VIKRAMUNIVERSITY, UJJAIN

SYLLABUS (w.e.f. session 2012)

SEMESTER WISE SCHEME

BACHELOR OF SCIENCE
SUBJECT: COMPUTER SCIENCE/ IT

B.Sc.–Semester –I
(With Subject: Computer Science/IT)
Effective from July 2012 and onwards

FIRST SEMESTER

Course	CCE MAX. MARKS	MIN. PASS MARKS	TERM END MAX. MARKS	MIN PASS MARKS	TOTAL
B.Sc.-CS/IT- 101 Fundamental of Computer Science & Information Technology	15	05	85	28	100
B.Sc. – CS/IT 101P Practical on M.S. Office	-	-	50	17	50

B.SC.-CS/IT- 101 FUNDAMENTAL OF COMPUTER SCIENCE   **[M.M. 85]**
AND INFORMATION TECHNOLOGY

UNIT I

Computer Fundamental : Characteristics of Computers, History of Computer,Evolution of Computers, Computer Generations, Types of Computer, Components of a Computer: Registers, Instruction Set, Bus Architecture, Computer Hardware: Input Devices, Output Devices, Storage Devices: Primary Storage capacity, Memory Types, Memory Measuring Units, Secondary Storage Device

UNIT II

Software and Computer Applications: Software &Software Types, Computer Languages, Compiler, Interpreter, Editor, Computer Ethics, Computer applications, **Introduction of Programming**: Procedure Oriented Programming, Object oriented programming, Concepts used in OOP, Benefits of OOP, Main advantages and disadvantage of OOP, Applications of OOP,OOP Vs. POP **.**

UNIT III

Operating System Overview: Computer System Startup, Computer System Structure, Computer SystemComponents, Operating System Classifications, Operating System Services, Major Functions of Operating System, Process Management, CPU Scheduling, Scheduling Criteria.**Memory and File Management**: Memory Management Requirements, Swapping, Memory Management Techniques , Virtual Memory, File Management, File Access Methods, Protection,

UNIT IV

Introduction to DBMS: File System, Traditional File Oriented Approach, DBMS- Advantages and Disadvantages, Role of DBMS, Three views of data, DBMS Architecture, Data Models, Data Independence, Major components of DBMS, Data Dictionary, Types of Users, DBMSApplications, Keys in Databases, Database Languages.

UNIT V

Introduction to Computer Networks: Computer Network Definition, Importance of Networking, Types of Networks, Network Topology, Advantages and Disadvantage of Computer Networks, Applications of computer networks, Reference Model, Internet, Introduction to Internet Technology, Electronic Mail, World Wide Web.

Books:

1. Operating Systems Concepts, A. Silberschatz, P.Galvin, G.Gagne, John Wiley & Sons
2. Object Oriented Programming in C++, Robert Lafore, Galgotia Publication.
3. Data base management systems vol. 1., Date C.J.
4. Fundamental of Computer Science & IT, Singh Umesh Kumar, Jain S., Maheshwari A., SSDN Publications New Delhi
5. Data Communications and Networks, Godbole A, Tata McGraw-Hill Publications.

B.Sc. CS/IT-101P - PRACTICAL ON MS-OFFICE

WINDOWS
1. Creating folder, cut, copy, paste, managing file and folder in windows.

2. Arrange icons, set display properties

3. Adding and removing software and hardware

4. Setting date and time, screen saver and appearance.

5. Using windows accessories.

6. Settings of all control panel items

7. Search file

MS-Word
1. Creating & Editing Document

2. Formatting Document

3. Use of Auto-text, Autocorrect, Spelling and Grammar Tool,

4. Page Formatting, Page Border, Background,

5. Creation of MS-Word-Mail Merge, Macros, Tables.

6. Practice of Printing, page setup etc.

MS-Excel
1. Creating & Editing Worksheet, Fill Handle

2. Use Formulas and Functions

3. Preparing Charts

MS-Powerpoint
1. Creating, Manipulating & Enhancing Slides,

2. Inserting Organizational Charts, Excel Charts

3. Using Word Art

4. Putting Animations and Sounds

5. Inserting Animated Pictures

6. Inserting Recorded Sound Effect