M.R. (1992), *Theory and Problems of Statistics*, Mcgraw Hill Book Co., London.

**பகுதி-1 : தாள்-2.1 : தமிழ்
இலக்கியம்**

கூறு-1

3. பத்துப்பாட்டு – முல்லைப்பாட்டு
4. எட்டுத் தொகை – ஐங்குறுநூறு – கபிலர் – குறிஞ்சித்திணை – மஞ்சைப்பத்து – முதல் மூன்று பாடல்கள்.

கூறு-2

- (3) குறுந்தொகை – பாணர் பாடல்கள், பா. எண் 19, 24, 36, 128, 399.
(4) நற்றிணை – பெருங்குன்றூர்கிழார் – பா. எண் 5
பெருவழுதியார் – பா. எண் 55
பெருங்கௌசிகனார் – பா. எண் 139
கருவூர்க்கோசிகனார் – பா. எண் 214
உலோச்சனார் – பா. எண் 249

கூறு-3

- அகநானூறு – சேந்தம்பூதனார் பாடல்கள் பா. எண் 84, 207
புறநானூறு – மாறோக்கத்து நப்பசலையார் பாடல்கள், பா. எண் 37, 39, 126, 226, 280.

கூறு-4 : பதினெண் கீழ்க்கணக்கு

3. திருக்குறள் – வாழ்க்கைத்துணை நலம் (6), அறிவுடைமை (43), பிரிவாற்றாமை (116).
4. நான்மணிக்கடிகை – எள்ளற்க (3), பறைபடவாழா (4), மண்ணியறிப (5), கள்ளி வயிற்றில் (6), கல்லிற் பிறக்கும் (7).

கூறு-5

நாடகம் – இராசராச சோழன் – அரு. இராமநாதன்.

கூறு-6

நாவல் – சுவடுகள் – இரா. பாலசுப்பிரமணியன், சத்தியா வெளியீடு, மதுரை.

கூறு-7

செய்யுள் உறுப்புகள் – யாப்பு, எழுத்து, அசை, சீர், தளை, அடி, தொடை – வெண்பா, ஆசிரியப்பா, கலிப்பா, வஞ்சிப்பா – புதிய யாப்பு வடிவங்கள் – சிந்து, கண்ணி, கீர்த்தனை – புதுக்கவிதையில் குறியீடு, படிமம்.

கூறு-8

- அகப்பொருள் – புறப்பொருள் – ஐந்திணை விளக்கம்.
- அகப்பொருள் துறைகள் – வரைவு கடாதல், அறத்தொடு நின்றல், உடன்போக்கு.
- புறப்பொருள் துறைகள் – வஞ்சினக்காஞ்சி, கையறுநிலை, செவியறிவுறாஉ.
- அணி இலக்கணம் – உவமை, உருவகம், வேற்றுமை, பிறிது மொழிதல், தற்குறிப்பேற்றம், சிலேடை, பின்வருநிலை.
- நிறுத்தல் குறிகள்.

இலக்கிய வரலாறு

கூறு-9

தொல்காப்பியம் – சங்க இலக்கியம் – எட்டுத்தொகை, பத்துப்பாட்டு – பதினெண் கீழ்க்கணக்கு.

கூறு-10

ஐம்பெருங்காப்பியங்கள் – பிற்காலக் காப்பியங்கள் – கம்பராமாயணம், பெரியபுராணம் – இக்காலக் காப்பியங்கள் – பாரதியின் பாஞ்சாலி சபதம் – பாரதிதாசனின் பாண்டியன் பரிசு – கண்ணதாசனின் இயேசு காவியம் – சிற்பியின் மௌன மயக்கங்கள்.

PART-I

Paper 2.1 : HINDI - PAPER-II

UNIT I

Prose: Aap Vepthikr Raham – Budappa – Kadamb Ke Phool – Bharat Ek Hai – Jeevan Ki Teen Pradhan Baten – Taj – Loka Nayak Tulasidas – Bade Bhai Sahab – Japan Men Kya Dekha – Paramanu Sakthi Ka Bharish.

UNIT II

Novel: Kadiyam (Non-detailed book).

UNIT III

Journalism: Patrakarita (Chapter-1) – Patrakarita: Prakar (Chapter-6).

UNIT IV

Letter Writing: Karyalaya Gyapan – Ardhasarkari Patra – Pari Patra – Anusmarak.

TEXT BOOKS :

5. *Hindi Gadhya Prabhakar*, Hiranmaya, Rajpal & Sons, Delhi.
6. Bhisham Sagni, *Kadiyam*, Rajkamal Prakashan, New Delhi.
7. Madhu Dhawan, *Patrakarita Ek Parichaya*, Boadh Prakashan, Chennai.
8. Viraj M A, *A Manual of Office Correspondence – Drafting and Noting in Hindi*, Rajpal and Sons, Delhi.

PART-II

Paper 2.2 : ENGLISH - PAPER-II

Poetry : Shakespeare – Sonet XVIII; Wordsworth – Upon Westminster Bridge; John Keats – Ode on a Grecian Urn; Robert Frost – The Road Not Taken; Wilfred Owen – Strange Meeting; Stephen Spender – The Express; Tagore – Where the Mind is Without Feat; Sarojini Naidu – Coromandel Fishers; Nissim Ezekiel – Night of the Scorpion.

Shakespeare : The Merchant of Venice.

Language Use : General Essay – Comprehension – Note Making – Report Writing.

TEXT BOOKS :

4. Seshadri P K, *The Golden Quill*, Macmillan.
5. Shakespeare, *The Merchant of Venice* (Any Overseas Edition).
6. *Active English Grammar*, Ed. by Board of Editors, Macmillan.

Paper 2.3: MACRO ECONOMICS

Unit – I

Nature and Scope of Macro Economics - Micro and Macro Economics - Circular Flow of Income - Two Sector Model - National Income - Measurement and Its Uses - Social Accounting.

Unit – II

Classical Theory of Employment and Income - Say's Law of Market - Post Keynesian Macro Analysis - Contribution of Hicks, Hanson: ISLM - Diagram.

Unit – III

Consumption Function: Meaning - Theories of Consumption Function - Investment Function: Determinants of Investment - MEC - MEI - Simple Keynesian Model of Income and Employment Determination.

Unit – VI

Multiplier - Static and Dynamic Multipliers - Accelerator - The Interaction Principle Basics of Income and Employment Multiplier.

Unit – V

Macro Economic Policy and Goals: Full Employment, Price, Stability, Growth and Distribution, Monetary, Fiscal and Income Policies.

REFERENCE BOOKS

1. Mithani, D.M (2003), *Modern Economic Analysis*, Himalaya Publishing House, Mumbai.
2. Ahuja, H.L.(2000), *Macro Economics*, S. Chand and Company, New Delhi.
3. Vaish, M.C. (2005), *Macro Economic Theory*, Vikas Publishing House, New Delhi.
4. Shapiro, Edward (2008), *Macro Economic Analysis*, Galyotia Publications. New Delhi.
5. Seth, M.L. (1999), *Macro Economics*, Lakshmi Narayan Agarwal Publishers, New Delhi.

Paper 2.4: FISCAL ECONOMICS

Unit – I

Meaning and Scope of Public Finance - Distinction between Private and Public Finance - Principle of Maximum Social Advantage.

Unit – II

Public Finance: Sources; Central, State and Local Bodies - Taxation - Direct and Indirect Taxes - Meaning of Public Expenditure and Importance - Effects of Public Expenditure - Growth of Public Expenditure - Control of Public Expenditure.

Unit – III

Public Debt: Forms, Need - Classification and Burden of Public Debt – Role of Public Debt in a Developing Economy - Causes of Growth of Public Debt in India.

Unit – V

Federal Finance - Principles - Analysis of Division of Revenue, Expenditure other powers between Union, State and Local Governments - Finance Commission - Analysis of latest Finance Commission's recommendation- Local Finance - Sources of Finance to Local Bodies.

Unit – V

Fiscal Policy - Objectives and Instruments of Fiscal Policy in a Developing Economy with reference to India.

REFERENCE BOOKS

1. Musgrave, R.A. and P.B. Musgrae (1976), *Public Finance in Theory and Practice*, McGraw Hill, Kogakusha, Tokyo.
2. Sundharam, K.P.M. (2003), *Public Finance*, Sultan Chand and Sons, New Delhi.
3. Agarwal, R.C. (2007), *Public Finance*, Lakshmi Narain Agarwal, Agra.
4. Sankaran K. (2002), *Fiscal Economics*, Kamala Publication, Chennai.
5. Tyagi, B.P. (2012), *Public Finance*, Jai Prakash Nath and Co., Meerut.

Paper 2.5: ECONOMICS FOR COMPETITIVE EXAMINATIONS

Unit –I

Economic Development - Measurement of Development - Causes of under development - Development and the New Economic Policy - Development and the Environment.

Unit – II

Population: Population growth - Age Composition of Population - Population Policy.

Unit- III

Poverty - Measurement of Poverty - Poverty Line - Policies for Poverty Alleviation - Poverty and Regional Disparity.

Unit -IV

Price Policy and Inflation history to Price rise in India - Causes of Inflation- Inflation and Price Control in the Post - Reform Period - Monetary and Fiscal Policies.

Unit-V

International Economic Co-operation: OECD - SAARC- EEU - BRICS - International Finance Institutions: World Bank - IMF - ADB - International Trade Organizations: UNCATD - GATT - WTO - OPEC.

REFERENCE BOOKS

1. Datt and Sundharam (2014), *Indian Economy*, S. Chand and Company, New Delhi.
2. Dhingra, S. (2010), *The Indian Economy, Environment and Policy*, S. Chand and Sons. New Delhi.
3. Dewett, K.K.; Varma J.D. and M.L. Sharma (2004), *Indian Economics*, S. Chand and Company, New Delhi.
4. Agarwal, A.N (2009), *Indian Economy*, New Age International, New Delhi.
5. General Studies Manual for the UPSC Civil Services Preliminary Examination (Latest edition).
6. Indian Economy, Praitiyogita Darpan, (Latest edition).

Paper 3.1: DEVELOPMENT ECONOMICS

Unit – I

Concept of Economic Growth and Economic Development - Factors Determining Economic Development - Economic and Non-Economic Factors Impeding Economic Development - Features of Indian Economy.

Unit – II

Capital Formation - Savings and Investment Pattern - National Income - Sectoral Contributions since 1991 - Trends in Per capita Income since 1991.

Unit - III

Concept of Human Resources - Role of Human Capital - Demographic Change – Social Development Index: Human Development Index (HDI), Gender Development Index, Global Hunger Index - Health and Education.

Unit – IV

Industry and Infrastructure - Its Contribution to Economic Development – MSME- Startup Programmes (New Industrial Policy).

Unit – V

Role of Technology - Green Revolution - Agricultural Productivity Food Problem and Food Security - Recent Trends in Agriculture Production - New Agricultural Policy - Agricultural Marketing of Tamil Nadu – Regulated Markets and Uzhavar Sandhai in Tamil Nadu.

REFERENCE BOOKS

1. Datt, Ruddar and Sundharam, K.P.M. (2014), *Indian Economy*, S. Chand and Company, New Delhi.
2. Dhingra, S. (2010), *The Indian Economy, Environment and Policy*, Sultan Chand and Sons. New Delhi.
3. Dewett, K.K.; Varma J.D. and Sharma, M.L. (2004), *Indian Economics*, S.Chand and Company, New Delhi.
4. Agarwal, A.N (2009), *Indian Economy*, New Age International, New Delhi.

Paper 3.2: MONEY AND BANKING

Unit – I

Definition of Money - Evolution of Money - Functions of Money - Forms of Money – Qualities of a good money material - Role of Money in Capitalist, Socialist and Mixed Economies.

Unit – II

Fisher's Quantity Theory of Money - Cambridge Equation - General Evaluation of the Quantity Theory of Money.

Unit – III

Monetary Standards - Paper Currency - Systems of Note Issue - Gold Standard - Indian Currency System - Development and Problems.

Unit – IV

Money Supply - Money Supply and Price Level - Keynesian Approach - Neutrality of Money - Classical Dichotomy - Real Balance Effect – Friedman's Restatement of Quantity Theory.

Unit – V

Inflation - Causes, Types and Remedies - Inflationary Trends in India - Trade Cycle - Monetary Policy of RBI.

REFERENCE BOOKS

1. Mishkin, Frederic (2008), *The Economics of Money, Banking, and Financial Markets*, Pearson Addition Wesley, New York.
2. Pierce D.G. and P.J. Tysome (1985), *Monetary Economics: Theories, Evidence and Policy*, Butterworths, London.
3. Rangarajan, C. and B. H. Dholakia (1979), *Principles of Macroeconomics*, Tata-McGraw Hill Publishing Company Limited, New Delhi.
4. Prasad, K. N. (2001), *Developments in India's Financial System*, Sarup and Sons, New Delhi.
5. Reddy, Y.V. (2000), *Monetary and Financial Sector Reforms in India: A Central Banker's Perspective*, UBSPD, New Delhi.
6. Reserve Bank of India: *Report on Currency and Finance*, various issues.

Paper 3.3: AGRICULTURAL ECONOMICS

Unit - I

Agricultural Economics: Definition, Scope and Nature - Need for a separate study of Agricultural Economics - Agricultural Linkages with other Sectors - Role of Agriculture in Economic Development - Declining of Agriculture in Economic development.

Unit - II

Transforming Traditional Agriculture: Ranis and Fei - Schultz and Mellor Models, Lewis model of Unlimited Supply of Labour.

