Scheme of Examination
BACHELOR OF ARTS (BA)
THREE YEAR PROGRAMME (ANNUAL)
2011

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks the theory marks secured by the candidate shall be proportionately enhanced.

BA-I

Paper	Nomenclature	External	Internal/ Practical
	Compulsory Subjects		
	English		
DEBA-101 A	Paper-A	35	15
DEBA-101 B	Paper -B	35	15
DEBA-102	Hindi	70	30
	Elective Subjects Choose any two of the following:		
DEBA-103	**History** Option-**1**- History of India (earlier to 1526)	70	30
DEBA-104	**Political Science** Option-**1**-Political Theory	70	30
DEBA-105	**Economics** Option-1-Micro Eco. & Indian Economic Problems	70	30
DEBA-106	Sanskrit	70	30
DEBA-107A	**Mathematics** Algebra And Trigonometry	25	10
DEBA-107B	Calculus And Ordinary Differential Equation	25	10
DEBA-107C	Vector Analysis And Geometry	20	10
DEBA-108	**Public Administration** Elements of Public Administration	70	30
DEBA-109	**Sociology** Introduction to Sociology	70	30
DEBA-110 A DEBA-110 B	**Military Science** Paper 1- World Military History(Earliest times to 1789 A.D) (Theory) Paper 2- Practical	50	50
DEBA-111 A DEBA-111 B	**Geography** Paper 1- Introduction to Geography and Geography of India(Theory) Paper 2- Practical	50	50
DEBA-112	**Qualifying Subject** Environmental Studies		100

BA-II

Paper	Nomenclature	External	Internal/ Practical
	Compulsory Subjects		
	English		
DEBA-201 A	Paper-A	35	15
DEBA-201 B	Paper -B	35	15
DEBA-202	Hindi	70	30
	Elective Subjects Choose any two of the following:		
DEBA-203	**History** Option-**1-**History of India (C.A.D 1526 to 1857)	70	30
DEBA-204	**Political Science** Option-1- Bhartiya Sarkar & Rajniti	70	30
DEBA-205	**Economics** Option -1-Macro Economics	70	30
DEBA-206	**Sanskrit**	70	30
DEBA-207A DEBA-207B DEBA-207C	**Mathematics** Advance Calculus Differential Equations and Calculus of Variations Mechanics	25 25 20	10 10 10
DEBA-208	**Public Administration** Option-1- Bhartiya Prashashan	70	30
DEBA-209	**Sociology** Option-1- Anusandhan Vidhi	70	30
DEBA-210 A DEBA-210 B	**Military Science** Paper 1- Option-B – Study of War (Theory) Paper 2- Practical	50	50
DEBA-211 A DEBA-211B	**Geography** Paper-1- Physical Geography(Theory) Paper 2- Practical	50	50

Third Year (BA-III)

Paper	Nomenclature	External	Internal
	Compulsory Subjects		
	English		
DEBA-301 A	Paper-A	35	15
DEBA-301 B	Paper -B	35	15
DEBA-302	Hindi	70	30
	Elective Subjects **Choose any two of the following:**		
DEBA-303	**History** Option-2-History of Modern World	70	30
DEBA-304	**Political Science** Options-1-Comparative Govt. and Politics	70	30

DEBA-305	**Economics** Development & Environmental Economics and International Trade	70	30
DEBA-306	Sanskrit	70	30
DEBA-307A DEBA-307B DEBA-307C DEBA-307D	**Mathematics** Analysis Abstract Algebra Programming in C & Numerical Analysis(Theory) Computer Practical in C based on Numerical Analysis in DEBA-307C(Practical)	25 25 20	10 10 10
DEBA-308	**Public Administration** Options-2- Local Govt. and Administration in India	70	30
DEBA-309	**Sociology** Option-1- Indian Society	70	30
DEBA-310 A DEBA-310 B	**Military Science** Paper 1- Option-A – National Defence & Security (Theory) Paper 2- Practical	50	50
DEBA-311 A DEBA-311B	**Geography** Paper-1- Human Geography & Resources & Environment Paper 2- Practical	50	50

Important Note:

* The Environmental studies is a qualifying paper for all UG Courses i.e BA & B.Com. Students are required to qualify the same, otherwise final result will not be declared and degree will not be awarded. Paper setting, conduct of examination and its evaluation will be done at the study centre itself.

BACHELOR OF ARTS (BA)

B.A. PART-I

ENGLISH (COMPULSORY)
PAPER A
PAPER CODE DEBA-101 A

External: 35
Internal: 15

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

   A. Chronicles of Time: An Anthology of Poems ed. by Asha Kadian (Oxford University Press, New Delhi).

     The following may be deleted:

       i) 'Leisure' by W.H. Davies

       ii) The Flute Player of Brindaban 'by Sarojini Naidu

       iii) The Soldier' by R. Brooke.

   B. The Pointed Vision: An Anthology of Short Stories by Usha Bande and Krishan Gopal. (Oxford University Press, New Delhi)

   C. Ideas Aglow by Dinesh Kumar and V.B. Abrol.

     Following essays may be deleted:

       i) 'If s question Time' by Jayant V. Narlikar

       ii) An Interview with Christian Barnard' by N.Ram

       iii) In humanization of War by Huek Gutman,.,

SCHEME OF EXAMINATION

Question-I Explanation with Reference to the Context

The candidate will be required to attempt two passages each (with internal choice) one from the book of Poems and the" other from the Collection of essays, Ideas A glow.   5 Marks

Question-II Short answer type questions on (five questions to be attempted out of the given eight)   4 Marks

OR

Four short-answer type questions will be set on the prescribed short-stories and four short-answer questions will be set on the prescribed essays. The students will be required to attempt any five out of the given eight questions.   4 Marks

Question-III One essay-type question (with internal choice) will be set on each of the prescribed texts A & B. Students will be required to attempt one question each from both the texts.   7×2=14 Marks

Question-IV One essay type question (with internal choice) will be set on the book of essays.   7 Marks

Question-V Items based on the exercises appended to the essays in Text (C).   5 Marks

PAPER B

PAPER CODE DEBA-101 B

<div align="right">

External: 35

Internal: 15

</div>

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Text Prescribed: A Remedial English Grammar for Foreign Students by FT. Wood.

The following items may be deleted:

Item Nos.:

8. Transformations

9. Confusion of Adjectives & Adverbs

10. Adverbial use of No, Not and None

13. The Pro word one

15. Redundant Pronouns & Preposition

16. The use of correlatives.

Q.I Items based on the examples/exercises given in the prescribed text books of Grammar.   12.5 Marks

Q.II Comprehension Passage (with five questions at the end.)   7.5 Marks

Q.III Paragraph: The candidate will be required to write a paragraph on any one of the five given topics.   5 Marks

Q.IV Letter/Application: Students will be asked to write a letter or an application. (The question will carry internal choice)   5 Marks

Q.V Translation (From Hindi to English) of a passage consisting of 6 to 8 sentences.   5 Marks

<div align="center">OR</div>

In lieu thereof expansion of an idea (with internal choice) into 100 words or so for foreign students including students of Non-Hindi Speaking States.   5 Marks

HINDI (COMPULSORY)

PAPER CODE DEBA-102

हिन्दी अनिवार्य

<div align="right">

External: 70

Internal: 30

</div>

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive

examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

पाठ्य पुस्तक :

1. 'काव्य शिखर' – प्राचीन एवं मध्ययुगीन काव्य पर आधारित संज्ञक पुस्तक सं. डॉ. नरेश मिश्र, हिन्दी विभागाध्यक्ष म. द. विश्वविद्यालय, रोहतक।

2. ''गद्य-शिखर'' नामक गद्य संकलन सं. हिन्दी विभागाध्यक्ष, कु. विश्वविद्यालय जिसमें पाँच कहानियां और पाँच निबन्ध संकलित हैं।

निर्देश :–

1. पहला प्रश्न काव्य शिखर नामक काव्य संग्रह से व्याख्या के रूप में होगा। पाठ्यपुस्तक में निर्धारित कवियों में से किन्हीं चार कवियों की चार व्याख्याएं पूछी जाएंगी। परीक्षार्थियों को उनमें से किन्हीं दो की सप्रसंग व्याख्या करनी होगी। प्रत्येक व्याख्या 5 अंक की होगी और पूरा प्रश्न 10 अंकों का होगा।

2. किन्हीं दो कवियों का परिचय पूछा जाएगा, जिनमें से परीक्षार्थियों को एक का उत्तर देना होगा। इस प्रश्न के लिए 6 अंक निर्धारित हैं।

3. निर्धारित कवियों में से किन्हीं दो पर अनुशीलनी में से दो आलोचनात्मक प्रश्न पूछे जाएंगे। परीक्षार्थियों को किसी एक का उत्तर देना होगा। इस प्रश्न के लिए 8 अंक निर्धारित हैं।

4. लघूत्तरी प्रश्न द्रुतपाठ में निर्धारित चार कवियों (अमीर खुसरो, विद्यापति, भूषण, धनानन्द) पर पाठ्य पुस्तक की ''अनुशीलनी'' में से ही एक-एक प्रश्न अर्थात चार प्रश्न पूछे जाएंगे, जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों के संक्षिप्त (प्रत्येक लगभग 250 शब्दों में) उत्तर देने होंगे। प्रश्न परिचयात्मक प्रकृति के ही होंगे। प्रत्येक प्रश्न 3 अंकों का होगा और पूरा प्रश्न 6 अंको का होगा।

5. निर्धारित पाठ्य पुस्तक गद्य-शिखर में संकलित निबन्धों और कहानियों में से व्याख्या के लिए दो-दो अवतरण दिए जाएंगे, जिनमें से परीक्षार्थियों को प्रत्येक से एक-एक अवतरण की सप्रसंग व्याख्या करनी होगी। प्रत्येक व्याख्या 5 अंकों की और पूरा प्रश्न 10 अंकों का होगा।

6. निर्धारित कहानीकारों और निबन्धकारों में से एक-एक का साहित्यिक परिचय पूछा जाएगा, जिनमें से परीक्षार्थियों को किसी एक का उत्तर देना होगा। इस प्रश्न के लिए 5 अंकों का होगा।

7. निर्धारित लेखकों में से किन्हीं दो पर अनुशीलनी में से दो आलोचनात्मक प्रश्न पूछे जाएंगे। परीक्षार्थियों को किसी एक का उत्तर देना होगा। इस प्रश्न के लिए 8 अंक निर्धारित हैं।

8. लघूत्तरी प्रश्न द्रुतपाठ में निर्धारित दो कहानीकारों (मोहन राकेश और मालती जोशी) और निबन्धकारों (महावीर प्रसाद द्विवेदी और सरदार पूर्ण सिंह) पर पाठ्य पुस्तक की अनुशीलनी में से ही एक-एक प्रश्न अर्थात चार प्रश्न पूछे जाएंगे, जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों के संक्षिप्त (प्रत्येक लगभग 250 शब्दों में) उत्तर देने होंगे। प्रश्न परिचयात्मक प्रकृति के होंगे। प्रत्येक प्रश्न चार अंको का होगा और पूरा प्रश्न आठ अंकों का होगा।

9. अन्तिम प्रश्न काव्य शिखर की अनुशीलनी के व्याकरण पर आधारित होगा, जिसके लिए 9 अंक निर्धारित हैं। इसके अंतर्गत वर्तनी, पर्याय, विलोम, वाक्य के लिए एक शब्द, मुहावरे और लोकोक्ति निर्धारित हैं। इसमें 9 अनिवार्य वस्तुनिष्ठ प्रश्न होंगे। प्रत्येक प्रश्न के लिए चार विकल्प होंगे, जिनमें से एक शुद्ध उत्तर देना होगा।

HISTORY

OPTION –I HISTORY OF INDIA (FROM EARLIEST TIMES TO C.A.D. 1526)

PAPER CODE DEBA-103

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

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Section I

1. Survey of the sources.

2. Pre historic hunterer -gatherers: Paleolithic culture-sequence and geographical distribution. Mesolithic cultures-distribution and cultural developments.

