

1

Shivaji University, Kolhapur
M. A. ENGLISH (Entrance Examination)
Faculty Change

Total Marks-100

- | | |
|-------------------|---------------------------------------------------------------|
| Unit No. 1 | Reading Comprehension |
| 1 | Prose |
| 2 | Poetry |
| Unit No. 2 | |
| | A study of major literary forms |
| 1 | The Novel |
| 2 | The Drama |
| 3 | The Poetry |
| Unit No. 3 | |
| | Essay Writing |
| 1 | Informative |
| 2 | Imaginative |
| 3 | Reflective |
| 4 | Analytical |
| Unit No. 4 | |
| 1 | Grammar |
| 2 | The Study of articles, and tenses |
| 3 | Use of prepositions |
| 4 | The Study of tenses |
| 5 | Active voice Passive voice |
| 6 | Remove ' too' |
| 7 | The Study of interrogative, assertive,
negative, sentences |
| 8 | As soon as..... No sooner than |
| 9 | The Study of Degree |
| | The Study of subordinate conjunctions |

(Pattern of Question Paper)

Total Marks-100

Q.1	A	Comprehension of a prose passage with the help of questions testing the literacy aptitude of students	15 Marks
	B	Comprehension of a piece of poetry	15 Marks
Q.2		A study of major literary forms	30 Marks
	1	The Novel	
	2	The Drama	
	3	The Poetry	
		(2/3 essay type questions will be set)	
Q.3		An essay in about 500 words on any one of the followings topics	20 Marks
Q.4	A	Use of articles, prepositions and tenses (Fill in the blank type of items)	10 Marks
	B	Do as directed	10 Marks
	1	Change the voice	
	2	Remove ' too '	
	3	Make interrogative	
	4	As soon as..... No sooner than	
	5	Exclamation	
	6	Change the degree	
	7	Assertive	
	8	Negation	
	9	Affirmation	
	10	Use of subordinate / coordinate conjunctions	

Recommended Books

- 1 R.J.Rees, English Literature An Introduction for Foreign Readers- Mcmillan
- 2 K.R. Shrinivas Iyengar & Prema Nandkumar Introduction to the Study of English Literature
- 3 Thomson & Martinet, A Practical English Grammar, (E.L.B.S.)
- 4 B. Prasad, A Background to the study of English Literature
- 5 V.S. Seturaman, C.T. Indra & T. Shiraraman Ced. Practical Criticism

Note:- Minimum 40% marks are required for passing

शिवाजी विद्यापीठ कोल्हापूर

एम.ए. प्रवेश परीक्षा पाठ्यक्रम हिंदी

1. निबंध लेखन—हिंदी भाषा तथा साहित्य से संबंधित पाँच विषयों में से एक विषय पर
निबंध लेखन।
2. हिंदी साहित्य के इतिहास का सामान्य परिचय : निम्नलिखित साहित्यकारों के आधार पर !
- अ) प्राचीन कवि : 1) कबीर 2) सूरदास 3) तुलसीदास 4) सीराबाई 5) बिहारी 6) शूषण

ब) आधुनिक कवि

- 1) जयशंकर प्रसाद 2) सुमित्रानन्दन पंत 3) सूर्यकांत त्रिपाठी 'निराला'
- 4) महादेवी वर्मा 5) हरिवंशराय बच्चन 6) रामधारीसिंह 'दिनकर'

उपनिषद् (पाठ्यक्रम)

पाठ्यक्रम :- 1) प्रेमचंद 2) यशपाल 3) कमलेश्वर 4) राजेन्द्र यादव

कहानीकार :- 1) प्रेमचंद 2) मनू भंडारी 3) हरिशंकर परसाई 4) ओमप्रकाश वाल्मीकि

3. पाठ्यपुस्तक : उपन्यास, कहानी, नाटक अथवा कविता इन विद्याओं में से किसी एक विद्या की पाठ्यपुस्तक नियुक्त की जाए और उस पर दो प्रश्न पूछे जाएँ, इनमें एक प्रश्न निबंधात्मक (अंतर्गत विकल्प के साथ) पूछा जाए और दूसरा प्रश्न टिप्पणियों को पूछा जाए !