Unit - III

Land Holding Pattern and Land Reforms - System of Farming - Farm size and Productivity Relationship.

Unit - IV

Agricultural Price Policy - Agricultural Taxation - New Agricultural Strategy and Green Revolution - Problems of Small Farmers and Agricultural Labourers.

Unit - IV

Agricultural Marketing - Structure and Function - Margin and Efficiency - Measures to Improve Marketing Efficiency - Marketing System in India - Role of FCI, State Agencies - Price Expectation and Price Uncertainties, Price Stabilization - Finances of Agricultural Marketing.

Unit - V

Agricultural Credit: Importance of Agriculture Finance - Need for Government Intervention - Agricultural Credit System in India – NABARD – RRB - Co-operatives.

REFERENCE BOOKS

1. Hanumantha Rao C.H (1965), *Agricultural Production Function, Costs and Returns in India*, Tata McGraw Hill, Bombay.
2. Joshi P.C (1975), *Land Reforms in India: Trends and Prospects*, Allied Publishers, New Delhi.
3. Shultz T.W (1965), *Transforming Traditional Agriculture*, New Haven, London Yale University Press.
4. Mellor J.W (1969), *the Economics of Agriculture Development*, Vora and Co Bombay.
5. Hanumantha Rao, C.H (2005), *Agriculture, Food Security, Poverty and Environment: Essays on Post-reform India*, Oxford University Press, New Delhi.
6. Bhalla G.S (2007), *Indian Agriculture since Independence*, National Book Trust, New Delhi.

Paper 3.4: HISTORY OF ECONOMIC THOUGHT

Unit-I

Introduction: Nature - Approaches - Significance of History of Economic Thought - Mercantilism - Physiocracy.

Unit – II

Classical School: Adam Smith - T.R Malthus - David Ricardo - J.S.Mill - J.B.Say - Alfred Marshall - J.A. Schumpeter - Pigou.

Unit – III

Role of Socialism: Karl Marx - Different schools of Socialism: Utopian - Christian –Fabian –Syndicalism –Guild Socialism.

Unit – IV

Institutional Economics: Gunnar Myrdal - Thorstein Veblen - Romesh Dutt - Wesley Clair Mitchell - John Maurice Clark - John Kenneth Galbraith.

Unit – V

Indian Economic Thought: Thiruvalluvar - Gokale - Nauroje - Ranade - Nehru – Gandhi – E.V. Ramasamy – Amartya Sen.

REFERENCE BOOKS

1. Hagela, (2000), *History of Economic Thought*, Konark Publications, New Delhi.
2. Loganathan, V. (1998), *History of Economic Thought*, S. Chand and Company, New Delhi.
3. Sankaran, S. (2000), *History of Economic Thought*, Margham Publications, Chennai.
4. Desai and N. Bhalerao (1999), *Economic History of Indian*, Himalaya Publishing House, New Delhi.
5. Neelakantan, S. (2012), *Aatam Smith Mutal Karl Maarks Varai: Cevviyal Araciyal Porulataaram* (in Tamil), Kalachuvadu Publications Private Limited, Nagercoil, Tamil Nadu.

Paper 3.5: COMPUTERS AND DATA PROCESSING

Unit - I

Computer System Concepts: Computer System Components and Functions
– Input and Output Devices

Unit - II

Hardware and Software: Assembly and Languages - Operating Systems -
Usage of Programming Languages.

Unit - III

Database: Advantages and types - Data Base Management Systems (DBMS) - Data Manipulation Language (DML), Query Language (QL), and Report Generator, Creating and Using a Database (Fox Pro) - Relational Database Management System (RDBMS):

Unit - VI

Data Processing Techniques: Basic features of Microsoft Excel- Computing Totals, Mean- Variance- Using Statistical Packages: SPSS - STATA - Correlation Coefficient - Regression Coefficient in Two Variable Models- Multiple Regressions.

Unit - V

Business Communication: Internet and Intranet - Electronic Mailing (E-mail), Internet Banking and Finance (ECS, RTGS, NEFT) - E Commerce - Cyber Crime (Economic offences).

REFERENCE BOOKS

1. Sanders, D.H. (1988), *Computers Today*, McGraw Hill, New York.
2. Sinha P.K (2007), *Computer Fundamentals*, BPB Publications, New Delhi.
3. Rajaraman,V. (1999), *Fundamentals of Computers*, Prentice Hall of Indian, New Delhi.
4. Lipschutz, M.M. and S.Lipschultz, (1982), *Theory and Problems of Data Processing*, Schum's Outline Series, McGeaw Hill, New York.

B.Ed - Distance Education 2015-2016 onwards

	Code No.	Subject	Marks		Total
			Int.	Ext.	
First Year		Perspectives in Education / Core			
	1.1	Contemporary India and Education	25	75	100
	1.2	Educational Psychology	25	75	100
	1.3	Assessment for Learning	25	75	100
	Optional I Choose Any One				
	1.4.1	Teaching of Tamil	25	75	100
	1.4.2	Teaching of English	25	75	100
	Optional II Choose Any One				
	1.5.1	Teaching of Special Tamil	25	75	100
	1.5.2	Teaching of Special English	25	75	100
	1.5.3	Teaching of Mathematics	25	75	100
	1.5.4	Teaching of Science	25	75	100
	1.5.5	Teaching of Social Studies	25	75	100
	1.5.6	Teaching of Commerce	25	75	100
	1.5.7	Teaching of Economics	25	75	100
Total Marks in First Year			500		
		Perspectives in Education / Core			
Second Year	2.1	Curriculum and Instruction	25	75	100
	2.2	Educational Technology	25	75	100
	2.3	Critical Understanding of ICT	25	75	100
	Electives				
	2.4.1	Guidance and Counselling	25	75	100
	2.4.2	Environmental Education	25	75	100
Total Marks in Second Year			500		
Total Marks both in First Year and second Year 1000					

1.1 CONTEMPORARY INDIA AND EDUCATION

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ know the meaning, definition and nature of Education and Philosophy
- ❖ understand the relationship between education and philosophy and different Indian and Western philosophies
- ❖ apprise the principles of education advocated by great Indian and Western philosophers
- ❖ develop an understanding of Sociology and Education
- ❖ understand the role of family, community, school and mass media in education
- ❖ get exposed to social and educational problems
- ❖ appreciate the social values and personal values of teachers
- ❖ acquire the knowledge about the educational provisions in the constitution of India
- ❖ explain the role and functions of various regulatory bodies in Education
- ❖ acquaint with the knowledge about health and nutrition

UNIT I Philosophy and Education

Education: Meaning, Definition, Nature and Scope – Philosophy: Meaning, Definition and Scope – Educational Philosophy: Meaning, Definition and Need – Relationship between education and philosophy.

UNIT II Contribution of Indian Philosophy and Indian Thinkers to Education

Major Schools of Indian Philosophy: Hinduism – Buddhism – Jainism
Educational Thoughts of Indian thinkers: Vivekananda – Mahatma Gandhi – Tagore – Aurobindo.

UNIT III Contribution of Western Philosophy and Western Thinkers to Education

Naturalism – Idealism – Pragmatism – Realism and Eclectism – Educational Thoughts of Western thinkers: Rousseau – Frobel – Montessori– John Dewey.

UNIT IV Sociology and Education

Concept of Sociology – Relationship between Sociology and Education – Socialization – Culture – Social mobility – Social-stratification – Social change – Modernization.

UNIT V Agencies of Education

Educational influence of family, community , religion, school and Mass media – Formal and non-formal systems of education – Open university system – Distance Education.

UNIT VI Problems in Indian Society and Education

Population explosion – Unemployment – Under employment – Illiteracy – Child labour – Communal violence – Terrorism – Universalisation of primary education – Stagnation – Wastage – Special education for differentially abled and gifted – Women education – Brain Drain.

UNIT VII Value Education and The Teacher

Value: Definition, classification – Value education in schools – Teachers personal values and code of ethics – Personal and professional development of teachers.

UNIT VIII Indian Constitution and Education

Directive Principles – Article 45 – Responsibilities of Central and State Governments – Amendments related to education – University Education Commission – Indian Education Commission – Secondary Education Commission – Ishwarbhai Patel Committee – NPE 1986.

UNIT IX Regulatory Bodies of Education

MHRD – UGC–NIEPA –NCERT – NCTE– NAAC– TANSICHE –
DTERT– DIET– CABE–CBSE.

UNIT X Health and Nutrition Education

The concept of health – School health programmes – Common ailments of children – First aid – Nutritional deficiencies – Balanced diet – Healthy food habit.

REFERENCE BOOKS

1. Agarwal, J.C. (1999). Theory and Principles of Education. New Delhi: Vikas Publications House Pvt. Ltd.
2. Biswal, U.N. (2005). Philosophy of Education. New Delhi: Dominant Publishers and Distributors.
3. Chandra, S.S. (1996). Principles of Education. New Delhi: Atlantic Publishers.
4. Ghanta, R. and Dash, B.N. (2005). Foundations of Education. Hyderabad: Neelkamal Publications.
5. Mathur, S.S. (1997). Sociological and Philosophical Foundations of Education. Agra: Vinod Pustak Mandir.
6. Patel, M.S. (1953). The Educational Philosophy of Mahatma Gandhi. Ahmedabad: Navjeevan Pub. House.
7. Sharma, R.A. (2008). Development of Educational System in India. Meerut: R.Lall books depot.
8. Sharma, R.N. (2008). Education in the Emerging Indian Society. Delhi: Surjeet Publications.
9. Saraswathi, T.S. (1999). Culture, Socialisation and Human Development. New Delhi: Sage Publications.

1.2 EDUCATIONAL PSYCHOLOGY

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ acquire knowledge of nature and scope of Educational Psychology
- ❖ understand the human growth and development
- ❖ apply psychology in classroom situations
- ❖ comprehend the concept of cognitive development
- ❖ acquaint the theories of learning
- ❖ acquire knowledge about individual differences and skill provide suitable learning situations
- ❖ understand the significance of motivation
- ❖ acquire knowledge about personality intelligence and creativity
- ❖ know the importance of mental health

UNIT I Introduction to Psychology

Definition of Psychology- Schools of Psychology – Behavioural, Cognitive, Psychoanalysts, Methods of Psychology – Branches of Psychology – Educational Psychology – Concepts, Nature and Scope – Importance of Educational Psychology for the Teacher.

UNIT II Human Growth and Development

Concept of Growth and Development – Distinction between Growth and Development – Maturation and Development – Nature versus Nurture, general principles of Growth and Development – Dimensions of development: Physical, cognitive, emotional, and moral – Stages of Development – Childhood to adolescence problems and Education of Adolescents – Developmental tasks and its Educational implications.

UNIT III Cognitive Development

Cognitive process – Attention Factors relating to Attention – Span of Attention – Inattention and Distraction – Sensation and Perception – Factors relating to perception – Imagery – Concept Maps. Piaget's Stages of Cognitive Development – Reasoning and problem Solving – Meta cognition – Implications for the teacher.

UNIT IV Learning

Nature and Importance of Learning – Types of Learning – Theories of Learning: Thorndike, Pavlov, Skinner, Kohler and Gagne – Learning Curve – Transfer of Learning Facilitating Transfer – Remembering and Forgetting – Improving memory.

UNIT V Individual Differences

Nature and causes of Individual differences – Educational programme to suit individual differences – Classroom instruction – Concept of exceptional children: gifted, backward, physically mentally and socially challenged and Educational provisions.

UNIT VI Motivation

Motivation: Functions of Motives – Kinds of Motives – Theories of Motivation – Maslow's Hierarchy of Needs – Achievement motivation – Components – Fear of Failure and Hope of Success – Motivation in the classroom context motivational functions of teacher - Praise and Blame, Rewards and Punishments – Feedback / Knowledge of results – Level of Aspiration – Characteristics of a motivated learner.

UNIT VII Intelligence

Theories of Intelligence – Single, Two Factor and Multi Factor theories – Multiple Intelligence, Guilford's Structure of the Intellect – Emotional Intelligence – Individual differences in distribution of Intelligence – Test and their uses.

UNIT VIII Creativity

Creativity – Relationship and differences between intelligence and creativity – Convergent and Divergent Thinking – The Process of Creativity – Guiding for Creativity – Measuring Creativity.

UNIT IX Personality

Meaning and Definitions of Personality – Determinants of Personality – Theories of personality – Psychoanalytic, humanistic, Assessment of Personality – Important Tools and techniques – Integrated Personality.

UNIT X Mental Health

Conflict and Frustration – Concept of Adjustment – Adjustment Barriers – Adjustment mechanisms – Causes of maladjustment – Symptoms of Maladjustment – Defense Mechanisms – Problem children, Juvenile Delinquency – Concepts of Mental Health.

REFERENCE BOOKS

1. Judith J. (2008) Learners, learning and educational activity London Routledge
2. Graham R. (2008) Psychology: The key concepts, London, Routledge
3. Chobra, RK.(2006) Elements of educational Psychology, New Delhi Arise Publishers
4. Thomas M.H (2005) A student's guide to studying psychology, London Psychology Press.
5. Cara .F (1998) Practical for Psychology. A student workbook London, Routledge
6. Coleman, D. (1998) Working with emotional intelligence New York: Bantan Books
7. Adams J.A (1992) Learning and Memory: An Introduction Illions Dorsey Press.
8. Mangal, S.K (1981) Psychological Foundations of Education Ludhiana Parkash Bros.
9. Kokila Thangasamy.S (2007) Educational Psychology Maa Nila Pathipagam Madurai.
10. Nagarajan.K & Seetharaman (2009) Psychology of Learning & Human Development Ram Publishers, Chennai.