3. Concept of the Neolithic-advent of food production.

4. Harappan Civilization-Origin, extent, urban planning, Nature of Social and economic condition, urban decline and late Harappan culture.

5. Society, Polity, economy, culture and religion as reflected in the vedic literature

6. Social developments- varna, Jati, marriage and property relations.

7. Rise of territorial states.

8. Rise of new religious movements in north India, Doctrines and social dimension of early Buddhism and Jainism.

Section II

1. The Mauryan Empire-State , administration and economy: Ashoka's Dharma-its nature and propagation; Mauryan art and architecture.

2. Post Mauryan period-Kushanas, Satavahanas, Cholas and Pandyas.

3. Sangam Age-Literature, society and culture.

4. Gupta Empire-administration, agrarian and revenue system, and trade; society, art, architecture, literature, science and technology.

5. Status of Women-marriage, property rights, sati, purdas and devadasi system.

6. Post-Gupta period upto 750AD-Pallavas, Chalukyas and vardhanas.

7. Polity and economy C.A.D 750-1200 Gurjara –Pratihara: Palas; Rashtrakuta.

Section III

1. Invasions of Ghaznavids and Ghorids; Causes of the success and their impact.

2. Rise and expansion of Delhi Sultanate: Illutmist, Balban, Allauddin Khilji and Mohammad Tughlaq.

3. Fragmentation and downfall of Sultanate.

4. Society and economy under the Sultanate.

5. Religion and culture; Bhakti and Sufi movements; art, architecture during the Sultanate.

Section IV

Maps

1. Important sites of the Harappan Civilization.
2. Ports, trading centres and trade routes of Ancient India.
3. Extent of Ashoka's Empire, Pillars and Edicts.
4. Extent of Harsha's Empire.
5. Extent of Allauddin Khalji's Empire.
6. Urban Centres during the Sultanate.

Suggested Readings:

H.C. Ray, Chaudhary. Advanced History of India Delhi, 1971 (Hindi Also).

R.S. Tripathi. Ancient India Delhi, 1977 (Hindi also).

H.C. ray, Chaudhary. Political History of Ancient India, Calcutta, 1963.

A.L. Basham. The Wonder that was India Delhi 1981(Hindi also).

R.C. Majumdar and A.S. The Vakta Gupta Age Delhi 1981(Hindi also).

Allchin, B and Allchin, F.R. Rise of civilization in India and Pakistan(Delhi Select Book Service Synidicate, 1983).

Munshi, V.K.M.and R.R. Bhartiya Vidya Bhavan Series-Indian Inheritance, 3 vols (Bombay, Bhartiya Vidya Bhavan, 1965, 1970).

Sharma R.S.Aspects of Political Ideas and Institutions in ancient India (Delhi, Motilal Bararsidass, 1991) (Revised Edition).

Thapar B.K. recent Archaeological discoveries in India (Paris UNESCO, 1985).

Thapar, Romila. A History of India, vol. 1 (Pelican, 1966, Penguin, Harmondsworth).

Gardon Stewart. The Marathas, 1600-1818, The New Cambridge History of India 11.4(Delhi, foundation Books, 1994).

Satish Chandra. Medieval India, From Sultanate to the Mughals (Delhi, Har Anand Publications, 1997).

Verma, H.C. Madhya Kalin Barat 1540-1750, Part-II (Delhi Hindi Directorate, 1983).

Habibula, A.B.M. Foundation of Muslim rule in India (In Hindi also).

Lal, K.S. Khalji Vansh Ka Itithas (in Hindi also).

Kanoongo, K.R. Life and Times of sher Shah Suri (in Hindi also).

POLITICAL SCIENCE

OPTION 1-POLITICAL THEORY

PAPER CODE DEBA-104

External: 70

Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.
2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Part-A

Nature and significance of Political Theory

Power and Authority

State: Original and Development

State: Dominant Perspectives

Sovereignty

Part-B

Citizenship, Rights and Liberty

Equality and Justice

Democracy

Development and Welfare State

Theories of Social change

Part-C

Short answer questions, at least five, spread over the entire syllabus.

Objective type (multiple choice) question over the whole syllabus.

Suggested Readings

N.P. Barry, Introduction to Modern Political Theory, London, Macmillan, 1995.

M. Carnoy, The State and Political Theory, Princeton NJ, Princeton University Press, 1984.

G.Catlin, A Study of the Principles of Politics, London and New York, Oxford University Press, 1930.

N.J. Hirschman and C.D. Stefano(eds.), Revisioning the Political Feminist Reconstruction of Tradition concepts in Western Political Theory, West View Press, Harper Collins, 1996.

D. Heater, Citizenship: The Civic Ideal in World History, Political and Education, London, Orient Longman, 1990.

D. Held, Models of Democracy, Cambridge, Polity Press, 1987, G Mclellan, D Held and S. Hall (eds.), The Idea of the Modern State, Milton Keynes, Open University Press, 1984.

D. Miller, social Justice, Oxford, The Clarendon Press, 1976.

D. Miller, (ed.), Liberty, Oxford, Oxford University Press, 1991.

D. Miller, Citizenship and National Indentities, Cambridge, Polity Press, 2000.

S. Ramaswamy, Political Theory: Ideas and concepts, Delhi Macmillan, 2002.

R.M. Titmuss, Essays on the Welfare State, London, George Allen and Unwin, 1956.

F. Thankurdas. Essays on Political Theory, New Delhi, Gitanjali, 1982.

J. Waldron(ed.), Theories of Rights, New Delhi, Oxford University Press 1984.

S.Wasby, Political Science: The Discipline and its Dimensions, Calcutta, scientific Book Agency, 1970.

ECONOMICS

(OPTION-1-MICRO ECONOMICS AND INDIAN ECONOMIC PROBLEMS)

PAPER CODE DEBA-105

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

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Unit I

Introduction, Nature and scope of economics, choice as an economic problem.

Consumer's Behavior: Utility- Cardinal and ordinal approaches: Indifference curve:

Consumer's equilibrium (Hicks and Slustsky); Elasticity of demand Price, Income and gross; Consumer's Surplus.

Theory of production Costs; Production decisions, Production function, ISO-quant Law of variable proportions; Returns to scale; Economics of scale, Different concepts of costs and their interrelations.

Unit II

Market structure and commodity pricing; market forms perfect and imperfect markets; Equilibrium of firm perfect competitions, monopolistic competition, Factor pricing marginal productivity theory of distribution.

Unit III

Basic Features; Problems and planning in India; Characteristics of Indian economy; problems of poverty; inequality and unemployment; objectives of planning in Indian achievements and failures; new economics reforms: A basic idea.

Unit IV

Indian Agriculture, Nature and importance: Trends in agricultural production and productivity, Rural credit, Agricultural marketing.

Industry : industrial development during the planning period; new industrial Policy. Growth and problems of small scale industries.

Suggested Reading

Bach, G.L 1977, Economics, Prentice Hall of India, New Delhi.

Gauio, J.P. and Edward P.L (1996), Micro economics theory, Richard Irwin Home wood.

Handerson J. and R.E. quandt (1900) Microeconomics Theory ; A mathematical approach, McGraw Hill, New Delhi.

Heath field and wibe (1907), An introduction to cost and production functions, Macmillan London.

Kouisoyionnis, A 91990) Modern Microeconomics, Macmillan.

Lipsey,R.G and K.A Christal (1999) Principles of Economics(9th Edition) Oxford Univ Press.

Mansfield . E. (1997) Microeconomics (9th Edition), W.W Norton and Company, New York.

Ray, N.C (1918) an introduction to Microeconomics, Mcmillan Company of India Ltd Delhi.

Raaj, W.J.I (1962) Price Theory, Mcmillan and Co. Ltd London.

Datt,R. and KPM Sundharam (2001), Indian Economy S.Chand & Co.

Dhingra I.C. (2001) The Indian Economics ; Envoirnment and policy Sultan Chand & Sons, New Delhi.

Misra, S.K. and V.K.Puri (2001) Indian Economy- its Development Experience, Himalaya Publishing House Mumbai.

PAPER CODE DEBA-106

संस्कृत ऐच्छिक

External: 70
Internal: 30

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit-I संस्कृत वाग्व्यवहार: अंक 10

एकक-1 संस्कृत व्यवहार साहसी (प्रकाशक संस्कृत भारती, माता मन्दिर गली, झण्डेवालान, नई दिल्ली) पुस्तक में से 1 से 8 विषयों तक संस्कृत में सरल प्रश्नोत्तर रूप में लिखित परीक्षा (शिष्टाचार, मेलनम्, सरलवाक्यानि, सामान्यवाक्यानि मित्र मिलनम्, यात्रा, प्रवासत: प्रतिनिर्वतनम्, छात्रा:)

Unit-II संस्कृत ग्रन्थानुशीलनम् अंक 21

एकक-2 (क) हितोपदोश: (मित्र लाभ:)   7

(ख) दूतवाक्यम् (भासविरचितम्)   7

(ग) शुकनासोपदेशु (कादम्बरीत:)   7

(पाठ्यांशो की व्याख्या व सार आदि)

Unit-III संस्कृत व्याकरणम् अंक 21

एकक-3 (क) शब्दरूप- राम, कवि, भानु, पितृ, लता, भति, नदी, धेनु, वधू, मातृ, फल, वारि, मधु, आत्मन्, दण्डिन्, वाच्, सरित्, सर्व, तद्, एतद्, यद्, किम्, इदम् (तीन लिंगों में), अस्मद्, युष्मद्, एक, द्वि, त्रि, चतुर:, पञ्चन् (तीनों लिंगों में)   - 8

(ख)   धातुरूप परस्मैपदम- भू, पठ्, हस्, नम्, गम्, अस्, हन, क्रुध, नशा्, नृत्, अद्, इष्, पृच्छ, चिन्त्।

आत्मनेपदम्- सेव, लभ्, रुच्, मुद्, याच्।

उभयपदम् - कृ, नी, ह, भज्, पच।   - 5

(ग) सन्धि - अच् सन्धि, हल सन्धि, विसर्ग सन्धि।   - 8

Unit-IV छन्द

एकक-4 अतुष्टप, आर्या, इन्द्रवज्रा, उपेन्द्रवज्रा, उपजाति, भालिनी, स्रग्धरा, वशस्थ, शिखरिणी, मन्दाक्रान्ता, वसन्ततिलका, शार्दूलविक्रीडितम्

- 6

Unit-V अनुवाद कण्ठस्थश्लोकाश्च

एकक–5 (क) हिन्दी से संस्कृत में सरल अनुवाद – 7

(ख) कण्ठस्थ चार श्लोकों का शुद्ध लेखन – 5

(प्रश्न पत्र में छपे श्लोकों से भिन्न)

MATHEMATICS

ALGEBRA AND TRIGONOMETRY

PAPER CODE DEBA-107 A

External: 25

Practical: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (3 Questions)

Symmetric and Skew symmetric matrices, Hermitian and skew-Hermitian matrices. Elementary operations on matrices. Inverse of a matrix. Linear independence of row and column matrices. Row rank, column rank and rank of a matrix. Equivalence of column and row ranks: "Eigenvaluesr eigenvectors and the characteristic equation of a matrix. (Cayley Hamiltoifthet) fem and its use in finding inverse of a matrix. Applications of matrices to a system of linear (both homogenous and non-homogenous) equations. Theorems on consistency of a system of linear equations.