पाठ्यपुस्तक : विद्या उपन्यास : अनन्दीता व्यतीत, कमलेश्वर

Book's Recommended

1. हिंदी साहित्य का इतिहास - हजारीप्रसाद दिविदी
2. हिंदी साहित्य : युग और प्रवृत्तियाँ - शिवकुमार शर्मा
3. 125 हिंदी निबंध -लेखक - तनसुखराम गुप्त प्रकाशक- सूर्य प्रकाशन, नई सड़क,
दिल्ली !
4. हिंदी साहित्य का इतिहास -लेखक - लक्ष्मीसागर वार्ण्य

प्रश्न 1	पाँच विषयों में से किसी एक विषय पर निबंध!	20
प्रश्न 2	'अ' विभाग पर अंतर्गत विकल्प के साथ निबंधात्मक प्रश्न	20
प्रश्न 3	'ब' विभाग पर अंतर्गत विकल्प के साथ निबंधात्मक प्रश्न.	20
प्रश्न 4	नियुक्त पाठ्यपुस्तक पर निबंधात्मक प्रश्न (अंतर्गत विकल्प के साथ)	20
प्रश्न 5	टिप्पणियाँ लिखिए (3 में से 2 पर) (नियुक्त पाठ्यपुस्तक पर आधारित)	20

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२. मराठी

१. निबंधलेखन

विविध पाच विषयावर निबंध विचारले जातील त्यापैकी एक विषय वाडमयीन स्वरूपाचा असेल, विचारलेल्या विषयापैकी एक विषयावर निबंध लेखन करण्यात आहे.

३. मराठी वाडमयाच्या इतिहासाती रस्तूल रूपरेश मुदील साहित्यिकात्मा आधारे

अ) प्राचीन **गुण ३०**

१) ज्ञानेश्वर, २) नामदेव, ३) एकनाथ, ४) तुकाराम, ५) रामदास।

ब) अवधीन **गुण २०**

१) कादंबरी : १) बाबा पद्मनाभी, २) भा. वि. वरेश्वर, ३) कुरुमावती॒.
देशपांडे

२) नाटक : १) किल्लेस्कर, २) मो. ग. रांगणेकर, ३) विजय तेंडुलकर

३) कथा : १) गगाधर गाडगीळ, २) शंकर पाटील, ३) द. मा. मिरासदार

४) काल्य : १) बालकर्णी, २) भा. रा. तोंडे, ३) नारायण सुर्वे

(वरील अंव ब या विभागावर प्रत्येकी २० गुणाचे दोन प्रश्न अंतर्गत विकल्पासह विचारले जातील)

४. कृष्णा, कादंबरी, नाटक अथवा काल्य या वाडमयप्रकारापैकी एका वाडमयप्रकारातील संग्रह । संपादन अशा स्वरूपाचे पाठ्यपुस्तक नेमण्यात यावे व त्यावर प्रत्येकी १५ गुणाचे दोन प्रश्न अंतर्गत विकल्पासह विचारले जातील.

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(गुण १५ अधिक १५)

नेमलेले पाठ्यपुस्तक : रसयात्रा - कुरुमाग्रज, संपा. बोरकर, वैद्य

संदर्भग्रंथ

१) पाच संत कवी - श. गो. तुळज्युळे

२) प्राचीन मराठी वाडमयाचे स्वरूप - ह. श्री. शेगोलीकर

३) प्राचीन मराठी वाडमयाचा इतिहास - ल. रा. नरिसराबादकर

४) मराठी वाडमयाचा विवेचक इतिहास खंड १ व २ - प्र. न. जोशी

५) आधुनिक मराठी वाडमयाचा इतिहास - भाग १ व २ - अ. ना. देशपांडे

६) प्रदक्षिणा - कॉन्टिनेन्टल प्रकाशन.

5. KANNADA

Section - I

Study of the Prescribed Portion of three Texts each to represent
Old, Medieval and Modern Kannada Poetry.

Section-II

- 1) Vaddaradhane - D. L. Darasimhachav
- 2) Prabhulinga Leele - R. C. Hiremath
- 3) Kattuvevu Naavu - Gopal Krishna Adiga.

SCHEME OF MARKS

20

- One question of each of the texts with internal option regarding critical evaluation of the work and style. 45

15 + 15 + 15

20

- One question on reference to context. 15

Section-II

- One question on the trends and the movements of the Kannada Literary - History. 20

- To identify the Authors and their works 20

6. URDU

ऋग्वेद, रुद्रा निषेद

- a) General Knowledge of the following works:

- b) General knowledge of the works of the following authors:
 1. भासा, कालीन, शृङ्ख, वामभूति, वाणमण्ड, जयदेव.
 2) श्रीमद्भगवद्गीता

- 3) नीतिशतक
4. Paraphrase :

8. संस्कृत

9. अ) General Knowledge of the following works:

The following portion is prescribed.