1.3 ASSESSMENT FOR LEARNING

OBJECTIVES

The student-teacher will be able to

- understand the concept of Assessment, measurement and evaluation
- apply measurement and evaluation in their teaching field
- understand the different approaches to evaluation
- understand and adopt CCE in their teaching and learning
- develop knowledge about techniques and tools of evaluation
- appreciate the new trends in evaluation
- implement the new examination system
- understand the need, importance and meaning of statistics
- prepare scholastic achievement test

COURSE CONTENT

Unit I – Concept of Assessment, Measurement and Evaluation

- 1.1 Concept and Meaning of assessment, measurement and evaluation.
- 1.2 Relationship and difference between measurement and evaluation.
- 1.3 Need and Importance of Evaluation.
- 1.4 Purpose of Evaluation
- 1.5 Place of Evaluation

Unit II – Approaches to Evaluation

- 2.1 Test and different types - Placement, Formative, Summative, diagnostic, Prognostic.
- 2.2 Distinction between Formative and Summative Evaluation
- 2.3 Continuous and Comprehensive evaluation: Meaning, need and relevance, procedures of Evaluation, Criteria of Evaluation

Unit III – Techniques of Evaluation

- 3.1 General Techniques of Evaluation
- 3.2 Quantitative technique and Qualitative technique
- 3.3 Self-reporting techniques
- 3.4 Observation techniques
- 3.5 Projective Techniques
- 3.6 Sociometric Techniques.

Unit IV – Tools of Evaluation

- 4.1 Tools of Evaluation – Rating Scales and Types – Aptitude Tests – Anecdotal Records- Inventories - Teacher made and Standardized tests.

4.2 New Trends in Evaluation --Grading system – Computer based Examination – Choice Based Credit System-other New Trends

Unit V – Instructional Objectives and Evaluation

5.1 Instructional Objectives and Specifications.

5.2 Cognitive Domain, Affective Domain, Psycho-motor Domain –Evaluation Pattern.

5.3 Bloom’s Evaluation Approach-Meaning and Definition-Techniques for evaluation of behavioural Modification.

5.4 Coordination of Teaching and Testing Activities.

Unit VI - Scholastic Achievement Test (SAT)

6.1 Purpose of Scholastic Achievement Test

6.2 Preparation of scholastic Achievement test- planning, preparation, designing the test items, review and editing, arranging the test items, providing directions, preparing scoring key and marking scheme, administering test and scoring, Evaluating the test.

6.3 Characteristics of good measuring instrument- Validity, Reliability, Objectivity, Adequacy, Practicability, Discrimination Index.

Unit VII – Examination System

7.1 Examination: Meaning, Types, Objectives of Examination, Test and Examination

7.2 Present Examination System ,Examination Reforms, NCERT and Examination Reforms

7.3 On-Line Examination: Meaning, Advantages, Limitations, Requirements for on-line Exam.

7.4 Open Book Examination (OBE): Meaning, Types, Objectives, Advantages, Limitations.

Unit VIII – Construction of Objective Type test Items

8.1 Objective Test Items –Meaning –Standardized-Teacher Made Objective Test Items Objective Test Items –Comparison between Teacher made objective Test and Standard Objective Test Items

8.2 Steps of Construction of Objective Type Tests. Planning, Preparation, Try-out, Evaluation of Test.

8.3 Types of Items of an Objective Test- Recall type-Recognition Type-Advantages and limitations

Unit IX - Analysis and Interpretation of Scores I

9.1 Importance and essentials of interpretation of scores.

9.2 Measures of central tendency- Arithmetic Mean, Median and Mode

9.3 Measures of Variability- Range, Quartile Deviation, Standard Deviation, and Mean Deviation

9.4 Coefficient of Correlation –Spearman Brown’s Rank Difference Method.

Unit X - Analysis and Interpretation of Scores II

10.1 Normal Probability Curve- Properties and Uses

10.2 Skewness and Kurtosis.

10.3 Graphical representation of data – Importance of Graphical representation of data-Types of Graphical representation, Limitations

10.4 Histogram, Frequency Polygon, Cumulative frequency Curve

REFERENCES

All India Council for Secondary Education (AICSE) (1956). **Report of the Bhopal Seminar on Examination Reform.** New Delhi.

DDE (1997). **Research Methodology and Educational Technology.** Pondicherry University.

Henry E. Garret. (1926). **Statistics in Psychology and Education.** Bombay: Vakils, Feffer and Simons Ltd.

IGNOU. (2000). **Educational Evaluation.** New Delhi

Nagarajan K. (1996). **Handbook of Statistics.** Madras: Ram Publishers.

Srivastava, H.S (2010). **Conducting Tests and Examinations.** New Delhi: S. Chand & Company Ltd.

UGC (1991). **Examination Reform – A Plan of Action,** New Delhi.

அழகப்பா பல்கலைக்கழகம்

தொலைதூரக் கல்வி இளங்கல்வியியல்

1.4.1 பொதுத் தமிழ்

நோக்கங்கள்

மாணவ ஆசிரியர்கள்

- ❖ தாய்மொழி கற்றலின் நோக்கங்களை அறிதல்
- ❖ தமிழ்மொழியின் பல்வேறு பயிற்று முறைகளை அறிதல்
- ❖ பாடத்திட்டம் அமைத்தலில் அமைந்துள்ள கோட்பாடுகளை அறிதல்
- ❖ கற்பித்தல் திறன்களை அறிதல்
- ❖ கேட்டுணர்தல் திறனையும் பொருளுணர்தல் திறனையும் அறிதல்
- ❖ சிறந்த படிக்கும் பழக்கங்களை வளர்த்தல்
- ❖ சிறந்த எழுத்தாற்றலை வளர்த்தல்
- ❖ செய்யுள் உரைநடைப்பாடங்களைக் கற்பித்தலின் வேறுபாடுகளை அறிதல்
- ❖ வினாத்தாள் அமைத்தலில் உள்ள பல்வேறு திறன்களை வளர்த்தல்
- ❖ தேர்வு குறித்த சிந்தனை பெறுதல்
- ❖ தமிழ் கற்பித்தலில் தகவல் நுட்பவியலைப் பயன்படுத்துதல்

அலகு-1 தாய்மொழிக்கல்வி

தாய்மொழி – தாய்மொழி கற்பித்தலின் நோக்கங்கள் – பயன்கள் – தனிச்சிறப்பு – எண்ணத்தை வெளியிடும் கருவி – திருத்தமாகப் பேச, கேட்க, படிக்க, எழுதப் பயிற்சி அளித்தல்

அலகு-2 தமிழைப் பயிற்றும் முறைகள்

தமிழ் மொழியினைப்பயிற்றும் முறை – பண்டையோர் கண்ட பயிற்று முறை – சங்ககாலம் முதல் தற்காலம் வரையில் – விளையாட்டு முறை, நடிப்பு முறை – செயல்திட்ட முறை – தனிப் பயிற்சி முறை – மேற்பார்வைப் படிப்பு முறை – திட்டமிட்டுக்கற்றல் – இம்முறைகளைப் பல்வேறு நிலைகளில் பயன்படுத்துதல்

அலகு-3 பயிற்சி ஆயத்தம்

உற்று நோக்கல் பதிவு – நோக்க அடிப்படையில் கற்பித்தல் – மொழிக்கற்பித்தல் நோக்கங்களும், நோக்கக் கூறுகளும் – பாடத் திட்டம் தயாரித்தலின் இன்றியமையாமை – நன்மைகள், தீமைகள் – ஆசிரியர் மனதிற் கொள்ளத்தக்கன – புளுமின் கற்பித்தல் கோட்பாடுகள்.

அலகு-4 நுண்ணிலைக் கற்பித்தல்

நுண்ணிலைக் கற்பித்தல் திறன்களில் பயிற்சி – பல்வகைத் தூண்டல்களைப் பயன்படுத்தும் திறன், கிளர் வினாத்திறன், வலுவூட்டிகளைப் பயன்படுத்தும் திறன், கரும்பலகையைப் பயன்படுத்தும் திறன், உதாரணங்களைப் பயன்படுத்தும் திறன் மற்றும் இணைப்புப் பயிற்சி.

அலகு-5 துணைக்கருவிகளைப் பயன்படுத்துதல்

துணைக்கருவிகள் – துணைக்கருவி வகைகள் – காட்சிக் கருவிகள், கேள்விக்கருவிகள், காட்சி-கேள்விக் கருவிகள் – உருவாக்கம் பயன்படுத்துதல்.

அலகு-6 மொழித்திறன்களைக் கற்பித்தல்

பேசுதல் திறன் – நோக்கம் – முறைகள் – பயிற்சி – பயன்கள்
கேட்டல்திறன் – நோக்கம் – முறைகள் – பயிற்சி – பயன்கள்
படித்தல் திறன் – நோக்கம் – முறைகள் – பயிற்சி – பயன்கள்
எழுதுதல் திறன் – நோக்கம் – முறைகள் – பயிற்சி – பயன்கள்.

அலகு-7 பாடநூல்

பாடநூல் – அமைப்பு முறை – உள்ளடக்கம் – வல்லுநர்களின் வழிகாட்டல் – தொடக்கநிலை, நடுநிலை, உயர்நிலை, மேல்நிலை வகுப்புகளில் மொழிப்பாடத் திட்ட நோக்கங்கள் – அவற்றின் மொழிப்பாடங்கள் – அமைப்பு முறை பற்றிய கருத்துக்கள் – உள்ளடக்கப்பகுப்பாய்வு – பயிற்சிச் சிக்கல்கள் – தீர்வுகள்.

அலகு-8 கற்பித்தல் பொது முறை

செய்யுள் பயிற்று முறை – உரைநடை பயிற்று முறை – இலக்கணம் பயிற்று முறை – துணைப்பாடம் பயிற்று முறை – (மாதிரி வகுப்புகள் வழி பயிற்சி ஆசிரியர்களுக்கு விளக்கம் அளித்தல்) – மொழிப்பயிற்சியும் – கட்டுரை வரைதலும்.

அலகு-9 தகவல் நுட்பவியலும் தமிழ் கற்பித்தலும்

மொழிக் கற்பித்தலில் மக்கள் தொடர்புச்சாதனங்கள் (Mass media in Language Teaching) கணினி அடிப்படையில் கல்வி (Computer Based Education) – கணினி துணையுடன் கற்பித்தல் (Computer Assisted Instruction) – கணினி மேலாண்மையில் கற்பித்தல் (Computer Managed Instruction) – கணினி ஊடகக் கற்பித்தல் (Computer Mediated Communication) கணினியில் தமிழ் – மின் தமிழ் – இணையத்தில் இணைந்த தமிழ்.

அலகு-10 மதிப்பீடு

தமிழ் கற்பித்தலின் விளைவுகளை மதிப்பிடல் – மதிப்பீடுதலின் நோக்கமும் பயனும் – பண்புகள் – நல்ல தேர்வின் இன்றியமையாத கூறுகள் – தேர்வு வகைகள் – வினா வங்கியின் பயன் – வினாத்தாள் வடிவமைப்பு – வினா வகைகள் – தொடர் மற்றும் முழுமையான மதிப்பீடு (CCE) – பயன்கள் – நோக்கம்.

மையப் போக்கு அளவைகள்: கூட்டுச்சராசரி, இடைநிலை, முகடு சிதறல் அளவைகள் : வீச்சு, திட்ட விலக்கம் , கால்மான விலக்கம் ஓட்டுறவு பொருளும் பயன்களும் – தர ஓட்டுறவுக் கெழு விளக்கம்.

செய்முறைப் பயிற்சிகள்

- ❖ கருத்தரங்கு நடத்துதல்
- ❖ கற்பித்தல் பொருள் தயாரித்தல் தொடர்பான துணைக்கருவிகள் தயாரித்தல்
- ❖ வானொலி அல்லது தொலைக்காட்சிப் பேச்சைக் கேட்டுக் குறிப்பெடுத்தல்
- ❖ வினாவங்கி தயாரித்தல்
- ❖ குறையறி சோதனையும் குறைதீர் பயிற்சியும்

பார்வை நூல்கள்

1. கணபதி வி. (1989) “தமிழ் ஐவகைப் பாடங்களும் கற்பித்தல்” சாந்தா பதிப்பகம் சென்னை -14
2. கோவிந்தராஜன் மு. (1990) “நற்றமிழ் பயிற்றழின் நோக்கமும் முறையும்”, சரஸ்வதி பதிப்பகம் சென்னை.
3. புலவர் செந்தூர் பாண்டியன் (1979) “நுண்ணிலைப்பயிற்சி “ மீனாட்சி பதிப்பகம் புதுக்கோட்டை
4. வேணுகோபால் இ.பா (1991) “பைந்தமிழ் கற்பிக்கும் முறைகள் சகுந்தலா வெளியீட்கம் வேலூர்.
5. முனைவர் பழனிவேலு ஞா. “தமிழ் கற்பித்தலில் புதுமைப்போக்குகள்”.கபிலன் பதிப்பகம் 93
6. கோவிந்தராஜன் மு. (1980) “மொழித்திறன்களும் சில சிக்கல்களும்” தேன்மொழிப்பதிப்பகம் சென்னை
7. கணபதி வி. (2005) “நற்றமிழ் கற்பிக்கும் முறைகள்” சாந்தா பதிப்பகம் சென்னை -14
8. இலக்குவன் (2008) : தமிழ்ப்பாடநூலும் ஆசிரியரும் , சென்னை : சாரதா பதிப்பகம் ,

1.4.2 TEACHING OF ENGLISH

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ realize the role of English in India in the right perspective and the rationale for learning English as a second language
- ❖ get familiarized with the various aspects of the B.Ed. programme with special reference to the nature of the language skills to be developed and evaluation
- ❖ acquire knowledge of the current trends in the teaching of English
- ❖ get familiarized with techniques of oral preparation and practice of language items.