Section II (2 Questions)

Relations between the roots and coefficients of general polynomial equation in one variable. Transformation of equations. Descartes' rule of Signs. Solutions of cubic equations (Cordon method) and Bi quadratic equations (Descartes' and Ferrari Methods).

Section III (3 Questions)

Mapping, Equivalence relations and partitions. Congruence modulo. Definition of a group with examples and simple properties. Subgroups. Generation of groups. Cyclic groups. Cost decomposition. Langrange's theorem and its consequences. Fermat's and Euler's theorems. Homomorphism and Isomorphism. Normal Subgroups. Quotient groups. The fundamental theorem of homomorphism. Permutation groups. Even and odd permutations. The altering groups A_n. Cayley's theorem. Introduction to rings, Sub rings, integral domains and fields. Characteristic of a ring.

Section IV (2 Questions)

De Moivre's theorem and its applications. Direct and inverse circular and hyperbolic functions. Logarithm of a complex quantity. Expansion of trigonometrically functions. Gregory's series. Summation of series.

Suggested Reading

1. L.N. Herstein Topics in Algebra, Wiley Eastern Ltd. NewDelhi, 1975.

2. K.B. Datta, Matrix and Linear Algebra, Prentice Hall of India Pvt. Ltd. New Delhi, 2002.

3. P.B. Bhattacharya, S.K. Jain and S.R*. Nagpaul, First Course in Linear Algebra, Wiley Eastern, New Delhi, 1983.'

4. S.K. Jain, A. Gunawardena and P.B. Bhattacharya, Basic Linear Algebra with MAATLAB., Key College Publishing(Springer-Verlag),2001.

5. S.L. Loney, Plane Trigonometry Part II, Macmillan and Company, London.

6. Shanti Narayan, A text Books of Matrics, S. Chand & Co., New Delhi.

7. Peter V. O'Neil, Advanced Engineering Mathematics, ITPCompany, USA.

8. Alan Jafferey, Advanced Engineering Mathematics, Harcourt/Academic Press, USA.

9. K.A. Stroud, Advanced Engineering Mathematics, Industrial Press, Inc., New York.

10. K.A. Stroud, Enginnering Mathematics (Indian Edition),

11. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley and Sons.

12. Ayers, Modern abstract Algebra, Schaum Outline Series, Tata McGraw Hill.

13. Baumslag, Group Theory, Schaum Outline Series, Tata McGraw Hill.

14. Jai Singh, Abstract Algebra, Schaum Outline Series, Tata McGraw Hill.

15. Lipschutz, 3000 solved problems in Linear Algebra, Schaum Outline Series, Tata McGraw Hill.

16. Lipschutz, Linear Algebra, Schaum Outline Series, Tata McGraw Hill.

17. Moyer, Trigonmetry, Schaum Outline Series, Tata McGraw Hill.

18. Rich, Eiementry Algebra, Schaum Outline Series, Tata McGraw Hill.

CALCULUS AND ORDINARY DIFFERENTIAL EQUATIONS
PAPER CODE DEBA-107 B

External: 25

Practical: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (2 Questions)

Successive differentiation. Leibnitz theorem. Maciaurin and Taylor series expansions. Asymptotes. Curvature. Tests for concavity and convexity. Points of inflexion. Multiple points. Tracing of curves in Cartesian and polar coordinates.

Section II (3 Questions)

Reduction formulae. Quadrature. Rectification. 'Volumes and surfaces of solids of revolution.

Section III (3 Questions)

Exact differential equations. First order higher degree j equations solvable for x, y, p. clairaut's form and singular solutions, Geometrical meaning of a differential equation. Orthogonal trajectories. Linear differential equations with constant coefficients: Homogeneous linear ordinary differential equations. Total/differential equations.

Section IV (2 Questions)

Linear differential equations of second order, *I* Transformation of the equation by changing-the dependent variable/the independent variable, reduction of order. Method of variation of parameters and unknown coefficients, Ordinary simultaneous differential equations.

84

Books Recommended

1. Murray R. Spiegel, Theory and Problems of Advanced.; Calculus, Schaum's outline series, Tata McGraw Hill.
2. P.K. Jain and S.K. Kaushik, An Introduction tp Real Analysis, i S. Chand & Co. New Delhi, 2000.
3. GT. Simmons, Differential Equations, Tata McGraw, i Hill, 1972.
4. S.L. Ross, Differential Equations, John Wiley and Sons (Student Edition).
5. H.T. H. Piaggio, Elementary Treatise on Differential *Equations* and their Applications, C.B.S. Publisher and; Distributors, Delhi, 1985.
6. Peter V. O'Neil, Advanced Engineering Mathematics, ITPI Company, USA.
7. Alan Jafferey, Advanced Engineering Mathematics, Harcourt/ Academic Press, USA.
8. K.A. Stroud, Advanced Engineering Mathematics, Industrial Press, inc., New York.
9. K.A. Stroud, Engineering Mathematics (Indian .Edition), Replika Press Pvt. Ltd.
10. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley and Sons, 1999.
11. Khalil Ahmed, Text Book of Integral Calculus and Differential Equations, Anamaya Publishers, New Delhi.
12. Khalil Ahmed, Text Book of Differential Calculus, Anamaya Publishers, New Delhi.
13. Ayres, Calculus, Schaum Outline Series, Tata McGraw Hill.
14. Bronson, Theory and Problems of Differential Equations, Schaum Outline Series, Tata McGraw Hill.

VECTOR ANALYSIS AND GEOMETRY

PAPER CODE DEBA-107 C

External: 20

Practical: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (2 Questions)

Scalar and vector product of three vectors. Product of four vectors. Reciprocal Vectors. Vector Differentiation. Gradient, Divergence and Curl.

Section II (2 Questions)

Vector integration. Theorems of Gauss, Green, Stokes and problems based on these.

Section III (3 Questions)

General equation of second degree. Tracing of conies. System of conies. Confocal Conies. Polar equation of conic.

Section IV (3 Questions)

General coincides, Paranoids. Plane...Sections of Coincides. Generating lines. Confocal coincides. Reduction -of Second Degree equation. Sphere, Gone, Cylinder.

PUBLIC ADMINISTRATION
ELEMENTS OF PUBLIC ADMINISTRATION
PAPER CODE DEBA-108

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Organization, meaning and basis, principles of Organization; Hierarchy, Span of Control, Decentralization, Supervision and Control, Communication. Public Relations Meaning, Methods and significance; Administrative Law; Delegated Legislation; Administrative Tribunals.

Forms of Administrative Organization, Department, Public Corporations; Parliamentary and Govt. Control over public Corporations, independent Regulatory Commission; Staff and Line Agencies.

Personnel Administration, Recruitment, Training, Promotion, Public Service Commission, Morale, Joint consultative Machinery (Whitley councils).

Preparation and passing of the Budget, Audit and its Preparation and significance, Parliamentary control over Public Finance. Accountability of Public Administration, Legislative and Judicial. E Governance in Public Administration.

SOCIOLOGY
INTRODUCTION TO SOCIOLOGY
PAPER CODE DEBA-109

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit I

Meaning and Perspectives: The Nature, Meaning, Scope and Growth of Sociology, Sociology and its Relationship with Social Anthropology, History, Economics and Political Science; Psychology Approaches to Sociology; Positivism: A Comte (Law of three stages); Functionalism : E. Durkheim (Social Fact) : Conflict : K. Marx (Historical Dialectical Materialism); Interpretative: Max Weber (Social Action, Ideal Type).

Unit II

Basic Concepts in Sociology: Society, Community, Institution, Association, social Groups, Social Structure, Status and Role Culture, Social Processes: Cooperation, Conflict and Competition Assimilation.

Unit III

Socialization and Social Control: Socialization as a Process of Learning, Stages and Agencies of Socialization; Theory of Socialization: Individual and Society, Social Control: Mechanism, Types.

Unit IV

Social Stratification, Social Mobility and Social Change: Meaning, Forms and Basis of Social Stratification; Social mobility and its Types; Social Change, Meaning and Type; Evolution and Revolution, Progress and Development – Factors of Social Change.

Unit V

Social Institutions : Family, Kinship and Marriage, Religion, Political and Economic. Types of societies, Rural , Urban, tribal, Industrial, Post-Industrial.

References:

1. Inkeles, Alex. What is Sociology, Prentice Hall, New Delhi, 1982.
2. Bottomore, t.B. Sociology: A Guide to problems and Literature Bombay : George Allen and Unwind (India), 1972.
3. Harlambos, M. Sociology: Themes and Perspectives. Oxford University Press, New Delhi, 1998.
4. Johnson, Harry. M. Sociology: A Systematic Introduction, Allied Publishers, New Delhi-1995.
5. Jayaram, N. Introductory sociology Macmillan New Delhi-1995.
6. Schaefer, Richard T. Sociology, Tata-McGraw Hill, New Delhi. 1999.
7. Mac. Lveer, R. M. and Society: An Introductory Analysis, Macmillan Co., Delhi, 1974.
8. Sorokin, P.A. Social Mobility, New York, 1927
9. Rocher, Guy. A General introduction to Sociology : A theoretical Perspective, Academic Publisher, Calcutta, 1990.

MILITARY SCIENCE

PAPER I WORLD MILITARY HISTORY(EARLIEST TIMES TO 1789 A.D)

PAPER CODE DEBA-110 A

External: 50

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

1. Influence of Armament on the History of World, Inter-Relationship of weapons and tactics. Winteringham's Theory and Fuller's Classification. Constant Tactical Factor.