1. Essay on Literary and General topics.

2. Translation. (English into Urdu)

It should not be about 100 words and should be as far as possible rounded whole in its thought contents.

3. Translation : (Urdu into English)
4. Paraphrase :

(8) The student is expected to understand the meaning of a given poem.

5. Precis-Writin ; The student is expected to make 1/3 (One-third) of the given message.

Distribution of Marks

1. Essay 30 Marks
2. Translation 20 Marks
3. Translation 20 Marks
4. Paraphrase 15 Marks
5. Precis-Writing 15 Marks

7. ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

1. SOURCES :

- Archaeological sources
- Inscriptions, coins, excavated remains
- Literary sources
- Hindu literature, Buddhist literature, Travel accounts.

2. PREHISTORIC INDIA :

- Palaeontology and Mesolithic Age
- Neolithic Age.
- Cultural development during Prehistoric and protohistoric period.

3. INDUS VALLEY CIVILIZATION :

- Town planning
- Social, economic and religious life
- Legacy of Indus valley civilization.

VEDIC AGE :

- God and Goddesses
- Sacrifice system
- Social conditions
- Varnashramas
- Samskaras
- Position of Women
- Economic conditions

JAINISM AND BUDDHISM :

- Life of Mahavir and Gautam Buddha
- Their teaching
- Sects in Jainism and Buddhism.

PRE-MAURYAN PERIOD :

- Persian and Greek invasion
- Sixteen Mahajanapadas
- Rise of Magadh Empire

MAURYAN EMPIRE :

- Political and Administrative Contribution of Chandragupta
- Cultural contribution of Ashoka
- Mauryan Administration

GUPTA EMPIRE :

- Political and cultural contribution of Samudragupta and Chandragupta - II
- Cultural Development during the Gupta Period
- Post Gupta Period

ARCHITECTURE IN ANCIENT INDIA :

- Rock-cut Architecture
- Stupa Architecture
- Temple Architecture in North and South India.

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8. HISTORY

OUTLINE OF WORLD HISTORY

10. SCULPTURE AND PAINTING IN ANCIENT INDIA :
- Gandhar School of Art
 - Mathura School of Art
 - Ajanta Painting
- Recommended Books**
1. Mujundar, R. C. and Pusalkar, A. D. (Ed.), 1950, *The Vedic Age* : opic No. 1 : Ancient Civilizations - India, China, Egypt, Greece and Rome.
 2. Shastri, K. A. N. and Shrinivaschari, G., 1970, *Advanced History of India*, McMillan and Co., London.
 3. Shastri, K. A. N., 1966, *History of South India* (Third Ed.), Motilal Banarasidas, Banaras.
 4. Raychoudhuri, H. C., 1950, *Political History of Ancient India* (5th Ed.), University of Calcutta, Calcutta.
 5. Thapar, Romila, 1973, *Ashoka and the Decline of Mauryas* (2nd Ed.), Oxford University Press, Oxford.
 6. Dhavlikar, M. K., 1997, *Protohistory of India*, Books and Books, New Delhi.
 7. Bhide, G. L., 1996, *Prachin Bharat*, Phadke Prakashan, Kolhapur (Marathi).
 8. Mate, M. S., *Prachin Bharatiya Kala*, Continental Prakashan, Pune (Marathi).
 9. Deglurkar, G. B., Dhavlikar, M. K., and Gaikwad, R. D., *Prachin Bharatacha Sanskrutik Itihas*, Continental Prakashan, Pune (Marathi).
 10. Deo, S. B., *Puratavatavida*, Maharashtra Grantha Nirmiti Mandal, Nagpur (Marathi).
 11. Bhide, G. L., *Prachin Bharatiya Samajik Sansthanacha Itihas*, Phadke Prakashan, Kolhapur (Marathi).
 12. Gayadhani and Rahurkar, *Prachin Bharatacha Itihasa*, Continental Prakashan, Pune (Marathi).