UNIT I Role of English in Indian Classroom

The status of English in India today – The rationale for learning English – Aims of teaching English at the Primary level, Secondary level and Higher Secondary level - Objectives of teaching English as a second language – Teaching English as a skill rather than a knowledge subject – The scope of the B.Ed English course – Recommendations of Indian commissions and Committees on English Language Education – Qualities of a Good English Teacher.

UNIT II Teaching of Different Skills in English

Bloom's Taxonomy of Educational Objectives – Cognitive – Affective – Psychomotor domains – General and Specific Instructional Objectives – Micro teaching – Macro teaching – Use of different drills in Teaching Oral English.

UNIT III Technology Assisted Language Learning (TALL)

Teacher made aids – Flash cards, Pictures, Charts, Models, Blackboard sketches - Mechanical aids – Overhead projector, Tape recorder, Lingua phone records, Radio, Television – Programmed learning – Language laboratory – Computer assisted language learning – Power point presentation – Related websites in language learning.

UNIT IV Approaches and Methods of Teaching English

Method – Approach – Technique – Design – Method – Grammar Translation Method – Bilingual method – Direct Method – Dr. West's new method – Merits and Demerits – Approaches – Structural Approach – Types of Structures – Selection and Grading of Structures – Principles of Situational – Oral Approach – Communicative approach- Eclectic approach – Recent trends in the teaching of English.

UNIT V Types of Evaluation

Difference between measurement and evaluation - Characteristics of a good English test – Concept of Evaluation – Types of evaluation – formative and summative- Different types of tests – Achievement tests – Aptitude tests – Proficiency tests – Diagnostic tests - Construction of a good test – Preparation of blue print.

UNIT VI Role of Mother-Tongue in Teaching English

Use of the Mother-Tongue in the English Class – Difference between Learning the Mother-Tongue and the other tongue – Arguments against the use of Mother-Tongue – When to use the Mother-Tongue.

UNIT VII Listening Comprehension

Sub skills of listening – listening for perception – listening for comprehension – The three phases of listening – Listening material – listening to specific information, for general understanding, to deduce meaning – Listening activities – dictation, following a route, listening to a telephone call, listening to commentaries, listening to instructions, Jigsaw listening.

UNIT VIII Speaking Skills

Techniques in teaching speaking – Tasks for developing speaking skill – Individual, pair and group work – Improving oral fluency – Dialogue – Role play – Dramatization – Play Reading – Group Discussion – Narration – Description – Communication Game – Debate – Interview – Extempore Speech – Barriers for Effective Communication – Testing Speaking.

UNIT IX Reading Skills

Aims of teaching reading - Process involved in reading – Symbol, sound, sense- Types of reading – reading aloud – silent reading – skimming – scanning – intensive reading – extensive reading – Methods of teaching reading to beginners – Alphabet method – Phonetic method – Word method – Phrase method – Sentence method – Strategies to develop reading.

UNIT X Writing Skills

Mechanics of Writing – Sub skills in writing – visual perception – syntax – organization – grammar – content purpose – relevance – Writing skills – Mechanical skills – Grammatical skills – Judgment skills – Discourse skills – Characteristics of good Handwriting – distinctiveness – legibility – simplicity – uniformity – spacing – capitalization – punctuation – speed – Developing good handwriting.

REFERENCE BOOKS

1. Aggarwal, J. C. (2008). Essentials of Educational Technology. UP: Vikas Publishing House Pvt Ltd.
2. Aggarwal. J. C. (2008). Principles, Methods & Techniques of Teaching. UP: Vikas Publishing House Pvt Ltd.
3. Chauhan, S. S. (2008). Innovations in Teaching Learning Process. UP: Vikas Publishing House Pvt.Ltd.
4. Dhand, H. (2009). Techniques of Teaching. New Delhi: APH Publishing Corporation
5. Palmer, H. E. (2008). Oral Method of Teaching Language. Delhi: Surjeet Publications.
6. Rao, P. (2005). Method of teaching English. Hyderabad: Neelkamal Publications.
7. Sharma, R. N. (2008). Principles and Techniques of Education. Delhi: Surjeet Publications.
8. Sharma, R. N. (2008). Contemporary Teaching of English. Delhi: Surjeet Publications.
9. Sharma, R. A. (2008). Technological foundation of education. Meerut: R.Lall Books Depot.
10. Siddiqui, M.H. (2009). Techniques of Classroom Teaching. New Delhi: APH Publishing Corporation.
11. Venkateswaran, S. (2008). Principles of Teaching English. UP: Vikas Publishing House Pvt.Ltd.

அழகப்பா பல்கலைக்கழகம்
தொலைதூரக் கல்வி - இளங்கல்வியியல்
1.5.1 சிறப்புத் தமிழ்

நோக்கங்கள்:

மாணவ ஆசிரியர்கள்

- ❖ மொழியின் தோற்றமும் வளர்ச்சியும் பற்றி அறிதல்
- ❖ கலைத்திட்டத்தில் மொழியின் இடத்தினை அறிதல்
- ❖ தமிழ்மொழியின் ஒலி அமைப்பு முறையை அறிதல்
- ❖ இலக்கியக் கழகங்கள் பற்றி அறிதல்
- ❖ தேசியக் கல்விக் குறிக்கோள்களை அறிதல்
- ❖ பள்ளியிதழ்களின் முக்கியத்துவத்தை அறிதல்
- ❖ கவிதை பற்றிய கொள்கைகளை அறிதல்
- ❖ முத்தமிழின் வளர்ச்சியினை முறையோடறிதல்
- ❖ இலக்கியத் திறனாய்வு பற்றி அறிதல்
- ❖ மொழிபெயர்ப்பு மொழிவளர்ச்சிக்குத் துணையாதலையுணர்தல்

அலகு-1 மொழியின் தோற்றம்

மொழியின் பண்புகள் – மொழியின் தோற்றக்கொள்கை – மொழியின் வளர்ச்சி – தமிழ்மொழி வரலாறு – தமிழ் மொழியின் கிளை மொழிக் கொள்கைகள் – பேச்சு மொழியும் எழுத்து மொழியும் – சிறப்பு மொழி – பண்பு மொழிக்கொள்கை – தமிழ்மொழியின் தனித்தன்மைகள்.

அலகு-2 கலைத்திட்டத்தில் தாய்மொழி

தேசிய இலக்குகளுக்கும் கல்வியின் நோக்கங்களுக்குமுள்ள தொடர்பினைக் காணல்- கலைத்திட்டத்தில் தாய்மொழி பெறுமிடம் – தேசியக் கல்விக் கொள்கையில் கலைக்கல்வி – கலைத்திட்டத்தின் கோட்பாடுகள் – ஆரம்ப, இடை, உயர்நிலைகளில் தேசியக் கல்வியின் நோக்கம் மற்றும் குறிக்கோள்.

அலகு-3 தமிழ் மொழியியல் அமைப்பு

மொழியியல் – ஒலி மொழியாதல் - ஒலிகளின் பிறப்பு – பேச்சுறுப்புகளும் அவற்றின் செயல்பாடுகளும் – தமிழ் மொழியின் அமைப்பு – அடைப்பொலி, உரசொலி, மூக்கொலி, ஆடொலி, மருங்கொலி, ஒலியனியல் – ஒலியன்களை கண்டறியும் கொள்கைகள்.

அலகு-4 இலக்கியக் கழகங்கள்

இலக்கியக் கழகங்கள் – இன்றியமையாமை – அமைக்கும் முறை – பணிகள் – திறன் வளர்ச்சி – செயல்முறை – இடம் பெறத்தக்கவை – நடத்துதல் பயன்.

அலகு-5 பள்ளியிதழ்கள்

பள்ளியிதழ்கள் – கையெழுத்துப் பிரதிகள் – அமைப்பு – முறை – பயன் – இதழாசிரியர்கள் – ஆசிரியர் குழு – செயற்குழு – அளவும் அமைப்பும் – நடைமுறை.

அலகு-6 இயல் தமிழ்

இலக்கிய வகைகள் – கவிதை – மேனாட்டார் மற்றும் தமிழறிஞர் விளக்கம் – கற்பனை – உணர்ச்சி, வடிவம், பாடுபொருள் – உள்ளுறை உவமம் – அணி, இறைச்சி மற்றும் சிறப்பியல்புகள் – புதுக்கவிதை.

அலகு-7 இசைத்தமிழ்

இசையும் தமிழும் – மொழிக்கல்வியில் இசை – தொல்காப்பியத்தில் இசைக் கூறுகள் – பக்திப் பாடல்கள், நாட்டுப்புறப் பாடல்கள் – தற்காலக் கவிதை வளர்ச்சிக்கு இசையின் பங்களிப்பு.

அலகு-8 நாடகத்தமிழ்

நாடகம்: தோற்றம் – சங்ககாலம் முதல் இக்காலம் வரை அமைப்பு – வகைப்பாடு – எழுத்து, வனொலி, வட்டார மொழி, செய்யுள் நாடகங்கள் – நாடக உத்திகள்.

அலகு-9 இலக்கியத் திறனாய்வு

திறனாய்வின் தோற்றம் – இன்றைய திறனாய்வின் நிலை – திறனாய்வின் வகைகள் – படைப்பு வழித் திறனாய்வு – மரபு வழித் திறனாய்வு – முருகியல் திறனாய்வு – விளக்க முறைத் திறனாய்வு – மதிப்பீட்டு முறைத் திறனாய்வு – வரலாற்று முறைத் திறனாய்வு – ஒப்பீட்டு முறைத் திறனாய்வு – பாராட்டு முறைத் திறனாய்வு – திறனாய்வாளரின் தகுதிகள்.

அலகு-10 தமிழ் மொழியின் வளர்ச்சி நிலை

கணிப்பொறியும் தமிழும் – பல்லாடகமும் தமிழ் கற்பித்தலும் – மொழிபெயர்ப்பு – மொழி வளர்ச்சியில் மொழிபெயர்ப்பின் பங்கு – தமிழ் இணையம் – தமிழ் ஆட்சிமொழியாவதில் ஏற்படும் சிக்கல்கள் – நீக்கும் வழிமுறைகள் – செம்மொழித்தமிழ்.

செயல்முறைப் பயிற்சிகள்

- முன்னறிவிப்பில்லாச் சொற்பொழிவுகள்
- கற்பித்தல் பொருள் தொடர்பான துணைக்கருவிகளைத் தயாரித்தல்
- கையெழுத்து இதழ் தயாரித்தல்
- வினாவங்கி தயாரித்தல்
- கருத்தரங்கம் நடத்துதல்

பார்வை நூல்கள்:

1. கணபதி .வி. (2005) “நற்றமிழ் கற்பிக்கும் முறைகள் “ பகுதி –II சென்னை சாந்தா பப்ளிஷர்ஸ்.
2. கணபதி.வி. (2005) “நற்றமிழ் கற்பிக்கும் முறைகள் “ பகுதி –I சென்னை சாந்தா பப்ளிஷர்ஸ்.
3. முனைவர் முத்துசண்முகம் (1988)இ “இக்கால மொழியியல்” கழக வெளியீடு
4. முனைவர் முவ. (1988) “மொழிவரலாறு” கழக வெளியீடு
5. முனைவர் எஸ் ஸ்ரீகுமார் (2002) “மொழியும் சமூகமும்” செண்பகா பதிப்பகம் தி.நகர் சென்னை -17.
6. முனைவர் சேதுமணியன் (1990) “மொழிபெயர்ப்புக் கோட்பாடுகளும் உத்திகளும்” செண்பகம் வெளியீடு மதுரை
7. முனைவர் ந. சுப்பு ரெட்டியார் (2005) “தமிழ் பயிற்றுமுறை” மாணிக்கவாசகர் பதிப்பகம் சிதம்பரம்
8. கணபதி .வி. (2005) “நற்றமிழ் கற்பிக்கும் முறைகள் “சென்னை. சாந்தா பப்ளிஷர்ஸ்.
9. முனைவர் மு.வ (1996) “தமிழ் இலக்கிய வரலாறு” சாகித்திய அகாடமி புதுதில்லி
10. முனைவர் இ.பா வேணுகோபால் (2006) பைந்தமிழ் கற்பிக்கும் முறை சாரதா பதிப்பகம் சென்னை.
11. முனைவர் சு. சக்திவேல் (1996) “தமிழ் மொழிவரலாறு” மணிவாகர் பதிப்பகம் சென்னை
12. முனைவர் மு் கோவிந்தராஜன் “மொழித்திறன்களும் சில சிக்கல்களும்” தேன்மொழிபதிப்பகம் சென்னை
13. முனைவர் வி. கருணாகரன் “மொழிவளர்ச்சி”

1.5.2 TEACHING OF SPECIAL ENGLISH

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ acquire knowledge of the sound system of English and to familiarize them with the appropriate terminology, to describe the sounds in English.
- ❖ understand the connections of English speech and to acquire good pronunciation and fluency of speech
- ❖ get familiarized with the syllabi related to High School and Higher Secondary classes.
- ❖ acquire a working knowledge of the grammatical terminology and grammatical system in English

UNIT I Phonetics of English

Elements of English language – Phonology, morphology, lexis, grammar – The individual sounds – Place of articulation – The concept of the Phoneme and the Allophone – Strong and weak forms – Word Stress – Phonetic Transcription.