2. The Age of Valour;

    (a) Comparative Study of Greek Phalanx and Roman Legion

    (b) Detailed Study of the Battle of Arbella (331 B.C)

(c) Battle of Cannae (216 B.C)

(d) Reforms made by Alexander the Great in the Art of Warfare.

3. The Age of Chivalry:

(a) Decline of Infantry and Emergence of Cavalry with special reference to the Battle of Adrianople (378 A.D.).

(b) Study of Battle of Hastings (1068 A.D.).

(c) Study of Battle of Crecy (1346 A.D.).

(d) Causes of the Decline of Cavalry.

(e) Influence of Feudalism, Church and Chivalry, Medieval Warfare.

4. The Age of Gun-Powder:

(a) Advent of Fire Arms and re-emergence of Infantry

(b) Impact of Science and Technology on Warfare,

(c) Military reforms and contributions of Gustavo's Adolph's and Frederick the Great.

5. The Age of Steam:

(a) Revolution in Tactics.

(b) French Revolution 1789 A.D.

(c) Napoleonic Art of War.

(d) Battle of Waterloo 1815A.D.

6. Contemporary Military Thinkers:

(a) Suntzu

(b) Kautilya

(c) Machiavelli

(d) Clausewitz

(e) Jomini

Books-Recommended:

1. Armament and History -J.F.C. Fuller.

2. Weapons and Tactics -Tome Winter Ingham.

3. Makers of Modern Strategy-E.M.Earle.

4. Conduct of War-J.F.C. Fuller

5. A Hundred Years of War-Cyril Falls

6. An Introduction to the Art of War -S.T. Das

7. SainyaVigyan-B.N. Maliwal.

Paper II   Practical

PAPER CODE DEBA-110 B

Practical: 50

1. **MAP**, its definition, Characteristics, Classification, Marginal information of a Topo-sheet and its utility for Military.

2. **CONVENTIONAL SIGNS** : Military and Geographical.

3. **GRID SYSTEM** : Four figure and six figure Map References.

4. **SHEET NUMBER**: Million Sheets 'Quarter inch sheets' 'Half inch Sheets' 'One inch Sheet' and index of Sheets.

5. **SCALE** : Definition, Three methods of representing scale, inter-converion of Statement' into R.F. construction of simple scale line and the comparative scale lines.

6. **NORTH** : "Types of North" and finding out True North Direction by equal Altitude Method, Watch Method, Compass Method.

7. Bearing and Inter-conversions of Bearings in detail.
8. Liquid Prismatic Compass functions of its various parts, and the following exercises on the Prismatic Compass.
   (a) To determine magnetic North by Compass.
   (b) Setting the MAP by Compass.
   (c) To find out the bearing of a point from other point situated on the ground.
   (d) To determine own's and enemy's position on the MAP by Re-section and Inter-section methods with the help of compass.
   (e) To set the compass in a particular direction for night march.
9. Determination of Individual Compass Error (ICE).
10. Service Protractor: its *types and uses.*

Books Recommended:

1. Military Map Reading by Gale and Polden.
2. 'Samrik Mancnitra Pathan' (Hindi) Professor-Hazari Lai.
3. 'Prakriyatmak Sanya Vigyan' (Hindi): Vol. I & II by B.N. Maliwal.
4. 'Sainik Manchitra Vigyan' MP. Verma.

GEOGRAPHY

PAPER I INTRODUCTION TO GEOGRAPHY & GEOGRAPHY OF INDIA

PAPER CODE DEBA-111 A

External: 50

Note:
1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.
2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I

(i) The nature of geography; objectives and relevance; place of geography in the classification of sciences; geography and other disciplines;

(ii) Geography as the study of environment; man-environment relationship, ecology and ecosystem; environmental determinism, possibilism. Non-determinism.

Section II

(iii) Use and relevance of map making techniques; and statistical methods in Geography (Mean, Median & Mode).

(iv) Field work collection of primary data through physical and socio-economic surveys; Basic methods of statistical analysis of data and preparation of maps. (Standard Deviation and Covariance).

(v) Introduction to modern techniques, use of air photos and satellite imageries, Remote Sensing as a tool for data generation and mapping.

Section III

(i) India in the context of Southeast and South Asia;, India, a land of diversities; unity within deversities. or Relief Regions and Drainage systems of India.

(ii) Climate of India, climatic regions of India/Soil types of India their distribution.

(iii) Minerals and power resources. Utilization and conversation of mica, Iron, coal and Bauxite; Hydre and thermal power resources. Spatial distribution of population and density; population exploring urbanization.

Section IV

(i) Green Revolution vis-à-vis traditional farming; production and distribution of following major crops; wheat, rice, sugarcane, cotton, tea. Industries: Cotton Textile; Iron & Steel, Sugar; and Automobile.

(ii) Contemporary issues; regional disparity; poverty, population. Explosion, globalization.

(iii) Impact of development on Environment, Social and ethnic tension; gender discrimination and empowerment of women.

Suggested Readings

1. Deshpande CD. India-A Regional Interpretation Northern Bank Centre, New Delhi-1992.
2. Former, B.H. An Introduction to South Asia, Mehtuen, London, 1983.
3. Govt, of India: India-Reference Annual, 2001 Pub. Div, New Delhi-2001.
4. Govt, of India: National Atles of India, NATMO Publication, Calcutta.
5. Govt, of India: The Gazette of India, Vol. I & III Publication Division, New Delhi-1965.
6. Mitra A : Levels of Regional Development India Census of India Vol. I, Part-I-A (I) & (II) New Delhi-1967.
7. Routray, J.K. Geography of Regional Disparity Asian Institute of Technology, Bangkok, 1993.
8. Shafi, M : Geography of South Asia, McMillan & Co. Calcutta, 2000.
9. Singh.R.L. (ed.) India : A Regional Geography. National Geographical Society India, Varanasi, 1971
10. Spate H.K. and Learmonth, A. T.A.: India and Pakistan-Land, People and Economy Methuen & Co., London, 1967.
11. Valdiya, K.S. Dynamic Himalaya, University-Press, Hyderabad, 1990.
12. Wadia. D.N.: Geology of India, McMillan & Co., London-1967.
13. Abler Ronald R. et al Geography's Inner Worlds; Pervasive themes in contemporary American Geography; Rout ledge New Jersey. 1992.
14. Dikshit R.D.: The Arts and Science of geography-Integrated Readings Prentice Hall of India, New Delhi, 1994.
15. Dikshit R.D.: Geographical Thought-A Contextual History of Ideas. Prentice Hall of India P Ltd.

PAPER II PRACTICAL

PAPER CODE DEBA-111 B

Practical: 50

Unit I

The nature and scope of cartography Scale. R.F., Plain, Comparative and Diagonal, Representative fraction, Statement of scale, Classification of maps. Quantitative and qualitative (theory only)

Unit II

Types of cartographic symbols and their uses : (a) Point (b) Line (c) Area

Representation of Population Data (Density, Distribution, Growth and Age and Sex Pyramid)

Representation of Agricultural date (Use Erg graph, Bar Diagram and pidiagram).

Representation of Industrial and transport Data (Flow Line Chart, locational map, Graduated circle) (Point methods, Geometica symbol).

Unit III

Chain and Tape Survey

ENVIRONMENTAL STUDIES
PAPER CODE DEBA-112

External: 100

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit I

The Multidisciplinary nature of environmental studies. Definition, scope and importance. Need for Public awareness

Unit II Natural Resources

Renewable and non-renewable resources:

Natural resources and associated problems:

Forest resources : Use and over-exploitation : deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.

Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits & problems,

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

Food resources: World food problems, changes, caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.

Energy resources : Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies.

Land resources : Land as a resource, land degradation, man induced landslides, soil erosion and desertification.

Role of and individual in conservation of natural resources.

Equitable use of resources for sustainable life styles.

Unit III Ecosystems

Concept of an ecosystem.

Structure and function of an ecosystem.

Producers, consumers and decomposers.

Energy flow in the ecosystem.

- Ecological succession.
- Food chains, food webs and ecological pyramids,
- Introduction, types, characteristic features, structure and function of the following ecosystem :
  a. Forest ecosystem.
  b. Grassland ecosystem.
  c. Desert ecosystem.
  d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

Unit IV Biodiversity and its conservation

- Introduction - Definition: Genetic, species and ecosystem diversity.
- Biogeographically classification of India.
- Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values.
- Biodiversity at global, National and local levels.
- India as a mega-diversity nation.
- Hot-spots of biodiversity.
- Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts.
- Endangered and endemic species of India.
- Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity. (8 lectures)

Unit V Environmental Pollution

Definition, causes, effects and control measures of:

(a) Air pollution
(b) Water pollution
(c) Soil pollution
(d) Marine pollution
(e) Noise pollution
(f) Thermal pollution
(g) Nuclear hazards

- Solid waster management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution.

Pollution case studies Disaster management: floods, earthquake, cyclone and landslides.

Unit VI Social issues and the Environment:

- From unsustainable to sustainable development.
- Urban problems related to energy.
- Water conservation, rain water harvesting, watershed management.
- Resettlement and rehabilitation of people : its problems and concerns. Case studies.
- Environmental ethics: Issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation.
- Consumerism and waste products.
- Environment Protection Act.
- Air (Prevention and Control of Pollution) Act.
- Water (Prevention and control of Pollution) Act.
- Wildlife Protection Act.
- Forest conservation Act.
- Issues involved in enforcement of environmental legislation.
- Public awareness.

Unit VII Human population and the Environment

Population growth, variation among nations. Population explosion - Family Welfare Programme. Environment and human health. Human Rights. Value Education.

– HIV/AIDS.

– Woman and Child Welfare.

Role of Information Technology in Environment and human health.

Case Studies.

Unit VIII Field Work

- Visit to a local area to document environmental assets river/forest/grassland/hill/mountain.
- Visit to a local polluted site-urban/Rural/industrial/ Agricultural.
- Study of common plants, insects, birds.
- Study of simple ecosystems - pond, river, hill slopes, etc.