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OUTLINE OF WORLD HISTORY

- 'opic No. 1 : Ancient Civilizations - India, China, Egypt, Greece and Rome.
- 'opic No. 2 : Renaissance, Reformation and Geographical Discoveries.
- 'opic No. 3 : Grand Monarchs - Akbar, Shivaji, Louis the 14th, Peter the Great, Fredrick the Great.
- 'opic No. 4 : Revolutions - American (1776), French (1789), Industrial Revolution and Russian Revolution (1917).
- 'opic No. 5 : Growth of Nationalism and Democracy in the 19th Century - Italy, Germany and England.
- 'opic No. 6 : Modern Imperialism - Causes and Effects.
- 'opic No. 7 : Two World Wars - Causes and Effects.
- 'opic No. 8 : Growth of Nationalism in India
- BOOKS FOR STUDY**
- J. E. Swain - *A History of World Civilization*
 - Webster and Wolf - *History of Civilization*
 - Davies - *An Outline History of the World*.
 - B. V. Rao - *Concise Book of World History*
 - व. यं. तिरसीकर - *जगाचा इतिहास*.
 - ओटेलकर, पोतनीस, महाजन - *जगाचा संक्षिप्त इतिहास*.
 - प. र. फडके - *अवधीन जगाचा इतिहास*.
 - प्र. ग. गायकवाड, भोसले, पाटील - *मानव जातीचा इतिहास*
 - हेलेकर, सावंत - *क्रांतीशुआ आणि राष्ट्रवाद*
 - शोरात, गायकवाड, कर्दम - *आधुनिक जग भाग १ व २*.

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12)	9. ECONOMICS	
I)	Nature of Economics	
a)	Definition - Adam Smith, Marshall, Robbins.	
b)	Scope of economics.	
c)	Basic concepts- goods, utility, value, wealth, welfare.	
II)	Demand : Utility and indifference curve analysis, Law of demand.	
III)	Supply	
Land		
Labour	Theories of population	
Division of Labour - Localization of Industries.		
Capital		
Organisation -		
Cost of production and supply, Laws of Returns.		
IV)	Market	
Pricing under perfect competition & Monopoly.		
V)	Distribution	
Theory of Distribution		
Rent-Ricardian theory and Modern theory		
Interest-classical, Liquidity preference and Loanable fund theory.		
Wages-Money and real wages. Wage differentials theories of wages.		
Profit-Gross and net profit, Risk, uncertainty theory of Profit.		
VI)	Money & Banking : Functions of Money. Quantity theory of Money functions of commercial Banks and Central Banks.	
VII)	International Trade	
Comparative cost theory : gains from Trade Balance of Trade and Balance of Payment causes of disequilibrium in the balance of payments.		
13)	10. POLITICAL SCIENCE	
VIII)	Public Finance	
	Private finance / Public finance.	
	Canons of taxation- progressive / proportional, Regressive tax system sources of revenue and heads of public expenditure.	
	Books	
1.	आमुनिक अर्थशास्त्री मुलतांत्रे (एस. चौट आणि कंपनी) के. के. डिबेट, जे. जे. वर्मा.	
2.	अर्थशास्त्राचा अभ्यास - पांडे, कैलकर पाण - १ व २.	
3.	वी. प. वाण - १ व २ साठी निर्धारित केलेली सर्व पुस्तके.	
BOOKS FOR REFERENCE		
1.	Political Science : B. K. Gokhale	
2.	Modern Political Theory : S. P. Verma.	
3.	Elements of Political Science : A. C. Kapoor.	
4.	सुलभ आमुनिक राज्यशास्त्र : डॉ. नवलजुंदकर, नरेंद्र प्रकाशन.	
5.	सुलभ राज्यशास्त्र : प्रा. व. न. शिरसीकर	
6.	राज्यशास्त्राची मुलतांत्रे : डॉ. ग. घोऱकर	

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11. PSYCHOLOGY

1. The Nature and scope of General Psychology. The Psychological Services in Social Life. The method of Psychology - Observation, Clinical, Case-history, Experimental.
2. The Motives : The kinds : Social Physiological Conflicts of motive & Defence mechanisms.
3. Learning : Nature of learning Methods of learning - Trial & Error, Conditioning, Insight.
4. The nature and scope of Social Psychology.
- Social groups : Kinds.
- Social Interactions.
- The nature of Industrial Psychology - An Industrial Accedent: Causes, prevention.
- Leadership - Nature, Kinds, Functions, Characteristics.
- Personality - Social and Biological factors-personality - Traits and types.
- The Psychology of Individual Differences.
- Heredity and Environment.
- Normal and Abnormal Behaviour.
- The major kinds of Abnormalities
- Psychoneurosis, Psychosis, Mental Deficiency, Anhsonial.
- Mental Deficiency : Various classifications
- Causes, Symptoms
- Rehabilitation