UNIT II Fluency

Use of conventional formulae – Describing and interpreting picture, tables, graphs, maps, etc – Various concepts and ways in which they are expressed – construction – suggestion – prohibition – permission – probability – likelihood – possibility – obligation – necessity for fluency – concession – Oral drills – Repetition drills – Mechanical drills – Substitution drills.

UNIT III Advanced Grammar

The Noun phrase – The Verb phrase – Tense forms – Auxiliaries – Types of Sentence – Clauses – Sentence pattern – Active and Passive voice – Direct and Indirect speech – Question forms – Analysis and classification of grammatical errors.

UNIT IV Lexis

Word formation – Affixation – Conversion – Compounding – Clipping – Port Manteau – Onomatopoeia – Loan words – other minor devices – Patterns of spelling – Phrasal verbs and prepositional phrases – Sentence connectors – Devices for cohesion and coherence.

UNIT V Language Acquisition Research

First Language acquisition – Behaviourism and Second Language Learning – Errors and Learning Strategies – Causes for difference among learners – Models of second language learning – As Creative Construction – As Acculturation – As Elaboration of a Simple Code – As a form of Skill Learning – As a form of Social Learning – Subconscious and Conscious aspects of Language Learning.

UNIT VI Teaching Vocabulary

Nature of words – Types of vocabulary – Active vocabulary – Passive vocabulary – Expansion of vocabulary – Selection and grading of vocabulary – Strategies to develop vocabulary.

UNIT VII Types of Courses and Stylistics

English for Global Purpose – English for Specific Purpose – Remedial English course – The English Reader – Intensive, Extensive and Supplementary – Types of Deviation – Redundancy in Poetry – Rhetorical Question – Apostrophe – Simile and Metaphor.

UNIT VIII Reference and Study Skills

Practice in the Intensive and Extensive Reading – Practice in the Efficient use of the Text Books and Library books – Study skills – note-taking, note-making, summarizing and paraphrasing – Reference skills – library – dictionaries – thesaurus – encyclopedia – bibliography – Annotated Bibliography.

UNIT IX Composition

Types of Composition – Controlled – Guided – Free – Kinds of composition – Letter writing – Formal – Informal – Business letters – Paragraph writing – Essay writing – Précis writing – Expansion of proverb

- Developing stories from outline – Summarizing Abstracting – Translation
- Comprehension – Oral composition – Pair work – Mixed ability grouping
- Correction of Composition exercise – correction symbols.

UNIT X Language Curriculum

Principles of Curriculum construction – Limitations in the existing school English language curriculum – Qualities of a good English language text book – Unity in Writing – Language as Creative Construction – Language as a form of Social Learning.

REFERENCE BOOKS

1. Francis Soundararaj, F. (1995). Teaching Spoken English and Communication Skills.Chennai:
2. Joyce., & Well., (2004). Models of Teaching. U.K: Prentice hall of India.
3. Kohli, A. L. (2006). Techniques of Teaching English. New Delhi: Dhanpat Rai pub.co
4. Mangal, S. k., & Mangal, S. (2005). Essentials of Educational Technology and Management. Meerut: loyal book depot.
5. Sachdeva, M. S.(2003). A new approach to teaching of English in India. New Delhi: Tandon Publications.

1.5.3 TEACHING OF MATHEMATICS

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ Understand the nature of Mathematics
- ❖ Analyse the objectives, aims and values of Teaching Mathematics
- ❖ Comprehend the steps in Curriculum designing
- ❖ **Maths** the mathematic concepts in the school level
- ❖ Become aware of and acquire expertise in production of materials
- ❖ Acquire skill in teaching mathematics through several teaching methods and techniques
- ❖ Practice various steps in teaching for problem solving
- ❖ Gain competence in assessing the performance of students through formative and summative evaluation.
- ❖ Acquire knowledge of several learning resources in Mathematics
- ❖ Acquire skill in planning for Teaching Mathematics
- ❖ Gain knowledge of several mathematical organisation for professional advancement

UNIT I Nature of Mathematics

Definition of Math – Objectivity, symbolism, Abstractness, logical structure, structuralism and formalism. History of Mathematics – Its importance for a teacher.

UNIT II Aims and Objectives

Aims of teaching Mathematics – practical, disciplinary, cultural , social – values of Mathematics for a common and advanced learner taxonomy of Objectives – Bloom & Anderson.

UNIT III Mathematics Curriculum

Principles of Curriculum – designing curriculum – Modern trends – Comparison of different curricula in Mathematics of Various streams.

UNIT IV Methods and Strategies

Developing a Mathematical concept –Expository and discovery teaching Group, cooperative and collaborative strategies – Provisions for heterogeneous classroom – special children and teaching of Mathematics – Active learning – Tiger methods –Constructivism.

UNIT V Teaching for Problem Solving

Definition of Problem – Polya’s steps in problem solving – Various kinds of proof, inductive and deductive method – Creative learning and teaching.

UNIT VI Learning Resources and Material Production

Classroom, library, laboratory, Low-cost teaching materials –Technology – Web based learning, interactive board, geo board Sketchpad etc.

UNIT VII Planning for Teaching

Lesson Plan – importance – preparation of lessons –worksheets Unit plan – preparation of resource units.

UNIT VIII Assessment and Evaluation

Purpose and programmes – NRT & CRT – Teacher made achievement – preparation of blueprint, writing items, preparing key & marking scheme Diagnostics tests – Preparation suggesting remedial teaching.

UNIT IX Teaching for Permanence

Drill, Review and Revision – Motivation Rationalization, Concretization, correlation, Individualized Programmes, Home assignments.

UNIT X Teachers and Professional Development

Mathematics teachers, participations in organizational activities – seminars
–Affiliating to AMTI, NCTM – How to play a role in Mathematical
Olympiads –Contribution to journals and Magazines.

REFERENCE BOOKS

1. Ball W.W.K A short History of Mathematics
2. Bertrand Russell, Principles of Mathematics George and Allen
3. Bhimsankaran C.V Mathematics Education Book field Centre Bombay
4. Bulter and Wren Teaching of Secondary Mathematics Mc Graw Hill Company NewYork.
5. Cooney, Davis, Hendenar Dynamics of teaching Secondary School Mathematics Houghton Mifflin Company Boston.
6. Courant and Robins What is mathematics? OUP
7. Cundy, Martyn H and RollettA.P Mathematical Models Oxford, London.
8. Devies R. Teaching of Mathematics Addison Wesley Press Cambridge.
9. E.T Bell Mathematics, Queen and Servant of science, Mc Grahill Book Company , NewYork.
10. Fletcher F.G Some lesions in mathematics OUP.
11. Hogben Lancelot, Mathematics for the Million George Allen and Unwin Ltd., London.
12. Joseph Crescimbeni teaching of New Mathematics Parker publishing Co. New York.
13. NCERT Brochure on themes relating to Mathematics Education.
14. NCTMS year Books
15. Siddhu R.S teaching of Secondary Mathematics Sterling publishers 21 S.M.S.G Books Yale University

1.5.4 TEACHING OF SCIENCE

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ understand the nature and scope of Science
- ❖ know the aims and objectives of teaching science
- ❖ understand the various teaching strategies in science
- ❖ develop a theoretical and practical understanding of the various methods and techniques of teaching science and the importance of self-learning devices
- ❖ acquiring skills relating to planning their lessons and presenting them effectively
- ❖ understand the criteria in selecting a good textbook and to evaluate a Science textbook.
- ❖ understand the ICT and give them practice in the use of Audio-visual aids
- ❖ understand the principles of curriculum construction and the organization of subject matter
- ❖ understand the techniques of evaluating science teaching and to construct achievement test
- ❖ acquire knowledge to understand the pupil's individual differences
- ❖ be aware of the recent trends in science education

UNIT I Nature and Scope of Science

Nature and Scope of Science-Science as a product and a process – a body of knowledge (Empirical knowledge, Theoretical knowledge-facts, concepts, hypotheses, theory, principle, law)-a way of investigation-a way of thinking-Inter disciplinary approach-New developments-Implications-Globalization and science

UNIT II Aims and Objectives of Teaching Science

Aims and Objectives of teaching Science-General and Specific Objectives of teaching Sciences-Bloom's Taxonomy of Educational Objectives (Cognitive, Affective and Psychomotor)-Aims and Objectives of teaching Science at different levels-Primary, Secondary, Higher Secondary.

UNIT III Strategies for Teaching Science

Criteria for selecting a method of teaching Science: Level of the class, size of the class, time availability and subject matter-Methods of Teaching

Science-General Methods: Heuristic Approach, Historical and Biographical Approaches, Lecture method, Lecture cum Demonstration Method, Individual Practical Method, Analytic and Synthetic Method, Scientific Method, Project Method.

UNIT IV Micro Teaching / Unit Planning / Lesson Planning

Microteaching and its scope-microteaching cycle-Relevant skills in Micro teaching- Content analysis-developing Unit Plan-steps in Unit Planning-characteristics of a good Unit Plan-Lesson Planning-Essential features of Lesson Planning and their importance-Steps in Lesson Planning (Herbartian steps)-Preparing Lesson Plans-Distinguishing Lesson Plan and Unit Plan

UNIT V Learning Resource in Science

Science Laboratory-Structure and Design-Organization and Maintenance of Science Laboratory-maintenance of Registers-Storage of Chemicals-Organization of Practical Work- Accidents and First Aids-Improvisation of Apparatus. Qualities of a good Science textbook-use of textbooks inside and outside the classroom-Criteria for evaluation of Science textbooks.

UNIT VI Information and Communication Technology in Science Education

Classification of Audio Visual Aids (Projected and Non-projected)-their importance-Principles and use of Hardware: Film strip cum Slide Projector, Overhead Projector, Motion Picture Projector, Radio, TV, CCTV, Tape Recorder, principles and use of Software: Objects, specimens, slides, transparencies, CD, Audio and Video Tapes-Educational Broadcasts: Radio and T.V. lessons-Programmed Learning-Power Point-use of Internet in teaching Science -E-learning.

UNIT VII Curriculum Reforms in School Science

Curriculum-Principles of curriculum construction-Organization of content matter-Critical evaluation of Tamil Nadu higher secondary school Science Curriculum-Curriculum Improvement Projects in India-NCERT and Abroad-CHEM Study, PSSC, Biological Science Curriculum Study(BSCS), Nuffield-recent trends in Science curriculum.

UNIT VIII Assessment in Science Learning

Tests and its types-Achievement tests-Qualities of a good test- Evaluating outcome of Science teaching-Principles of test construction-Blue Print and Question Paper-Item Analysis-Standardizing a test-Diagnostic testing and Remedial teaching.

UNIT IX Science Teacher and Teacher Perspectives

Science Teacher - Academic and Professional qualification-Special qualities-In-service training-Classroom Climate: Autocratic, Democratic and Laissez faire pattern, Flander's Classroom Interaction Analysis. Problems of Science teaching – Individualized instruction- catering to individual differences – Identification of the gifted and enrichment programs for the Gifted.

UNIT X Recent Trends in Science Education

Nano science – Bio-technology – Bio-sensor – Micro biology – Micro-electronics – Environmental Engineering - Equitable Education in Tamil Nadu -Activity Based Learning (ABL) – Advanced Learning Methodology (ALM) – Continuous Comprehensive Evaluation (CCE)-Trimester System in Tamil Nadu School Education .

REFERENCE BOOKS

1. Carin & Robert Sund, (1989). Teaching Modern Science (Fifth Edition), Merrill Publishing Co., U.S.A.
2. Edgar Dale, Audio-Visual Methods in Teaching, Revised Edition, Thy Dryden Press, Newyork.
3. Jenkins, E.W. (Ed.) (1997). Innovations in Science and Technology Education, Vol. VI, UNESCO, Paris.
4. Heiss, Obourn & Hoffman (1985). Modern Science in Secondary Schools, Sterling.
5. Nair, C.P.S. (1971). Teaching of Science in our Schools, Sulthan Chand & Co. (Pvt.) Limited.
6. Pandey, (2003). Major Issues in Science Teaching, Sumit Publications, New Delhi.
7. Patton, M.Q. (1980). Qualitative Evaluation Methods, Sage Publications, India.
8. Sharma, P.C. (2006). Modern Science Teaching, Dhanpat Rai Publications, New Delhi.
9. Sharma, R.C. (1985). Modern Science Teaching, Dhanpat Rai and Sons.
10. Siddifit Siddiqi, (1985). Teaching of Science Today and Tomorrow, Doals House.
11. Yadav, M.S. (2003). Teaching of Science, Amol Publications.

1.5.5 TEACHING OF SOCIAL STUDIES

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ understand all topics that he has to teach in Social Studies
- ❖ know the meaning, aims, objectives and values of Social Studies
- ❖ understand the curricular activities pertinent to the teaching of Social Studies
- ❖ apply the modern techniques of teaching for effective teaching
- ❖ evaluate their students' performance effectively

UNIT I Nature and Structure of Social Studies

Social Studies – meaning, definition, nature, purpose and characteristics of Social Studies - Different concepts of Social Studies – History – Geography – civics - Scope of Social Studies - Social Studies in daily life - Correlation with other subjects and life.

UNIT II Aims and Values of Teaching Social Studies

Aims, Goals, Objectives of Social Studies at different level

Values – practical, cultural, ethical and disciplinary values of Social Studies.