References

1. Agarwal, K.C. 2001 Environmental Biology, Nidi Pub. Ltd. Bikaner.
2. Bharucha, Frach, The Biodiversity of India, Mapin Publishing Pvt: Ltd. Ahmedabad 380013, India, Email: mapin(g)jcenet.net (R).
3. Brunner R.C. 1989, Hazardous Waste Incineration, Mc.Graw Hill Inc. 480p.
4. Clark R.S., Marine Pollution, Slanderson Press Oxford (TB).
5. Cunningham, W.P. Cooper, T.H. Qorhani, E. & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Pub. House, Mumbai1196p.
6. De A.K. Environmental Chemistry, Wiley Eastern Ltd.
7. Down to Earth, Centre for Science and Environment (R).
8. Gleick, H.P., 1993. Water in crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute. Oxford Univ. Press. 473p.
9. Hawkins R.E, Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay. (R)
10. Heywood, V.H. & Watson, R.T 1995. Global Biodiversity Assessment. Cambridge Uni.
11. Jadtrav, H & Bhosale.-VM-. 1995^EnvifOHmefital Protection and Laws. Himalaya Pub. House, Delhi 284p.
12. Mckinney, M.L. & Schoch, RM 1996. Environmental Science Systems & Solutions, Web enhanced edition. 639p.
13. Mhaskar A.K., Matter Hazardous, Tekchno-Science Publications (TB).
14. Miller T.G. Jr. Environmental Sciences, Wadsworih Publishing Co. (TB).
15. Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574p.
16. Rao M.N. & Datta, A.K; 1987. Waste Water Treatment." Oxford & IBH Publ. Co: Pvt. Ltd.
17. Sharma, B.K. 2001, Environmental Chemistry, Goel Publication House, Meerut.
18. Survey of the Environment, The Hindu (M).
19. Townsend C, Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science (TB).
20. Trivedi R.K., Handbook of Environmental Laws, Rules, Guidelines, Compliances and Standards, Vol. I and II Enviro Media(R).
21. Trivedi R.K. and P.K. Goel, Introduction to air pollution, Techno Science Publication (TB).
22. Wagner K.D., 1998. Environmental Management, W.B. Saunders Co. Philadelphia, USA.
23. A text book environmental education G.V.S. Publishers by Dr. J.P Yadav.

B.A. PART-II

ENGLISH (COMPULSORY)

PAPER CODE DEBA-201A

<div align="right">

External: 35
Internal: 15

</div>

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Text Prescribe

1. An Anthology of Poems edited by Dr. S.S. Sangwan published by Oxford University Press, New Delhi.

2. An Anthology of One-Act Plays edited by Dr. S.K. Sharma, published by Oxford University, Press, New Delhi.

3. Selected episodes form Mahabharata by C. Raja Qojmlachari, Published by Bharatiya Vidya Bhavan Bombay

4. The first 63 chapters from episode "Ganapti", "The Scribe" to" Yudhistra Seeks Benediction" are prescribed for study.

5. A text book of Grammar written by Sh. Inderjit Kumar of G.M.N. College, Ambala Cantt and Dr. Sanjay Kumar, Reader and Head, Ch. Devi Lai University, Sirsa Published by Kurukshetra University, Kurukshetra.

Q. l Explanation with reference to the context. Candidate will be required to attempt two passages, one each from the book of poems and the book of one act plays. The passages will have internal choice. (6 marks)

Q. 2 Short-answer type questions.

Four short-answer type questions will be set on the prescribed poems and four short-answer type questions will be set on the prescribed book on fiction. The students will be required to attempt five questions out of given eight questions selecting at least two from each text (i.e. book of Poems and Books of Fiction). (5 marks)

Q. 3 One essay-type question (with internal choice) will be set on each of the prescribed book of poems and one-act plays, students will be required to attempt one question each from both the texts. (6 × 2 = 12 marks)

Q. 4 One essay-type question (with internal choice) will be set on the book of Fiction. (8 Marks)

Q. 5 Items based on the exercises appended to the one-act plays. (4 Marks)

PAPER CODE DEBA-201B

<div align="right">

External: 35
Internal: 15

</div>

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Q.1 Questions on Grammar on the prescribed items (use of Tenses in Communicative situations, Subject-verb concord, active and passive voice, narration, common errors, word power, vocabulary, idioms and phrases) based on prescribed text-book of Grammar but not necessary the same as those given in the textbook. (12 Marks)

Q.2 Questions on the following items in the prescribed hook of Grammar,

    a) Transcription of simple words, listed in the text book *of* Grammar, The students will be required to transcribe 10 words out of given 15 words from the text book.   (5 Marks)

Q.3 Comprehension passage.(with five questions at the end)   (7.5 marks)

Q.4 Precise A passage of about 250 words will be given.   (5 marks)

Q.5 Translation (from English to Hindi, of a passage consisting of 9 to 10 sentences.)   (5.5 Marks)

PAPER CODE DEBA-202

हिन्दी अनिवार्य

External: 70
Internal: 30

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

पाठ्य पुस्तक/ पाठ्य विषय

1. अभिनव काव्य गरिमा स. डॉ. राम नरेश मिश्र, प्रकाशक खाटू श्याम प्रकाशन, रोहतक, दिल्ली।

2. ''अभिनव गद्य गरिमा'' कुरूक्षेत्र विश्वविद्यालय।

3. अंधेर नगरी–भारतेन्दु हरिश्चन्द्र।

4. जहाज का पंछी (संक्षिप्त संस्करण) इलाचन्द जोशी।

5. हिंदी साहित्य का इतिहास (आधुनिक काल)।

निर्देश :-

1. काव्य पुस्तक से व्याख्या के लिए चार पद्यावरण पूछे जाएंगे जिनमें से परीक्षार्थियों को दो की व्याख्या करनी होगी। प्रत्येक व्याख्या 6 अंकों की होगी। पूरा प्रश्न 12 अंकों का होगा।

2. काव्य पुस्तक से संबंधित किन्हीं तीन कवियों का साहित्यक परिचय पूछा जाएगा जिनमें से परीक्षार्थियों को किसी एक का उत्तर देना होगा। यह प्रश्न 7 अंकों का होगा।

3. अंधेर नगरी से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों के उत्तर देने होगें। प्रत्येक प्रश्न 5 अंकों का होगा।

4. ''जहाज का पंछी'' उपन्यास से चार आलोचनात्मक प्रश्न पूछे जाएंगे। जिनमें से परीक्षार्थियों को 2 प्रश्नों के उत्तर देने होगें। प्रत्येक प्रश्न 8 अंकों का होगा।

5. ''अभिनव गद्य गरिमा'' से चार गद्यांश पूछे जाएंगे जिनमें से परीक्षार्थी को दो की सप्रसंग व्याख्या करनी होगी। प्रत्येक व्याख्या 6. 5 अंकों की होगी। इससे चार लघूत्तरी प्रश्न पूछे जाएंगे। जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्न के उत्तर देने होगें।

6. आधुनिक हिन्दी साहित्य के इतिहास से इस प्रश्न अति लघूत्तरी पूछे जाएंगे जिनमें से परीक्षार्थियों को 8 प्रश्नों का उत्तर देना होगा। प्रत्येक का उत्तर लगभग 50 शब्दों में देना होगा । प्रत्येक प्रश्न 1.5 अंकों का होगा । पूरा प्रश्न 12 अंकों का होगा ।

HISTORY

OPTION I   HISTORY OF INDIA (EARLIER TO 1526-1857)

PAPER CODE DEBA-203

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I

1. Mughal Empire till 1707-Relations with Rajputs, Sikhs, deccan Kingdom, Maraths, Parsia and Cenral Asia.
2. Mughal administration and institutions : administrative structure, land revenue system : manasabdari and jagirdari.

Section II

1. Economic and technological development : agriculture, industry, trade, commerce and urban centers.
2. Society under Mughals (i) Social classes-ulema; nobility, Zamindars, peasantry, artisans, (ii) Status of Women.
3. Art and architecture under Mughals.
4. Religion and Culture : Religious policies of Akbar and Aurangzeb, Sufism; Bhakti Movement and Composite Culture.
5. Decline and disintegration of Mughal Empire.

Section III

1. Advent of European powers : Portuguese; French; and English.
2. Expansion and Consolidation of British rules: Occupation of Bengal, Warnen Hastings, Lord Wellesley, Lord Hastings, Lord Dalhousis.
3. Social Changes : Spread of Western education upto 1854: Raja Ram Mohan Rai and early social reformers; development of means of communications.
4. Economic Changes : Land revenue settlement-Permanent Settlement, Rayatwari and Mahalwari; decline of cottage industry and industrialization.
5. Early resistance against Company's rule; Revolt of 1857 Causes; nature and results.

Section IV

Maps

1. Political Condition of India in 1526.
2. Mughal Empire at the death of Akbar (1605).
3. Indian Powers and Kingdoms around 1765.
4. Centres of early resistance to Company's Rule.
5. Major Centres of Revolt of 1857-58.
6. Areas and Centres of Socio-religious movements in early 19th century India.

Section V

Objective type questions.

Suggested Readings

Verma. H.C. Madhyakaleen Bharat-Vol-II (154)

POLITICAL SCIENCE
OPTION-1 BHARTIYA SARKAR & RAJNITI
PAPER CODE DEBA-204

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Part-A

The Making of India's Constitution and its sources. Basic features of India's Constitution.

Preamble, Fundamental Rights and Duties and the Directive Principles of State Policy.

Union Government: President, Parliament, Cabinet and Prime Minister.

Part-B

Centre-State Relations

Supreme Court and the Constitutional Process.

Political Parties : National and Regional Parties.

The Election Commission Electoral Reforms. Major issues in Indian Political, Caste, religion. Language Region, Poverty-Alleviation.

Part-C

Short answer questions, at least five, spread over the entire syllabus. Objective type (multiple choice) questions spread over the whole syllabus.

Suggested Readings

G. Austin, The Indian Constitution: Comer Stone of Nation, Oxford, Oxford University Press, 1966.

G. Austin, Working a Democratic Constitution : The Indian Experience, Delhi, Oxford University Press 2000.

D.D. Basu, An Introduction to the Constitution of India, Nevs^ Delhi, Prentice Hall, 1994.

D.D. Basu and B. Paarekh (ed). Crisis and Change in contemporary India, New Delhi, Sange, 1994.

C.R Bhambhri, The Indian State: Fifty years. New Delhi, Shipra, 1997.

P. Brass, Politics of India Since Independence Hyderabad, Orient Longman, 1990.

P. Brass, Language, Region and Politics in North India London, Cambridge University Press, 1974.

A. Chanda, Federalism in India: A Study of Union-State Relations, London, George Allen & Unwin, 1965.

S. Cambridge and J. Harriss, Reinventing India: Liberalization Hindu Nationalism and Popular Democracy, Delhi, Oxford University Press, 2001.

B.L'. Fadia, State Politics in India, 2 vols, New Delhi, Rediant PubHshers,1984.

R.L. Hardgrave, India: Government and Politics in a Developing Nations, New York, Harcourt, Braqce and World, 1965.

N.G. Jayal (ed.). Democracy in India, Delhi, Oxford University Press, 2001.

S. Kaushik (ed.) Indian Government aad Politics, Delhi University, Directorate of Hindi Implementation, 1990.

A. Kohli, Democracy and Discontent: India's Growing Crisis of Govemability, Cambridge, Cambridge University Press, 1991.

R. Kothari, Politics in India, New Delhi, Orient Longman, 1970.

R. Kothari, Party System and Election Studies, Bombay, Asia Publishing House 1967.

W.H. Morris Jones, Government and Politics in India, Delhi, Bl Publications, 1974.

A.C.Noorani, Constitutional Questions in India : The President, Parhament and the States, Delhi, Oxford University Press, 2000.