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Books for Study

- | | |
|----------|-----------------------------------------------------------|
| 100 Marl | 1. Introduction to Psychology - Morgan and King (5th Ed.) |
| 2. | Social Psychology - Kuppuswamy. |
| 3. | Industrial Psychology - Dr. Bhagawatwar |
| 4. | Abnormal Psychology - Page |
| 5. | सामाजिक वाचनशास्त्र - तडसे - हिंदू |
| 6. | सामाजिक वाचनशास्त्र - गोपेन - अकोलकर |
| 7. | मनोविज्ञानशास्त्र - डॉ. प. देशपांडे |
| 8. | जीवोंवाला वाचनशास्त्र - डॉ. भावतवार |
- N. B. - Nature of question paper :
1. The candidate shall attempt 5 questions out of 10 questions. (All Questions carry equal marks)

12. PHILOSOPHY

1. The Upanishadic background of Philosophy. Common characteristics of the Indian Systems of Philosophy.
2. Buddhism : The Buddhist search for the freedom from sorrow. The four noble truths. The Theory of twelve causes. Eight-fold path.
3. The Vedant System : Nature of the World. The doctrine of Maya. Nature of the Self and Brahman. Concept of Moksha.
4. Beginning of Modern Western Philosophy. Descartes' Method of doubt. 'Cogito Ergo Sum'. Proofs for the existence of God. Dualism of matter and mind.
5. Locke : Locke's Theory of Empirical knowledge. His theory of substance.
6. The problems, nature and scope of ethics. The notions of Right and Good. Customary and Reflective morality.

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7. Kant's ethical theory : Categorical Imperatives. The notion of Goodwill.
 8. Hedonism - Egoistic and Universalistic. Utilitarianism of Bentham and Mill.
 9. Nature and value of philosophy Philosophy and Metaphysics. Nature of knowledge. The a priori and empirical elements in knowledge.
 10. Human Freedom, Determinism and Indeterminism. Classifications of values. The highest value.
- BOOKS FOR STUDY**
1. Introduction to Indian Philosophy, Chatterji and Dutta.
 2. भारतीय तत्त्वज्ञान - श्री. ह. दीक्षित.
 3. A History of Modern Philosophy, Wright W. H.
 4. A History of Philosophy, Frank Thilly.
 5. पाश्चात्य तत्त्वज्ञानाचा इतिहास (खड २) - ग. ना. जोशी.
 6. नीतिमीमांसा - श्रीनिवास दीक्षित.
 7. An Introduction to Ethics, William Lillie.
 8. The Fundamental Questions of Philosophy, A. C. Ewing.
 9. तत्त्वज्ञानातील समस्या - डि. य. देशपांडे

13. SOCIOLOGY

- I) **Sociology - As a Science;**
Subject Matter - Scientific Nature of Sociology - relationship with other Social Science
- II) Basic Concepts :
 - A) Social Interaction Nature and Types of Interaction
 - i) Co-operation
 - ii) Conflict
 - iii) Competition

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- III) **Social Institutions in India :**
- A) Concept of Social Institution
 - B) Family : Characteristics and types.
 - C) Marriage : Characteristics and types
 - D) Caste : Characteristics
- IV) **Sociological Thinkers**
- A) Auguste Comte : Social Statics and dynamics, Law of three stages.
 - B) Karl Marx : Historical Materialism, Theory of Class, Conflict and Change.
 - C) Emile Durkheim : Social facts, Mechanical & Organic Solidarity, Types of Suicide and its Interpretation.
 - D) Maxwweber : Definition of Sociology Types of Authority Protestant Ethic and spirit of Capitalism.
- V) **Research Methods**
- A) Steps in Scientific Method
 - B) Major techniques of data collection
 - 1) Observation
 - 2) Interview Schedule
 - 3) Mailed Questionnaire
- References :**
1. Horton P. B. & Hunt C. L. : Sociology - McGraw Hill, New York, 1967.