UNIT III Unit Planning and Lesson Planning

Instructional objectives in behaviour form – Bloom's Taxonomy of Objectives – Cognitive Domain – Affective Domain – Psychomotor Domain – Advantages of planning a lesson – Steps involved in lesson planning – Specimen lesson plan – Learning Experiences - Evaluation of objectives and learning experiences – Unit planning – Advantages of unit planning – Specimen unit plans – Resource units.

UNIT IV Instructional Methods

Lecture Method – Discussion Method – Problem Method – Morison's method of teaching for understanding – Source Method – Oral – Recitation, Review, Drill, Story Telling – Inductive and Deductive – Laboratory Method – Role – play and Dramatization – socialized method, small group, panel discussion, buzz session, seminar, symposia and work shop – Team Teaching, supervised study in teaching Social Studies, stories and legends, biography – Dalton plan.

UNIT V Audio-Visual Aids in the Teaching of Social Studies

Importance of Audio visual Aids – Classification of Audio Visual Aids – Chalk Board – Bulletin Board – Charts – pictures – Graphs – Maps and Globes – Stereo scopes – Motion pictures (silent) of objects, Specimens and

Models, auditory Aids, Radio – Audio visual Aids – Television – Sound motion pictures – Dramatization – Field Trips and School journeys – OHP – Epidiascope – Improvised Aids – Computer, LCD.

UNIT VI Social Studies Curriculum

Present Social Studies curriculum – modern concept of Social Studies curriculum – principles involved in curriculum construction – Basis for the selection of the content – Chronological Method – Spiral Method – Concentric Method – Topical Method – Individual, Social and National Heads – Theories influencing selection of materials – Doctrine of Natural Tastes – Cultural epoch Theory – Proceeding from the Near to the Remote.

UNIT VII Human Relationship and Social Studies Teaching

National integration and Social Studies Teaching – Meaning or National integration – Factors and Forces standing in the way of national integration – Role of Social Studies in fostering national integration. Need for International Understanding – Causes of International Dissensions and Conflicts – Nationalism Vs Internationalism – Role of Social Studies in International understanding – Role of UNESCO – Struggle for Tolerance and Peace.

UNIT VIII Learning Strategies

Assignment – Oral – Written – Map Drawing – Preparation of Charts – Models, Albums and Specimens. Visits to related fields – Temples, Museums, Art Galleries, Exhibitions, collection of specimens – Stamps, coins, etc. Reading of books, historical novels, magazines, newspapers and learning from other media. Self – learning materials and using instructional materials. Motion picture, video tapes, radio, software and hardware.

UNIT IX Evaluation in Social Studies

Meaning of Evaluation – Importance of Evaluation or Examination – Purpose of Evaluation – Special Objectives of Evaluation in Social Studies – Criteria of Good Examination – Evaluating the Results of Social Studies Instruction.

UNIT X Utilizing Current Affairs

Importance of Current Affairs – Purpose of teaching current affairs – Criteria of selecting Current Events – Programme of current affairs – Restriction – Use of Various Learning Activities in Current Affairs programme – Specimen Current Affairs for High classes.

REFERENCE BOOKS

1. Aggarwal, J.C. (1982). *Teaching of Social Studies*. New Delhi : Vikas Publishing House Pvt.Ltd.
2. Bining and Bining (1972). *Teaching of Social Studies in Secondary Schools*. New York : McGraw Hill Book Co.
3. Heller, F. (1986). *The use and abuse of Social Sciences*. London : Sage Publications.
4. James Fleming: *The Teaching of Social Studies in Secondary School*. Longman Green and Co., London.
5. Joyce, B. & Weil, M. (1979). *Models of Teaching*. Prentice Hall Inc., New Jersey.
6. Kochhar, S.K. (1988). *The Teaching of Social Studies*. New Delhi : Sterling Publishers Pvt.Ltd.
7. Kochhar, S.K. (1986). *Methods and Techniques of Teaching*. New Delhi: Sterling Publishers Pvt. Ltd.
8. Marsh, D.A. (Ed.) (1965). *The Social Sciences*. London: Roultedge and Kegan Paul.

1.5.6 TEACHING OF COMMERCE

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ acquire knowledge of meaning, definition, nature and scope of Commerce and Accountancy
- ❖ understand the aims and objectives of teaching Commerce and Accountancy
- ❖ develop skills in the preparation of lesson plan
- ❖ understand the principles of curriculum construction and organization of the subject matter
- ❖ find out the resources available for learning Commerce and Accountancy
- ❖ apply the knowledge in analyzing, selecting and adopting the suitable methods and aids for the purpose of teaching Commerce and Accountancy
- ❖ understand the classroom management techniques
- ❖ develop competency in evaluation techniques applicable to Commerce

UNIT I Commerce and Accountancy

Commerce and Accountancy – Meaning – Definition – Nature – Scope – Branches of Commerce: Trade, Transport, Banking, Insurance, Warehousing, Advertising, Communication – e-commerce – Correlation of Commerce and Accountancy with other subjects – Need for Commerce and Accountancy education – Commerce Education in developing and developed countries – Significance of Commerce in Indian schools.

UNIT II Aims and Objectives of Commerce Education

Definition of Aims and Objectives – Difference between aims and objectives – Criteria for the selection of aims and objectives – Aims and Objectives of Commerce education – Values of teaching Commerce and Accountancy – Bloom's Taxonomy of educational objectives: Cognitive, Affective and Psychomotor domains – Writing objectives in Behavioural terms.

UNIT III Curriculum Designing

Meaning of curriculum – Relationship between syllabus and curriculum – Characteristics of curriculum – Types of curriculum – Principles for the determination of Commerce curriculum – Organization of subject matter – unit – topical – concentric – logical and psychological – Secondary Education Commission on Curriculum – Defects of the present Commerce Curriculum– Suggestions for removing the defects of curriculum.

Critical study of the curriculum in Commerce and Accountancy at higher secondary school level in Tamilnadu.

UNIT IV Lesson Planning and Unit Planning

Definition of Lesson Plan – Types of Lesson Plan – Steps of Lesson Planning – Advantages of Lesson Planning – Limitations of Lesson Planning – Precautions while preparing Lesson Planning – Model Lesson Plan – Various approaches to Lesson Planning – Evaluation criteria of Lesson Plan – Unit Plan – Steps in Unit Plan – Advantages – Model Unit Plan.

UNIT V Resources of Learning

Textbook – Meaning of text book – Definition of text book – Qualities of a text book – Need and importance of text books – Use of text books – Criteria for the evaluation of text books – Suggestions for improvement in text books – Reference books – Business journals – News papers – Research journals and reports – e-resources – Community resources in the teaching and learning of Commerce and Accountancy.

UNIT VI Methods of Teaching Commerce and Accountancy

Lecture method – Demonstration method – Discussion method – Problem solving method – Project method – Inductive method – Deductive method – case study – Socialized recitation methods – Team Teaching – Seminar – Symposium – Workshop – Debate – Panel discussion – Group discussion – Tutorial method – Assignment method – Students motivated technique – Supervised study – Programmed learning – Computer Aided Instruction (CAI) – Brainstorming – Heuristic method-simulation and role playing.

UNIT VII Aids for Teaching Commerce

Teaching aids – Meaning – Definition – Importance – classifications – Characteristics of Audio-Visual aids – Difficulties in the use of Audio-Visual aids – Precautions to be taken while selecting A-V aids – Important teaching equipments and materials for commerce teaching : Text-book – Pictures – Charts – Map – Graph – Periodicals and Journals – Black board – Bulletin board – Flannel board – Slide and film strip – Model – Specimen copy – Over-head Projector – Radio – Television – Computer.

UNIT VIII Commerce Teacher

Commerce teacher – Qualities of a Commerce teacher : Individual qualities, Professional qualities and Social qualities – Professional growth of commerce – pre- service and in-service programme – Responsibilities of a commerce teacher – Problems faced by commerce teachers – Teacher's diary – Records and registers to be maintained by commerce teacher – Micro-Teaching : Meaning, Definition – Micro-Teaching cycle – Advantages – Skill of Stimulus Variation – Skill of Reinforcement – Skill of Questioning.

UNIT IX Classroom Management

Classroom management – Factors influencing classroom management – Class room interaction analysis – Class room climate – Types of teachers based on leadership styles: Teacher dominated pattern – Laissez faire pattern – Democratically planned pattern – Significance of the classroom climate – Flanders Interaction Analysis Category system.

UNIT X Evaluation Approach in Commerce

Evaluation: Meaning – Aim – Difference among: Test, Measurement and Evaluation – Difference between examination and Evaluation – Difference between Evaluation and Measurement – Types of evaluation : Formative, Summative, Norm –referenced and Criterion referenced – Tests : Achievement and Diagnostic – Forms of test items – Characteristics of a good test – Blue print – Test Construction – Item analysis.

REFERENCE BOOKS

1. Chauhan, S. S. (2008). *Innovations in Teaching Learning Process*. UP: Vikas Publishing House Pvt Ltd.
2. Dhand, H. (2009). *Techniques of Teaching*. New Delhi: APH Publishing Corporation.
3. Kochhar S. K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Private Limited.
4. Kumar, K. L. (1996). *Educational technology*. New Delhi: New Age International Publishers.
5. Muthumanickam, R. (2004). *Educational objectives for effective planning and teaching*. Chidambaram: Cyber land Publisher.
6. Passi, B. K. (1976). *Becoming a better teacher : Micro teaching approach*. Ahemedabad: Sahitya Mudranalaya.
7. Rao, Seema. (2007). *Teaching of Commerce*. NewDelhi: Anmol Publication.
8. Sanjeev Tomar. (2008). *Teaching of Commerce*. Agra: Vinod Pustak Mandir.
9. Sharma, R. N. (2008). *Principles and Techniques of Education*. Delhi: Surjeet Publications.
10. Sharma, R. A. (2008). *Technological foundation of education*. Meerut: R.Lall Books Depot.
11. Siddiqui, M.H. (2009). *Techniques of Classroom Teaching*. New Delhi: APH Publishing Corporation.
12. Singh, Y. K. (2009). *Teaching of Commerce*. New Delhi: APH Publishing Corporation.

1.5.7 TEACHING OF ECONOMICS

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ acquire knowledge of the nature and scope of Economics
- ❖ understand the aims, objectives and value of discipline of Economics
- ❖ acquire skills to write lesson plan for lessons in Economics
- ❖ understand the principles of curriculum construction and organization of subject matter in Economics
- ❖ know the sources available for teaching Economics
- ❖ develop effective instructional skills for effective delivery of the subject matter
- ❖ develop the ability in preparing and use of A.V. aids
- ❖ understand the evaluation techniques and interpretation of scores
- ❖ realize the qualities of Economics teacher and importance of in-service programme
- ❖ understand the recent research trends in Economics education

UNIT I Economics Education

Economic education – Meaning – Scope of Economics education – Significance of learning and teaching Economics – Nature of Economics – Correlation of Economics with other subjects : Commerce, Civics, Mathematics, Statistics – New Economic Policy aspects globalization, liberalization and privatization.

UNIT II Aims and Objectives of Economics Education

Definition of Aims and Objectives – Difference between aims and objectives – Criteria for the selection of aims and objectives – Aims and Objectives of Economics education – Values of teaching Economics – Objectives of teaching economics based on Bloom's taxonomy : Cognitive, Affective and Psychomotor domains – Writing objectives in Behavioural terms.

UNIT III Lesson Planning and Unit Planning

Lesson Plan: Definition – Advantages of Lesson Planning – Writing instructional objectives – Developing lesson plans – Steps involved in Lesson Planning – Principles of lesson planning – Model lesson plan – Unit plan – Steps involved in Unit Plan – Advantages of Unit Plan – Model Unit Plan.

UNIT IV Curriculum Design

Meaning of curriculum – Difference between syllabus and curriculum – Characteristics of curriculum – Curriculum construction in Economics – Principles of curriculum construction – Criteria of selection of content matter – Organization of subject matter – unit – topical – concentric – logical and psychological.

Critical Study of the Curriculum in Economics at higher secondary school level in Tamilnadu.

UNIT V Resources for Teaching Economics

Textbook – Meaning of text book – Definition of text book – Qualities of a text book – Reference books – News papers – Information and Communication Technology (ICT) resources in teaching economics – Community resources – Excursions- Field trips – Library.

UNIT VI Methods of Teaching Economics

Lecture method – Demonstration method – Discussion method – Problem solving method – Project method – Inductive method – Deductive method – Micro teaching technique – Use of modern techniques in teaching Economics – Seminar – Symposium – Workshop – Team Teaching – Brain storming – Supervised study and Tutorial system – Programmed learning – techniques : Linear and branching – Computer Aided Instruction (CAI).

UNIT VII Instructional Aids for Economics

Instructional aids – Meaning – Definition – Importance of instructional media in relation to teaching economics – Criteria for the selection of instructional media – e-learning – Epidiascope – Overhead projector- blackboard – Bulletin board – Flannel board – charts – Maps – Graphs – Diagrams – Pictures – Power point presentation – Slide and film strip – Model – Specimen copy – Radio – Television – Computer.

UNIT VIII Evaluation Approach in Economics

Evaluation – Nature and scope – Difference between Measurement and Evaluation – Characteristics of a good test in Economics: Reliability, Validity and Objectivity – Item analysis – Different types of objective tests – Types of evaluation: Formative, Summative, Norm –referenced and Criterion referenced – Achievement Test – Blue Print – Test Construction.