M. V. Pylee, An Introduction to the constitution of India, New Delhi, 1998.

A. Ray, Tension Areas in India's Federal System, Calcutta, The World Press, 1970.

N.C. Sahni (ed.). Coalition Politics inlndia, Jullundher, New Academic Pubhshing Company, 1971.

J.R. Siwach, Dynamics of Indian Government & Politics New Delhi,SterHng Publishers, 1985.

R. Thakur, The Government & Politics of India, London, Macmillan,1995.

ECONOMICS

OPTION-1 MACRO ECONOMICS

PAPER CODE- DEBA-205

External 70
Internal 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit I

National income : Concepts and measurement, Say's Law of Market & the classical theory of employment, Keynes objection to the classics theory; Keynesian employment theory, consumption function Autonomous and induced investment; Investment multiplier, Theories of investment, MEC and accelerator.

Unit II

Trade Cycle theories-Samueison and Wicks, Control of trade cycles Growth models Harrod-Domar model and Solow model.

Unit III

Money-meaning functions and significance, Quantity theory of monej Keynesian theory of money, Inflation doman-pull and cost-push; effect and control of infection; Functions of commercial banks and Cento Bank; Credit and control; Recent reforms in banking sector in India.

Unit IV

Nature and Scope of Public Finance; The principle of maximum social advantage; Classification, canons and effects of Public expenditure Classification, cannons and effects of taxation; Impact and incident taxes; Characteristics of a good tax system, Recent tax reforms India-an overview; Sources and effects of public debt; Methods of del redemption; Recommendations of Tenth Finance Commission.

Reading list

Ackley, G (1976), Macroeconomics, Theory and Policy. Macmilk Publishing Company New York.

Day, A.C.I., (I960), Outline of Monetary Economics, Oxford Universil Press, Oxford.

Gupta, S.B (1994), Monetary Economics, S. Chand and Co., Delhi. -

Heijora, B.J. and F.V. Pleg (2001), Foundation of Moder, Macroeconomic, Oxford University Press, Oxford.

Lewis, M.K. and P.D. Mizan (2000), Monetary Economics, Oxfor; University Press, New Delhi.

Shapiro, E (1996), Macroeconomic Analysis; Galgotia Publications, New Delhi.

Ackley, C (T996)y!Maer0economic; Theory,,and Policy Macjogilb Publishing Co. New York.

Bhargava, R.N. (1971), The Theory and working of Union Finance i. India Chaitanya Publishing House, Allabhad Gupta, S.B.(1994).

संस्कृत (ऐच्छिक)
PAPER CODE- DEBA-206

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit-I

क) संस्कृत व्याकरण:-

संस्कृत व्यवहार साहस्त्री (प्रकाशक संस्कृत भारती, माता मंदिर गली झण्डेवालन नई दिल्ली) पुस्तक में से 6 से 16 विषयों तक संस्कृत मे सरल प्रश्नोत्तर रूप लिखित परीक्षा (6 परीक्षा, 10 चलविम्, शिलका, 12 स्त्रिय:, 13 वाक्य, 14 वेश भषणति, 15 काषलय, स्वस्थम्)

8 अंक

Unit-II

एकक-2 संस्कृत ग्रन्थानुशलम्

क) रामायणम् (बालकाण्डम् प्रथम अध्याय)   8 अंक

ख) श्रीमद्भागवद्गीता (द्वितीय अध्याय)   8 अंक

ग) रघुवंशम (द्वितीय, सर्ग)   8 अंक

श्लोकों की व्याख्या व आलोचना प्रश्न, सार आदि)

Unit-III

एकक-3 संस्कृत व्याकरणम्

क) समास-अव्यीभाव, कर्मधारय, द्वन्द्व, बहुव्रीहि 7

ख) वाच्य-कर्तृवाच्य, कर्मवाच्य, भाववाच्य आदि। 4

ग) कृत्प्रत्यय-कत्वा, तुमुन, व्यचत्, क्त, क्तवतु, शनृशावच, कृत्यत्, अनीयर। 4

घ) नद्धेत प्रत्यय-न्युत्इति, ठक्, त्व, तल्, छ 4

ड) जंत रूप व संस्कृत रूप-भु, पठ्, गम्, पा, लिख, श्रृष्ट,

मृ, दा, स्था, हन् धातुओं के लट् लकार, प्रथम पुरूष एकवचन में 4

Unit-IV

एकक-4 लघु सिद्धांत कौगुदी

(प्रत्याहार सूत्र तथा संज्ञा प्रकारण सोदाहरण सूत्र व्याख्या) 7

Unit-V

एकक-5 अनुवाद, पत्र लेखनम्

1. हिन्दी से संस्कृत में सरल अनुवाद 4

2. सरल विषयों पर संस्कृत में पत्र लेखन। 4

MATHEMATICS

ADVANCE CALCULUS

PAPER CODE- DEBA-207 A

External: 25
Internal: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (3 Questions)

Definition of a sequence. Theorems on limits of sequences. Bounded and monotonic sequences. Cauchy's convergence criterion. Sequential continuity. Properties of continuous functions. Uniform continuity. Series of non-negative terms. Comparison tests. Cauchy's integral test. Ratio tests. Raabe's logarithmic, de Morgan and Bertrand's tests, Gauss test. Alternating series Laibnitz's Theorem. Absoiute and conditional convergence.

Section II (5 Questions)

Mean value theorems and their geometrical interpretations.Darboux's intermediate value theorem for derivatives. Taylor's theorem with various forms of reminders. Limit and continuity of functions of two variables. Partial differentiation, Change of variables. Eider's theorem on homogeneous | functions. Taylors theorem for functions of two variable. Jacobians. | Maxima, minima and saddle points of functions of two variables. legrange's multiplier method.

Section III (2 Questions)

Envelopes, Evolutes, Indeterminate forms.

Section IV (2 Questions)

Beta and Gamma functions. Double and triple integrals. Dirichlets' integrals. Change of order of integration in double integrals.

Books Recommended

1. T. M, Apostol, Mathematical Analysis, Narosa Publishing House, New Delhi. 1985.
2. R.R. Goldberg, Real Analysis, Oxford & I.B.H. Publishing Co., New Delhi, 1970.
3. D. Soma Sundaram and B. Choudhary, A First course in r Mathematical Analysis. Narosa Publishing House, New Delhi, i 1997.
4. Murray R. Spiegel, Theory and Problems of Advanced Calculus. Schaum Publishing Co. New York.
5. S.C. Malik, Mathematical Analysis, Wiley Eastern Ltd., New Delhi.
6. Earl D. Rainville Infinite Series. The Macmillian Company, New York.
7. Shanti Narayan. A Course of Mathematical Analysis. S. Chand and Company, Mew Delhi.
8. Avanced Engineering Mathematics, ITP : Company, USA
9. Alan Jafferey, Advanced Engineering Mathematics, Harcourt/ ; Academic Press, USA.
10. K..A. Stround, Advanced Engineering Mathematics, Industrial K.A. Stround, Engineering Mathematics (Indian Edition)., Replika Press Pvt. Ltd.
11. Erwin Kreyszig, Advanced Engineering Mathematics John Wiley and Sons.
12. Klialil Ahmed, Text Book of Differential Calculus, Anamaya Publishers, New Delhi.
13. Wrede, Advanced Calculus, Schaum Outline Series, Tata McGraw Hill, New Delhi.

DIFFERENTIAL EQUATIONS AND CALCULUS OF VARIATIONS

PAPER CODE- DEBA-207 B

External: 25

Internal: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (2 Questions)

Series solutions of differential equations-Power series method, Bessel, Legendre and Hyper geometric equations. Bessel, Legendre and Hyper geometric functions and their properties, recurrence and generating relations. Orthogonally of Bessel functions and Legendre polynomials.

Section II (3 Questions)

Laplace Transformation-Linearity of the Laplace transformation. Existence theorem for Laplace transforms. Laplace transforms of derivatives and integrals. Shifting theorems. Differentiation and integration of transforms. Convolution theorem. Solution of differential equations and system of differential equations using the Laplace transformation, Fourier transforms and their properties, and their application to solutions of differential equations.

Section III (3 Questions)

Partial differential equations of the first order La n grange's Solution. Some special types of equations which can be solved easily by methods other than the general method. Charpit's general method of solution and its special cases.

Partial differential equations of second and higher orders. Classification of linear differential equation of second order. Homogeneous and non-homogeneous equation with constant coefficients. Partial differential equations reducible to equation with constant coefficients.

Section IV (2 Questions)

Curves with torsion, principal normal, osculating circle, binomial, Serret-Frenet formulae, locus of centre of curvature, spherical curvature, surfaces, envelopes, edge of regression, fundamental magnitudes of the first order.

Books Recommended

1. D.A. Murry, Introductory Course on Differential Equations, Orient Longman, (India), 1967.
2. IN. Sneddon, Elements of Partial Differential Equations, McGraw Hill Book Company, 1988.
3. Frank Ayres, Theory and Problems of differential Equations, McGraw Hill Book Company, 1972.
4. SX. Ross, Differential Equations, John Wiley and Sons (Student Edition).
5. Peter V.O.'Neii, Advanced Engineering Mathematics, ITP Company,USA.   .
6. Alan Jafferey. Advanced Engineering Mathematics, HarcounV Academic Press, USA.
7. K. A. Stroud, Advanced Engineering Mathematics, Industrial Press, Inc., New York.
8. K.A. Stroud, Engineering Mathematics (Indian Edition), Replika Press Pvt. Ltd.
9. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley and Sons.
10. C.E. Weatherbiirn differential Geometry, ELBS.
11. Bronson, Theory and Problems of differential Equations, Schaum Outline Series, Tata McGraw Hill, New Delhi.
12. Duchateau, Partial Differential Equations, Schaum Outline series, Tata McGraw Hill, New Delhi.
13. Lipsehutz, Differential Geometry, Schaum Outline Se n es, Tata McGraw Hill, New Delhi.
14. Spiegel, Lapalce Transforms, Schaum Outline Sen ;s, Tat;:. McGraw Hill, New Delhi.
15. Spiegel, Theory and Problem of fourier analysis with Applications to Boundary Value Problems, Schaun> Outline Series, Tata McGraw Hill, New Delhi.

MECHANICS

PAPER CODE DEBA-207 C

External: 20

Internal: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.
2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive

examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (3 Questions)

Conditions of equilibrium of Coplanar forces. Virtual work in two dimensions. Proof of principle of virtual work and its converse for caplanar forces. Forces which may be omitted in forming the Equation of virtual work.

Section II (2 Questions)

Forces in three dimensions. Stable and unstable equilibrium.

Section III (3 Questions)

Velocities and accelerations along radial and transverse directions and along tangential and normal directions. Simple harmonic motion. Elastic strings. Motion on smooth and rough plane curve s Motion in a resisting medium. Motion of particles of varying mass.