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2. Harlambous M. : *Sociology-Themes & Perspectives* : Bell & Heymen, 1985.
3. Tischler Whitten & Hunter : *Introduction to Sociology*, Holt, Rinehart and Winston Inc, New York, 1983.
4. Johnson Harry M : *Sociology - A Systematic Introduction*, Allied Publishers Ltd, New Delhi 1960/1991.
5. Davis Kingsley : *Human Society*, Subject Publications, Delhi - 1981.
6. Vidyabhushan & D. R. Sachdeva : *Introduction to Sociology*, Kitab and Mahal, Allahabad, 1998.
7. Inkles Alex : *What is Sociology*, Holt Rinehart, London, 1965.
8. Ogburn & Nimkoff : *A Handbook of Sociology*, London, R. Kegan Paul, 1960.
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14. GEOGRAPHY

Note:

- The question paper shall carry 100 marks and will be of three hours question.
- There will be 10 questions divided equally in to Two sections.
- The candidate is required to answer in all FIVE questions selecting any THREE from section 'A' and any Two from Section 'B'.
- All question will carry equal marks.
- Both the sections should be attempted in one and the same answerbook.

Section A

- Nature and scope of Geography. Major branches of Geography.
- Landforms and weathering - world distribution of Mountains, Plateaus and Plains - Weathering and Mass wasting - Man as a geomorphic agent.
- Evolution of a graded stream - landmass rejuvenation.
- Atmosphere - Composition and structure of the atmosphere - Horizontal distribution of temperature Inversion of Temperature - Atmospheric pressure and winds.
- Humidity - Types of humidity - Types of Clouds - Types of Precipitation Major climatic regions of the world.

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6. Concept of Ecosystem - Man - environment relationships. Determinism and possibilism.

Section B

- Major types of agriculture in the world and their characteristics.
- Growth and distribution of world population. Concepts of under, over and optimum population. Processes and patterns of urbanization in the world.
- Distribution of major mineral production in the world. (Coal, Petroleum, Iron ore)
- Distribution of major industries in the world. (Textile, Iron steel, Automobile and electronics)
- Settlements Origin, types functions and landuse of Urban settlements.

References :

1. Strahler and Strahler : *Modern Physical Geography*. John Wiley & Sons. (1978)
2. Trewartha G. T. : *Introduction to climate*, McGraw Hill, New Jersey (1978)
3. Alexander J. W. : *Economic Geography*, Prentice Hall of India New Delhi (1978)
4. Chandana R. C. : *A geography of Population*, Kalyani Publishers New Delhi. (1986)
5. Carter, Harold : *Study of Urban Geography*, Pergamon Press New York (1974).

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15. MATHEMATICS (Marks 100, Time : 3 hours)

Note : The question paper consists of 5 questions, one on each of the following sections. There will be an option to each question. All questions carry equal marks.

Section-I

ALGEBRA

Definitions and examples of group, ring, integral domain, field,

Vector space. Langranges theorem on groups, Isomorphism and Homomorphism of rings, Range and kernel of a linear map.

Section-II

CALCULUS

Continuous function of real variable, Rolle's theorem with simple illustrations, Talor's theorem, Maclaurin's series.

Double integra, change of order of integral, application to areas and volums.

Section-III

DIFFERENTIAL EQUATIONS

First order and First degree differential equations, linear differential equations with constant coefficients. Total differential equation $P dx + Q dy = 0$, Partial differential equations of first order of the type $PQ + QP = R$.

Section - IV

COMPLEX ANALYSIS

De Moiver's theorem, roots of unity, Cauchy - Riemann equations, Cauchy's integral formula, Residue theorem, Evaluation of integrals.

$$\int_{-\infty}^{\infty} f(x) dx$$

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Section - V

SPECIAL TOPICS

Definitions of Mathematics (Aristotle, Descartes Hilbert), Definitions of function (Leibnitz, Euler, Dirichlet), Remarkable functions (Riemann, Weierstrass) the small-big set (centor's set), algebra of electrical switches.

Reference Books

1. Differential Calculus by Shanti Narayan.
2. Differential equations by Diwan and Agashe.
3. Differential equations by D. A. Murray.
4. Calculus and differential equations by H. V. Kumbhojkar and G. V. Kumbhojkar.
5. Algebra and Trigonometry - Vaze, Gosavi.
6. Elementary Abstract Algebra - Vaze.
7. Modern Algebra - Sharma Sheth.
8. Complex Numbers - W. Ledermann.
9. Mathematical Analysis - Shanti Narayan.
10. Integral Calculus - Shanti Narayan.
11. A Survey of Modern Algebra by Birkhoff and Mac Lane (Macmillan 1965).
12. Linear Algebra : Hoffman and Kunze, (East West Press).
13. Topics in Algebra - I. N. Herstein.
14. Functions of a complex variable - by Shanti Narayan.
15. L. Radhakrishna - History, Culture, Excitement and Relevance of Mathematics.
16. Complex Analysis - Sharma.