UNIT IX Economics Teacher

Economics teacher – academic, professional qualification and professional growth – Qualities of a good Economic teacher – in-service education – Problems of Economics teaching in urban and rural areas – Micro-Teaching: Meaning, Definition – Micro-Teaching cycle – Advantages – Skill of Stimulus Variation – Skill of Reinforcement – Skill of Questioning.

UNIT X Research in Economics Education

Research – Meaning – Definition – Research in Economics Education – Characteristics features of research in Economics Education – Problem selection – Survey method – Experimental method – Importance of review of related literature in Economics – Recent trends in Research in Economics Education – Utilization ICT resources in research.

REFERENCE BOOKS

1. Aggarwal, J. C. (2005). Essentials of education technology: Teaching learning innovations in education. New Delhi: Vikas Publishers.
2. Aggarwal, J. C. (2005). Teaching of economics. Agra: Vinod Pustak Mandir.
3. Chauhan, S. S. (2008). Innovations in Teaching Learning Process. UP: Vikas Publishing House Pvt Ltd.
4. Dhand, H. (2009). Techniques of Teaching. New Delhi: APH Publishing Corporation.
5. Joyce., & Well., (2004). Models of teaching. U.K: Prentice hall of India.
6. Karthick, G. S. (2004). Teaching of economics. New Delhi: Discovery publication house.
7. Kumar, J. J. (2001). Encyclopedia of teaching of economics.(Vol.1-3). New Delhi: Anmol Publishers.
8. Kumar, K. L. (1997). Educational technologies. New Delhi: New Age Publishers.
9. Mangal, S. k., & Mangal, S. (2005). Essentials of educational technology and management. Meerut: Loyal Book Depot.
10. Passi, B. K. (1976). Becoming a better teacher : Micro teaching approach. Ahemedabad: Sahitya Mudranalaya.
11. Patil, V. T. (2005). Virtual education: Dimension of educational resources. New Delhi: Authors press.
12. Singh,Y. K. (2009). Teaching Practice. New Delhi: APH Publishing Corporation.
13. Sharma, R. N. (2008). Principles and Techniques of Education. Delhi: Surjeet Publications.
14. Krishnamurthy, R. (1997). Library management. New Delhi : Common Wealth Publishers.
15. Sharma, K., & Tuteja, T. (1995). Teaching of economics. New Delhi: Common Wealth Publishers.

2.1 CURRICULUM AND INSTRUCTION

OBJECTIVES

At the end of the course, the student teachers will be able to

- ❖ Acquire knowledge about the basic principles of Curriculum development
- ❖ Understand the importance of Instructional objectives
- ❖ Develop skill in Instructional management
- ❖ Realise the need for innovation in Teaching-learning Process
- ❖ Understand the concept of evaluation
- ❖ Familiarise various Evaluation Techniques
- ❖ Acquire knowledge in Recent Trends
- ❖ Understand the way of Curriculum Transaction

UNIT I Curriculum

Meaning of Curriculum –Curriculum and Education – Curriculum and syllabus – need and importance of Curriculum – co-curricular and extra curricular activities – types of Curriculum- linear type, spiral type, concentric type, pyramidal – Patterns of Curriculum – Subject –centred Activity – centred, Experience – centred.

UNIT II Curriculum Development

Determinants of Curriculum – Philosophical, sociological, Psychological , Religious, Cultural, Economical, Political - Principles of Curriculum Development Relevance, variety, Utility, Flexibility – NCERT’s recommendations with reference to School Education – Steps in Curriculum Development.

UNIT III Instructional Objectives

Instructional Objectives - Meaning of Instructional Objectives –learning Experience and Evaluation – Bloom’s Taxonomy of Instructional Objectives – Cognitive, Affective and Psychomotor domains – Revised version of Bloom’s Taxonomy – Anderson.

UNIT IV Innovations in Teaching-Learning Process

Individual Instruction – programmed Instruction – personalized system of Instruction – Computer Assisted Instruction - Team teaching – Co-operative Learning – Seminar – Symposium – panel Discussion – Workshop.

UNIT V Instructional Management

Need for Instructional planning – Preparation of Annual plan- Time table – Classroom Management – Role of headmaster – Qualities of Teacher – Job satisfaction of teachers – Teacher Welfare measures.

UNIT VI Evaluation

Concept and Purpose of Evaluation – basic Principles – tools and techniques of Evaluation – Tests as Tools –Classification of tests – Characteristics of a Good Tool – Validity, Reliability, Objectivity and Usability. Preparation, Administration and Interpretation of Results of Achievement and Diagnostic test.

UNIT VII Evaluation Techniques

Evaluation – its importance – semester vs Non-Semester Patterns – External Examination: merits and limitations –Continuous Internal assessment: merits and demerits –Criterion referenced and norm referenced Tests-formative and summative Education.

UNIT VIII Student Support Services

Meaning of Co-curricular and extra curricular activities – Organisation of co-curricular and extra curricular activities - Discipline and freedom – School health programme - Physical Education programme – Guidance and counseling – Principles of guidance and counseling.

UNIT IX Curriculum Transaction

Teaching – Definition – Meaning – Principles of Teaching – Functions of Teaching – Role of a Teacher – Models of Teaching – Characteristics features of Models of teaching – Components of Models of Teaching – Glaser’s Basic model of teaching – Herbert’s model of teaching – Carroll’s models of teaching – Classification of model of teaching based on Joyce and Weil.

UNIT X Recent Trends

National Policy on Education – Special focus on Teacher education – DTERT, DIETs, BRC – Activity Based Learning (ABL) – Active Learning Methodology (ALM), Advanced Active Learning Methodology (AALM) : Overview, Benefits – Trimester system in School Education – Continuous Comprehensive Evaluation in School education (CCE) – Justice Verma Commission on Teacher Education (2012) – SSA, RMSA, Rashtriya Uchatar Shiksha Abhiyan (RUSA).

REFERENCE BOOKS

1. Benett, bill J. and Martin, Kenneth (1980). The practice of teaching: A positive start New York: Harper and Row International.
2. Bigge, Morris L (1982). Learning Theories for teachers.
3. Diana Lapp, Hilay Bender, Stephan Ellewood and Martha John (1975). Teaching and Learning New York. Mac Millan ub.co.Inc.
4. Glan Gene V.et.al (1982). School class, size research and policy sage.
5. Goodson Iyer (Ed) (1985). curriculum Development and Educational Technology New York: Sterling publication

6. Harms Alan Lawn Martin and Roscott William (1975). Curriculum Innovation New York: John Willey and sons.
7. Haukins J.P Curriculum Development: programme Planning Improvement Chicago: Merrill, Columbus.
8. Heywood John (1984). Considering the curriculum during student teaching New York Nicholas Publishing Co.
9. Huebner Dwayna (1964). Assessment of the Curriculum New York Bureau of Publication Coloumbia University, teachers College.
10. JacobgenD.Etal (1985). Methods of etachingA skilsl approach Toronoto Charles and Meril Publication Company
11. Kalra, R.M and Rishi Ram Singh (1987). Curriculum Construction and youth development New Delhi: Sterling
12. NCERT (1978). Effective Science of School Curriculum: An Introduction New Delhi: NCERT.
13. NCERT (1986). National Curriculum for Primary and Secondary Education: a Framework New Delhi NCERT.
14. NCERT (1980). School Curriculum Some problems and Issues Report of the 1st meeting of the Advisory committee for School curriculum (April 22-23, 1980). New Delhi: NCERT.
15. NCERT(1984). Curriculum Load at the school level–A quick appraisal New Delhi:NCERT

2.2 EDUCATIONAL TECHNOLOGY

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ understand the meaning of the term 'Educational Technology'
- ❖ be familiar with application of Educational Technology
- ❖ appreciate the role of technology in education
- ❖ use the concept in designing classroom teaching
- ❖ acquire knowledge and skills necessary for using media in teaching-learning
- ❖ have a positive attitude towards Educational Technology

UNIT I Concept of Educational Technology

Meaning, Need and Scope of Educational Technology – Difference between “Technology of Education” and “Technology in Education” – Definition of Educational Technology – Major approaches of Educational Technology – Hardware Approach – Software Approach – Objectives of Educational Technology – Educational Technology as a System.

UNIT II Teaching Learning Process and Educational Technology

Concept of Teaching – learning Process – Condition of Teaching Learning Process – Relationship between Teaching and Learning – Variables of Teaching – Principles of Teaching – Role of Educational Technology in teaching – Learning Process.

UNIT III System Approach

Definition of a System – Components of an Instructional System – Flow Diagram for Designing a System – Steps in System Approach – Advantages of System Approach – Role of the Teacher in System Approach.

UNIT IV Mass Media in Education

Mass Media – Meaning and Significance – School Broadcast Programmes – Merits of School Broadcasting – Limitation and shortcomings – Suggestion for Effective School Broadcasting Programmes – ETV (Educational Television) – Merits and Limitations of ETV – CCTV – Role of Teacher in School TV Programme.

UNIT V Information Technology in Education

Information Technology – Definition – Importance – Information Technology Revolution – History of Information Technology – Cybernetics – meaning – Cybernetics and Education – E- Learning – Internet – Role of Internet in teaching and learning.

UNIT VI Media Selection and Integration

Introduction – Media and Instructional process – Need of Media Selection – Factors affecting media Selection – How to select media – media Integration – Multiple media and multimedia.

UNIT VII Application to Computer Programmes

Introduction – Approaches to the use of computers in education – Computer based Training (CBT) – Computer Managed Learning (CMC) – Computer Assistance Learning (CAL) – Computer Assistance Instruction (CAI) – Modes of CAL – Advantages of CAL – Limitations of CAL – Problems related to the use of CAL approach – Steps.

UNIT VIII Experiential Learning

Introduction – Nature of Experience – Learning from experience – Experiential learning – Objectives – experiences leading to learning – Teaching strategies for experiential learning – Teacher determined methods.

UNIT IX Developing Learning Skills

Introduction – Stages in the process of learning – learning styles – learning strategies – meta memory – met cognition – meta comprehension study skills – Note Taking – underlining – marginal comments and coding systems – problem solving strategies.

UNIT X Evaluation and Managing Educational Technology

Introduction – purpose – types – different approaches – model of evaluation of educational technology – Quality – steps – different context of evaluation and educational technology management – concept – functions – system approach – steps.

REFERENCE BOOKS

1. Agrawal, J.C.: Educational Technology and Management. Agra: Vinod Pustak Mandir. 2003.
2. Agrawal, Rashmi: Educational Technology and Conceptual Understanding. New Delhi: Prabhat Prakashan, 2001.
3. Brown, J.W., R.B. and Hercherod: A.V. Instruction Technology Media and Method. New York: McGraw Hill Book Company, 1977.
4. Chand, Tara: Educational Technology. New Delhi: Anmol Publication, 2002.
5. Davis, I.K.: The Management of Learning. London: McGraw Hill Book Company, 1971.
6. Dececo, John, P.: Educational Technology: Readings in Programmed Instruction.

8. London: Holt Rinehart and Winston, 1964.
9. Jerone, P. L. and Clarence, M. W.: A Guide to Programmed Instruction. J. Wiley and Sons, New York, 1975.
10. Kumar, K.L.: Educational Technology and Conceptual Understanding. New Delhi: New Age Publication, 2001.
11. Mangal, S.K.: Fundamentals of Educational Technology. Ludhiana: Prakash Brothers, 1988.
12. Mukhopadhyay, M.: Educational Technology – Challenging Issue. New Delhi: Sterling Publishers Private Limited, 1980.

2.3 CRITICAL UNDERSTANDING OF ICT OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ understand the meaning of the term ‘ ICT ‘
- ❖ acquire knowledge and skills necessary for adapting ICT in teaching-learning
- ❖ be familiar with application of ICT in teaching and learning
- ❖ appreciate the role of Information and Communication Technology in Education
- ❖ utilising the techniques in designing classroom teaching
- ❖ develop positive attitude towards the application of Information and Communication Technology

UNIT –I ICT and School Education

ICT-Meaning - Definition-Need for ICT in Education- Evolution of Information Technology-Information and Communication Technology in School Education –Impact of ICT on educational System –Impact of ICT on Curriculum – Impact of ICT on Teaching and Learning - ICT as a tool for individualized learning

Unit-II Communication and Network

Communication –Meaning –elements of Communication-Barriers of Communication –Effective communication –Types of Communication-Media of Communication-Computer network concept –Definition- Types –LAN, WAN – History of Internet –Use of Search engine -social Network –Concept , definition – Educational use of social network like face book, blog, whatsapp.

UNIT-III Computer and Learning

Computer as a tutor-Computer as a Tutee-Computer as a teaching Resource –Different forms of Learning through Computers: computer Assisted Instruction (CAI); Modes of CAI: Drill and Practice, Tutorial Instructional games –Computer simulations advantages and limitations of CAI –Computer Managed Instruction (CMI) Computer as a tool for teacher and students.

UNIT-IV E- LEARNING

E-Learning –Definition –Importance of E-Learning-E-Learning Modalities; Preconditions of E-Learning-Strategic foundation for E-Learning –Integrating E-learning and Classroom Learning –Creating your E-learning strategy; Analyzing your current situation, describe your direct situation, set you vision and mission, Gap Analysis, and Building an action plan- limitation of E- learning.