Section IV (2 Questions)

Central Orbits, Kepler's laws of motion. Motion of a particle it-three dimensions. Acceleration in terms of different coordinate system

Books Recommended

1. S.L. Loney, Statics-Macmillan Company, London.
2. S.L. Loney, An Elementary Treatise on the Dynamics of Particle and Rigid bodies. Cambridge Universitv Press. 1956
3. E. Chorlton, Dynamics, CJ3S Publishers, New Delhi.
4. Peter V.O.'Neil, Advanced Engineering Mathematics, 1TP Company, USA.
5. Alan Jafferey, Advanced Engineering Mathematics, Harcourt/ Academic Press, USA.
6. C. A. Stroud, Advanced Engineering Mathematics, Industrial Press. Inc, New York,
7. C.A. Stroud, Engineering Mathematics (Indian Edition), Replika Press Pvt. Ltd.
8. Erwin Kreyszig, Advanced Engineering Mathematics. John Aft lev and Sons

PUBLIC ADMINISTRATION
OPTION 1-INDIAN ADMINISTRATION
PAPER CODE DEBA-208

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Feature of Indian administration; its role in the context of democratic system and socio-economic development. Centre State Relationship-Administration and Financial relations.

Role of the president, Prime Minister and cabinet in Indian Administration, cabinet Secretarial, Organization and functions of Union Minister and State Secretariat, role of the Chief Secretary in State Administration.

Preparation of the Indian Budget, its enactment Parliamentary control over Public finance in India. Role of comptroller and Auditor-General over financial Administration, composition and functions of Public Accounts Committee and Estimate Committee at the Centre.

Civil Services: Recruitment, training, promotion, discipline, morale, Union Public Service Commission. District Administration: Its Features, role and position of the Deputy Commissioner and Superintendent of Police in District Administration. Accountability of Indian Administration to the Parliament and Judiciary; administration and citized, Lokpal and Lok- Ayukt.

SOCIOLOGY

OPTION-1- RESEARCH METHODOLOGY

PAPER CODE DEBA-209

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit I

Basic Concepts in Social Research: Meaning, Scope and Significance of Social Research; Concept, hypothesis Fact and Theory.

Unit II

Scientific Study of Social Phenomena: Nature and Characteristic of Scientific Method; Objectivity and Subjectivity in social Research; Empiricism in sociology; Social Survey Social Research and its steps Research Design.

Unit III

Method of research and techniques of Data Collection: Quantitative and Qualitative Methods: Comparative Method; Observation, Case Study and content Analysis; Techniques of Date Collection, Sampling Questionnaire, Schedule and Interview.

Unit IV

Sources, Classification and presentation of Data: Primary and Secondary Sources of Data; Classification, Coding, tabulation, Graphical representation, Histograph, Polygon, Pie-Chart

Unit V

Statistical Methods in Social Research: Significance of Statistics in Social Research: Measures of Central Tendency: Mean, Mode and Medium; Measures of dispersion: Range; Mean Deviation, Standard deviation.

References

1. Goode, W.J.& Hatt Methods in Social Research, McGraw Hill Book Co. Ltd 1950.
2. Garrett. H.E. Statistics in Psychology and Education Vakils, Bombay, 1981.
3. Seltiz C. Hahedam Research Methods in Social Relations Holt Rine Hart and Winstion, 1951.
4. young, P.V. Scientific Social Survey and Research, Prentice Hall, New Delhi, 1988.
5. Kothari C.R. Research Methodology : Methods and Techniques, Wiley Eastern, Bangalore.
6. Kerlinger, F.N. Foundation of Behavioral Research Halt Rinehart and Winston, New York, 1973.

MILITARY SCIENCE
OPTION –B STUDY OF WAR
PAPER CODE – 210 A

External: 50

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Part A

Nature of War

a) Definition of War, its scope, advantages and disadvantages,

b) Evolution of War : Feudal, Dynastic, Peoples, Total and Nuclear Wars.

c) Cold War : Psychological, Economic and Diplomatic Aspects.

d) Guerilla War

e) Features of Modern War.

f) Future of War.

Principles of War

a) Selection and Maintenance of Aim.

b) Offensive action

c) Concentration

d) Economy of Force.

e) Co-operation

f) Security

g) Surprise

h) Mobility

i) Maintenance of Moral and

j) Administration

Strategy Tactics

Various definition, distinction, between Strategy and Grand Strategy Evolution of Tactics during 19th and 20th Century evolution of Strategy during 19th and 2Qth Century, strategy of Indirect-Approach-Strategy of Annihilation and Strategy of Exhaustion.

Part B

1. Indo-Pak War 1965 and 1971 A.D. with reference to the following:
    i) Causes of War
    ii) Study of War in Outline.
    iii) Political and military lessons learnt
2. Origin and Causes of World War-I and II.

Suggested Books

1. Essentials of Military Knowledge; Maj. Gen. Pal it.
2. Nature of Modern War: Cyril Falls.
3. Samrik Sidhant: M.P. Verma
4. The Art of Land Warfare : B.N. Maliwal.
5. India Wilis the War ; S.N. Rampal.
6. An Introduction of the Art of War; S.T. Das
7. The Study of Indirected Approach : Hiffle Hart.
8. Yoddh Mimansa by Prof. M.C. Maheshwari.
9. The Study of Military History : Shappered.

PAPER-II (PRACTICAL)

MAP READING

PAPER CODE – 210 B

Practical: 50

Scale

Construction of Time Scale and Diagonal Scale. Bearing and Inter- Conversion of Bearing with I.C.E Bining Position on the girdded Map by intersection Method and Resection Method Relief features and their representation on the map. Types of slope and their representation on the map by CONTOUR lines. Gradient and slope of Degrees. To determine Inter-visibility between tow point; gradient method sim proportion method and section, Drawing method. To draw a field sketch from a given Route Report. Enlargement and Reduction of Maps. To prepare a Route Report from a given narrative data.

GEOGRAPHY

PHYSICAL GEOGRAPHY

PAPER CODE – 211 A

External: 50

Section-I

The nature and scope of physical Geography : the place of n Geomorphology in physical Geography, Geological Time scale, Earth's interior, Wegner's theory of continental Drift; plate Tectonics'. Earth movements organic and eperegenic isostasy, earthquakes and volences.

Section-II

Rocks origin and composition of rocks; weathering: (river glacial wind, karst and coastal) Process of Geomorphology and land form, Mass wasting and soil formation. Evolution of landscape; concept of cycle of erosion.

Coastal environment. Application of Geomorphology to human activities, settlement transport land-use.

Section-III

Weather and climate; elements of weather and climate and their causes. Composition and structure of the atmosphere. Atmospheric temperature: Insulation, vertical, horizontal and seasonal distribution of Global temperature. Atmospheric pressure and winds; vertical and horizontal distribution of pressure; planetary and local winds. Atmospheric moisture; humidity, evaporation; and condensation hydrological cycle, types of precipitation world patterns of rainfall; Air masses concept and classification. Atmospheric disturbances; tropical and temperature cyclones.

Section-IV

Surface configuration of the ocean floor, continental shell continental slope, abyesal plain, mid-oceanic and oceanic trenches Distribution of temperature and salinity of oceans and seas. Circulation of oceanic waters;currents of Atlantic,, pacific and Indian oceans Ocean as starehause of resources for the future.

Suggested Readings:

Cambridge University Press 2000.

Monkhouse. F & J Principles of physical Geography. Hodder and Stoughton, London, 1960.

Pitty. A.: Introduction to Geomorphology Methuen, London, 1974.

SharmaH.S.: Tropical Geomorphology, concept New Delhi,1987.

Singh, S.: Geomorphology, Prayagi Puslkalaya, Allahbad, 1998.

Strahler. A.N.: Environmental Geo-Science,Hamilton Publishing Santa Barbara, 1973.

StahlerA.N. and Stahler A.N.: Modern physical Geography, John Wiley & Sons. Revised edition, 1992.

Wooldridge, S.W. and Moygen, R.S. The physical basis of geography. An outline of Geomorphology, Longman Green & Co.,$_3$Routledge, 1998.

Barry, R.G. & Chaley, RJ.: Atmosphere, Weather and Climate, Routledge, 1998.

Trewar, G.T.: An Introduction to climate, International Students Edition, Mcgraw-Hill, New yORK, 1988.

Garrison, 1. Oceanography Wedsworth. Com. USA. 1998.

Kind, CAM: Oceanography for Geographers E. Arnold, London,1938.

PAPER-II (PRACTICAL)

PAPER CODE – 211 B

Practical: 50

Section I

Methods of showing relief (hachures shading contours and layer tints) ; Representation of different landforms by conturs. Drawing of profiles; cross and long profiles, superimposed. Composite and projected profiles and their relevance in land form mapping and analysis.

Section II

Representation of temperature, Pressure and rainfall data line (Examples isotherms, isobars and isohyets); and bar graphs.

Drawing of climograph and hythergraph and their interpretation. Weather maps of India published by Indian Metrological, Department for July and January; Interpretation of Weather Maps.

Section Ill

Plane-Table Surveying : Plane Table survey by radiation intersection and traversing method.B.A. PART –III

B.A. PART III

ENGLISH (COMPULSORY)

PAPER- A

PAPER CODE DEBA-301 A

External: 35
Internal: 15

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

1. **POETRY: The Eternal Muse** edited by Dr. Brajesh Sawhney,Reader. Dept. of English, K.U.K., and Neena Malhotra, Head, Dept.of English, S.D. College, Ambala Cantt.

2. **PLAY** : Macbeth by william Shakespeare.

Scheme of Examination

Q. 1 (a) One passage (with internal choice for explanation with reference to. the context from **The Eternal Muse** will be set.

(b) Similarly, there will be one passage (with internal choice) for explanation with reference to the context from Macbeth.   (4+4=8 Marks)

Q.2 Two short questions (with internal choice) each on Poetry and the Play requiring critical understanding of the poems and the play.   (4+4=8 Marks)

Q.3 One essay-type questions (with internal choice) on the book of poems, requiring first hand appreciation of the poems.
(7 marks)

Q.4 *One* essay-type question (with internal choice) on the play requiring first-hand- appreciable of the text, Including appreciation of theme/characters/ plot.   (7marks)

Q.5 (a) 5 out of short-answer type questions on the poems it **(The Eternal Muse)** to be attempted.   (5 Marks)

ENGLISH (COMPULSORY)

PAPER- B

PAPER CODE DEBA-301 B

External: 35
Internal: 15

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

PRESCRIBED BOOKS

1. A Text book of English Grammer and Composition edited by (i) Dr. S.C. Sharma, Head Dept. of English, University College, kurukshetra, (ii) Sh. ShivNaain, Sr. Lecturer in English, University College, Kurukshetra, Dr. Gulab and Mr, Pankaj of Hindu College, Sonepat.