UNIT –V MULTIMEDIA AND LEARNING

Multimedia –Meaning-Definition-Applications of Multimedia –Multimedia classroom environment for learners at school level –Features of Multimedia; Sound effects –Images effect –Animation effect –Video effect –Hypermedia –

Development of Multimedia Courseware for learners at school level ; steps involved in the development –Advantages and limitation of multimedia based courseware

UNIT –VI INTERACTIVE MULTIMEDIA AND LEARNING

Interactive multimedia – Meaning-Definition –factors influencing learning with interactive multimedia – Principles of Instructional design for multimedia and interactive Multimedia; Split Attention principle , Modality Principle- The Redundancy Principle , the Spatial contiguity Principle, Temporal contiguity principle –Coherence principle –Advantages and limitations of Interactive Multimedia

UNIT-VII COMPUTER SIMULATION AND LEARNING

Computer simulation –Definition –Characteristics features of computer simulation – Importance – Interactive computer simulation –Objectives of Interactive Computer simulation - Virtual Science lab at school level – objectives of the Virtual science lab – Advantages and limitations of the virtual science lab.

UNIT –VIII WEB BASED LEARNING

Web based Learning-Concept –Definition –Online learning for school Learners –Principles of Web based learning -Categories of Web based learning; Asynchronous Format, Synchronous Format, Small Group collaboration –Virtual Campus –Merits and limitations of Web based learning.

UNIT –IX ELECTRONIC PORTFOLIOS FOR TEACHERS AND LEARNERS

Electronic Portfolio –Meaning –Definition –Characteristic features basic equipments of creating E-portfolio –E –Portfolio for teachers and learners – Features of E-Portfolio –Developing an E-portfolio –Advantages of limitations of E-Portfolio.

UNIT-X CURRENT TRENDS IN ICT BASED LEARNING

Virtual classrooms –Meaning- Importance of Virtual classrooms –Role of the teacher –Smart classroom ;Concept, Advantages and limitations of Smart classroom – Role of the teacher – Blogs- concept, Advantages and limitations – Online learning resources ; E-Books, E library- MOOC (massive open online courses).

REFERENCE BOOKS

1. Arulsamy.s and Sivakumar.P 2000 ‘Applications of ICT in Education’, Neelkamal publication, Hyderabad.
2. Brown, J.W., R.B. and Hercheroad: A.V. Instruction Technology Media and Method. New York: McGraw Hill Book Company, 1977.Chand, Tara: Educational Technology. New Delhi: Anmol Publication, 2002.

3. Davis, I.K.: The Management of Learning. London: McGraw Hill Book Company, 1971.
4. Dececo, John, P.: Educational Technology: Readings in Programmed Instruction. London: Holt Rinehart and Winston, 1964.
5. Jerone, P. L. and Clarence, M. W.: A Guide to Programmed Instruction. J. Wiley and Sons, New York, 1975.
6. Kumar, K.L.: Educational Technology and Conceptual Understanding. New Delhi: New Age Publication, 2001.
7. Mangal, S.K.: Fundamentals of Educational Technology. Ludhiana: Prakash Brothers, 1988.
8. Mukhopadhyay, M.: Educational Technology – Challenging Issue. New Delhi: Sterling Publishers Private Limited, 1980.
9. National Policy on ICT in Education; Ministry of HRD, Government of India.
10. Wadi Haddad and Sonia Jurich, “ICT for Education: Potential and Potency, in Technologies for Education: Potentials, Parameters, and Prospects, eds. Wadi Haddad and A. Drexler (Washington, D.C.: Academy for Educational Development), 28-40.

2.4.1 GUIDANCE AND COUNSELLING

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ understand the meaning, characteristics, need and principles of guidance and counselling
- ❖ describe various types of guidance
- ❖ understand the history of guidance in India
- ❖ describe various approaches to counselling
- ❖ know the qualities required for a good counsellor
- ❖ develop skills in administering and interpreting testing and non-testing devices in guidance
- ❖ develop the counselling skills
- ❖ improve the method of study and remove the weakness in particular subject
- ❖ explain the purpose of guidance at primary, middle, secondary and higher secondary school level
- ❖ discuss the special needs of exceptional children

UNIT I Concept of Guidance

Guidance: Meaning, Definition, Characteristics of guidance, Need of guidance, Objectives of guidance – Principles of guidance – Types of Guidance: Educational, Vocational, Personal, Social, Avocational and Health – Guidance and Teaching – Merits and Limitations of guidance.

UNIT II Concept of Counselling

Counselling : Meaning, Definition, Characteristics of counselling, Need of Counselling – Principles of counselling – Techniques of counseling – Organisation of counseling in schools – Difference between guidance and counselling – Difference between counseling and teaching.

UNIT III Guidance Movement in India

Origin of guidance – Guidance in India: British period – After independence – Secondary Education Commission – Kothari Commission – Development of vocational guidance – Factors for the development of guidance – Present position of guidance service.

UNIT IV Major Approaches to Counselling

Group counselling : Purpose of group counselling – Goals of group counselling – Advantages of group counseling – Directive Counselling – Non-directive counseling : Procedures – Characteristics – Advantages and limitations – Individual Counselling : Meaning, Characteristics – Advantages and limitations – Eclectic counselling – Meaning, Nature, Steps, Merits and Limitations.

UNIT V Qualities and Functions of a Counsellor

Counsellor: Meaning – Qualities of a good counsellor : Personality traits, Training and Development, Academic qualifications, Experience – Role of counselor – Functions of a counsellor – Professional ethics – Counsellor and Teacher – Counsellor and Counsellee relationship.

UNIT VI Testing and Non-Testing Devices in Guidance

Testing devices in guidance: Intelligence test – Aptitude test – Achievement test – Attitude scales – Interest inventory – Personality test – Creativity tests. Non-testing devices in guidance: Questionnaire – Observation – Sociometry – Autobiography – Rating Scales – Anecdotal Record – Case study – Cumulative Record – Role of Information and Communication Technology (ICT) in Testing and Non-Testing devices in Guidance.

UNIT VII Theories of Vocational Guidance

Theories of Vocational Guidance – Ginzberg Theory, Holland's Theory, Super's vocational choice theory – Havighurst theory of vocational choice – Structural theory – Essential aspects of an occupation – Various sources of vocational information.

UNIT VIII Educational Guidance

Meaning of Educational Guidance – Definition – Characteristics – Need – Objectives of Educational Guidance – Guidance for improvement in the method of study – Removal of weakness in particular subjects – Curricular guidance – Method of developing good study habits – Recommendation of Education Commission on Educational Guidance.

UNIT IX Guidance Services in Schools

Meaning of school guidance services – Significance – Types of guidance services offered in schools: Orientation service to students – Methods of providing orientation service – Student information service – Counselling

service – Placement services – Follow-up services – Persons working in school guidance: Headmaster – Class teacher – School counsellor – School Doctor – Planning of Guidance service – Activates at Primary school level, Middle school level, Secondary level and Higher secondary level.

UNIT X Guidance for Exceptional Children

Guidance for Exceptional Children: Meaning and Types. Guidance for gifted, Backward, Mentally retarded, Orthopaedically handicapped, Visually impaired, Deaf and dumb and Problematic children.

REFERENCE BOOKS

1. Aggarwal, J. C. (1991). *Educational, vocational guidance and counselling*. New Delhi: Doabai House.
2. Bernad, H. W. and Fullmer, D. F. (1977). *Principles of Guidance* (Second Edition). New York: Crowell.
3. Bhatnagar, R. P., and Seema, R. (2003). *Guidance and Counselling in education and psychology*. Meerut: R. Lal Book Depot.
4. Chauhan, S.S. (2008). *Principles and Techniques of Guidance*. UP: Vikas Publishing House Pvt. Ltd.
5. Cormier, Sherilyn, L. and Hacney, Harold. (1987). *The Professional Counsellor*. New Delhi: Prentice Hall of India Limited.
6. Crow, L.D., & Crow, A. (2008). *An Introduction to guidance*. Delhi: Surjeet Publications.
7. Jones, A. J (2008). *Principles of guidance*. (5 ed) Delhi: Surjeet Publications.
8. Kochhar, S. K. (1984). *Guidance and counseling in colleges and universities*. New Delhi: Sterling Publishing Private Limited.
9. Meenakshisundaram, A. (2012). *Guidance and counseling* Dindigul: Kavyamala Publishers.
10. Nagarajan, K. and Natarajan, S (2012). *Guidance and counselling* Chennai: Ram Publishers.
11. Sharma, R.A. (2012). *Fundamentals of guidance and counselling*. Meerut: R. Lal Book Depot.
12. Sharma, R.N. (2008). *Vocational Guidance & Counselling*. Delhi: Surjeet Publications.

2.4.2 ENVIRONMENTAL EDUCATION

OBJECTIVES

At the end of the course, the student-teachers will be able to

- ❖ understand the concept of Environmental Education
- ❖ analyse various Environmental issues
- ❖ establish relationship between man and environment
- ❖ develop positive attitude towards Environmental protection
- ❖ understand the Environmental hazards
- ❖ develop the skill of managing the environment
- ❖ understand the concept of evaluation in Environmental Education

UNIT I Environment

Environment-Definition –classification of Environment; i)Physical Environment ii)Biological Environment iii) Social Environment and iv)Psychological Environment – Heredity and Environment – Ecology: Meaning and Definition – Branches of Ecology – Ecosystem – Components of Eco system.

UNIT II Environmental Education

Environmental Education – Definition –characteristic features of Environmental Education – Objectives of Environmental Education – Need for Environmental Education – Environmental Awareness – Environmental Education for Teacher Education Programmes – Environmental Education in School Curriculum.

UNIT III Environmental Hazards

Meaning of Environmental Hazards – Categories of Environmental Hazards; i) Natural Hazards – Endogenous hazards and Exogenous hazards ii)Man Induced Hazards – Environmental degradation – Environmental pollution – Types of Pollution – Air Pollution - Sources of Air Pollution – Adverse effects of Air Pollution – Control and Prevention of Air Pollution – Water Pollution – Sources and Adverse effect of Water Pollution – prevention measures – Land and Noise Pollution – Effects of Land and Noise Pollution – Prevention and Control of Land Noise Pollution.

UNIT IV Environmental Issues

Global Warming – meaning – issues related Global Warming – Green House Effect – Green House gases – Acid Rain – Problems related to Acid Rain – Ozone layer depletion – Effect of depletion of Ozone layer – Bio-diversity – Meaning –Threats to bio-diversity.

UNIT V Environmental Issues in India

Major Environmental problems of India – Environmental conservation Act –Wild life (protection) Act – Environmental Movements in India – Chipko Movement – Silent Valley Movement , Narmada Project.

UNIT VI Environmental Education and Teacher Education

Need for Environmental Education in teacher Education Programme – NCERT and Environmental Education – teaching strategies for Environmental Education - Group discussion – Project Work –Field Trips – Co curricular activities in Environmental Education – Advantages and limitations of different strategies for teaching Environmental Education.

UNIT VII Man and Environment

Interaction between man and Environment – Human adaptation to Environment –Human Population and Environment – Population Education – Population and its effects on Environment-Impact of Science and Technology on Environment – Industrial growth and its environmental impacts.

UNIT VIII ICT and Environmental Education

ICT- Meaning –Role of ICT on Environmental Education – Instructional Media for Environmental Education – Educational Radio Programme in Environmental Education –Community radio –Educational T.V-Satellite Instructional Television Experiment (SITE)-Satellite based communication – Utilization of E-resources in Environmental Education –CDs-E books E-Journals –E- learning.

UNIT IX Environmental Management

Environmental Management – meaning for Environmental Management – Characteristics of Environmental Management – Approaches of Environmental Management; i) preservative approaches ii. Conservative approaches – social forest – Water Management – Rain water Harvest – surface water management.

UNIT X Evaluation of Environmental Education

Concept of Evaluation-Measurement and Evaluation in Environmental Education –Measurement in Physical Science and in Behavioural Science – Techniques of Evaluation: Estimation of Awareness in Environmental Education, Achievement test in Environmental Education – Attitude Scale and Value Scale: Construction, Advantages and Limitations

REFERENCE BOOKS

1. Begon, WD and Mortimer, M (1981): Population Ecology, Blackwell Oxford
2. Botkin, DB and Keller, E.A (1982): Environmental Studies, C.E Merrill Company.
3. Dassaman R.D (1976): Environmental Conservation, Wiley, new York.
4. Deshbandhu and G.Berberet (1987) Environmental Education for Conservation and Development Indian Env Society , New Delhi.
5. Det Wyler T.R (1971) Man's Impact Environmental , Mc Graw –Hill New York.

6. Kendeigh S.C (1974) : Ecology with Special Reference to Animal and Man, prentice –Hall New Jersey
7. Komondy E.J (1969) Concept of Ecology, prentice Hall New Serscy
8. Krishnamacharyulu and Reddy GS. (2005): Environmental Education, Neelkamal Publication, Hyderabad.
9. LohaniB.N (1984) Environmental Quality Control, South Asian Publishers, New Delhi.
10. Nagarajan K and Sivakumar .P , Environmental Education Ram Publishers, Chennai.
11. Odum, E.P (1979) Fundamentals of Ecology, Saunders, Philadelphia
12. Odum, EP (1983): Basic Ecology, Holt Saunders Intle ed., Japan.
13. Rao M.Sitaram (1987) Introduction to Social Forestry, oxford & IBH, pp.87.
14. Sexena A.B (1986) Environmental Education, national Psychological Corporation Agra pp.191.
15. Sharma PD (1990) Ecology and Environment, Rastogi Publishers, meerut (U.P)
16. Sharma R.A (2002) Environmental Education: surya Publication, near Govt. Inter College, Meerut – 250001.