   The text book of Grammar will focus on the following items;

a)	Essay : 400 words	8 marks
b)	Letter/Application	5 marks
c)	Precis	7 marks
d)	Vocabulary-Synonyms, Antonyms	4 marks
	One Word Substitution	
e)	Correction of incorrect sentences/	4 marks
	Do as directed	

2. The spectrum of life: A Selection of Modern Essays by Late Dr. M.K. Bhatnagar, Ex Prof. Dept. of English M.D. University, Rohtak -   7 Marks

Scheme of Examination

Q .1 The Students shall be required to attempt an essay of approximately 400 words, on any one topic out of the four given in the question paper. The topics may be of descriptive or general nature.

Q.2 One question with internal choice will be set asking the students to write a letter/application. (Personal/Business Correspondence)

Q.3 Precis of a given passage (with internal choice)

Q.4 Grammar (vocabulary; synonyms, Antonyms, one-word-substitution and correction of incorrect sentences, (including items covered in the exercise contained in the book of essays).

Q.5 One essay type question with internal choice on the Spectrum of life : A Selection of Modern Essays.

PAPER CODE DEBA-302

हिन्दी (अनिवार्य)

External: 70
Internal: 30

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

पाठ्य-पुस्तक विषय

1. हरियाणा लोकधारा : सम्पादक डॉ0 मीरा गौतम प्रोफेसर हिन्दी विभाग, कुरूक्षेत्र विश्वविद्यालय, कुरूक्षेत्र।

   1. गरीबदास 2. नितानंद 3. बाजे भगत 4. लखमी चन्द 5. मांगे राम 6. साधू राम 7. बस्तीराम 8. फौजी मेहर सिंह 9. तारा दस विलक्षण 10. जयनारायण कोशिक 11. जगदीश चन्द्र वत्स 12. भारत भूषण सांघीवाला।

   नोट : कवि परिचय, व्याख्या एवं प्रश्न पर लिखे गए कवियों में से पूछे जाएंगे। गद्य भाग में से आसा की किरण (हरियाणवी कहानी) साझ और (हरियाणवी नाटक) तथा स्वर्ण जयन्ती (हरियाणवी एकांकी) पाठ्यक्रम में रखे गये हैं।

   नोट : गद्य भाग में से केवल दो आलोचनात्मक प्रश्न पूछे जाएंगे, जिनमें से किसी एक का उत्तर देना होगा।

2. प्रयोजनमूलक हिंदी और काव्यांग – डॉ नरेश मिश्र अभिनव प्रकाशन, नई सड़क दिल्ली।

अंक विभाजन

1. हरियाणवी जनपदीय भाषा और साहित्य पर आधारित कवियों में से व्याख्या के लिए चार अवतरण पूछे जाएंगे। परीक्षार्थियों को इनमे से दो की व्याख्या करनी होगी। प्रत्येक व्याख्या 4 अंकों की होगी।

2. निर्दिष्ट कवियों में से किन्हीं दो कवियों का साहित्यिक परिचय पूछा जाएगा। परीक्षार्थियों को इनमें से किसी एक का परिचय देना होगा। यह प्रश्न 6 अंकों का होगा।

3. निर्धारित कवियों की अनुशीलनी में दिए गए प्रश्नों में से दो प्रश्न पूछे जायेंगे। परीक्षार्थियों को इनमें से किसी एक का उत्तर देना होगा। यह प्रश्न 5 अंकों का होगा।

4. गद्य भाग में से पूछे गए दो आलोचनात्मक प्रश्नों में से कोई एक प्रश्न करना होगा। यह प्रश्न 5 अंकों का होगा।

5. प्रयोजनमूलक हिन्दी और काव्यांग पर आधारित पाठ्य पुस्तक से 4 प्रश्न पूछे जाएंगे, इनमें से परीक्षार्थियों को दो प्रश्नों के उत्तर देने होंगे। प्रत्येक प्रश्न 7 अंकों का होगा।

6. **हिन्दी साहित्य का इतिहास** (आदिकाल और मध्यकाल) से 4 प्रश्न पूछे जायेंगे इनमें से किन्हीं दो प्रश्नों के उत्तर देने होंगे। प्रत्येक प्रश्न 7 अंकों का होगा।

7. हिन्दी साहित्य का इतिहास (आदिकाल-मध्यकाल) और प्रयोजनमूलक हिंदी पाठ्य पुस्तक दोनों में से 5-5 अति लघुत्तरी प्रश्न पूछे जाएंगे, इनमें से किन्हीं पाँच प्रश्नों के लगभग 50 शब्दों में उत्तर देने होंगे। प्रत्येक प्रश्न 2 अंक का होगा और पूरा 10 अंकों का होगा।

8. काव्यांग से दो रसों के और दो अलंकारों के सोदाहरण लक्षण पूछे जाएंगे। इनमें से एक रस और एक अलंकार का लक्षण सोदाहरण लिखना होगा। यह प्रश्न 4+4=8 अंकों का होगा।

HISTORY

OPTION-2 HISTORY OF MODERN WORLD

PAPER CODE DEBA-303

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I

1. Prehistoric huntergatheres : Paleolithic and Mesolithic cultures.
2. Food produces and Villages Settlements.
3. bronze age civilization : Egypt and Mesopotamia – Socio Economic Structure, Science and Technology.
4. Iron Age civilization : Greece and Rome –Policy, economy and society
5. Origin of feudalism in western and central Europe : Manorial system, Rise of Inter – dependency, Position of peasantry under feudalism Role of Church.
6. Feudal Dynamism: Technology innovation, Population growth, Revival of long distance trade and rise of town, Decline of feudalism.

Section II

1. Arabia before Islam.
2. Rise of Islam Prophet and Pious Caliphs
3. Evolution of Islamic state with special reference to state under Ummayids and Abbasids.
4. Society under umayyads and Abbasids.
5. Administrative structure under ummayyads and Abbasids.

Section III

Maps

1. An outline of Bronze Age civilizations indicating important sites.
2. Location of important town of Greek Civilization.
3. Location of important towns of Roma World.
4. Trade routes and towns under Arab Empire.

Section IV

Objectives types Questions:

Suggested Readings:

Anderson P. Passages from Antiquity to Marc Bloch Feddalism Feudal Society; 2 Vols.

Henri Pirence, Social and Economic History of Medival Europe.

Maurice Dobb, Studies in the Development of Capitalism.

White Jr. Lynn, Medieval Technology and social Change.

Mukhia, Harbans, The Feudalism Debate (in Hindi also).

Gupt, P.S. (ed.) Adhunik Pashim Ka Udhay (in Hindi).

Virotam, Balmukand, Madhya Kallen Europe ka Itihas (in Hindi).

Hitti, P.K. History of the Arabs.

Ali.K. Studies in Islamic History.

Sahu, Kishori Prashad IsIam –Udbhav aur Vikas.

Levy, R. Social Structure of Islam.

POLITICAL SCIENCE

OPTION (I) COMPARATIVE GOVERNMENT AND POLITICS

PAPER CODE DEBA-304

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

(Government and Politics of UK, USA, China, Switzerland)

Part A

Approaches to the study of comparative Politics.

Constitution and constitutionalism

Constitution Structures: Executive, Legislature and Judiciary

Political Culture.

Part B

Political parties and Party Systems

Interest Groups and Pressure Groups

State and Local Government

Socio-Economic bases of the constitution

Women and the Polities Process

Part C

Short answer questions, at least five, spread over the entire syllabus, Objective Type (Multiple choice) questions spread over the whole syllabus.

Suggested Readings

G.Almond al., Comparative Political Today : A world view, 7th edn. New York, London, Harper/Collins 2009.

W. Begehot, The English Constitution, London, Fontana, 1962.

A.H. Birch, British System of Government, 4th and London, George Alen and Unwin 1980.

J. Blondel, An Introduction to comparative Government London Weidenfeld and Nicoloson, 1969.

J.Blondel, Modern Democracies, Vol. 2, New York Macmillan, 1921.

I.Derbyshire, Politics in China, London Chanbers, 1991.

H.F. Finer, Theory and Practice of Modern Government, London Methuen, 1969.

S.E. Finer Comparative Government, Harmondsworth, Penguin, 1974.

J.Gettings, China Changes Face: The Road from Revoltion 1949-89 London, Oxford University Press 1989.

E.S. Griffin, The American System of Government, 6th edn. London Methuen, 1983.

H.Harding, China, Second Revolution : Reforms after Mao. United Washington DC, Brookings Institute, 1987.

Inter-Parliamentary Union, Women in National Parliaments, 2000.

D. Kavangh, British Politics: Continuity and Change, Oxford, Oxford University Press, 1985.

H.J. Laski, American Democracy : A Commentary and A Interpretation, London, Unwin 1948.

A Liphrt, Electoral Systems and Party System New Haven CT, Yale University Press, 1994.

A Lijhart, (ed.) Parliamentary versus Presidential Government, Oxford and New York, Oxford University Press, 1992.

A Lijphart, Democracies: Patterns of Majoritarian and Consensual Government in Twenty One Countries New Haven CT and London, Yala University Press, 1992.

R.C. Macridis and R.E. Ward, Modern Political Systems : Europe and Axia 2nd Edn. Englewood Cliffs No. Prentics Hall, 1968.

R.Maddex, Constitutions of the world., 2nd Edn. Washington DC and London CQ Press, 2000.

P.Mair, The West European Party System, Oxford University Press, 1998.

T.Munro, The Governments of Europe, New York, Macmillan, 1963.

B.Nelson and N. Chowdhary (ed.) Women and Politics Worldwide, Delhi, Oxford University Press 1997.

D.Olson, Legislative Institutions : A comparative View, Armonk NY, M.E.Sharpe, 1994.

V.Randall, Woman and Politics: An International Perspective, 2nd Edn., Chichago, University of Chicago Press, 1987.

A. Randal, P. Heywood and V. Wright Developments in West European Politics, Besingstoke, Macmillan, 1997.

K.C. Wheare, Federal Government, 4th Edn. Oxford and New York Oxford University of Chicago Press, 1987.

M. Randal, P. Heywood and V. Wright, Developments in West European Politics, Besingstoke, Macmillan, 1997.

K.C. Wheare, Federal Government, 4th Edn. Oxford and New York Oxford University Press, 1963.

J.Wilson, American Government, 4th Edn. Boston Massachusetts, Houghton Miffin, 1997.

ECONOMICS

PAPER- DEVELOPMENT & ENVIRONMENTAL ECONOMICS AND INTERNATIONAL TRADE

PAPER CODE DEBA-305

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Part-A (DEVELOPMENT AND ENVIRONMENTAL EONOMICS)

Unit 1

Economic growth and development Determinants and measurement of development : vicious circle of poverty- Development with unlimited supply of labor(leqi's Model), - Balanced and unbalanced growth; critical minimum effort thesis (Harvey Leireinstein).

Unit II

Environment as a necessity and luxury; Population environment linkage; Market failure in case of environmental good; environment as a public good; Prevention and Control of Pollution; Environment as a public good; Prevention and control of pollution Environmental legislation; Meaning, importance and indicators. Sustainable development.

Part- B (International Economics)

Unit III

Meaning of balance of payments equilibrium. Causes and effect of BOP disequilibrium and corrective measures; Foreign trade multiplier; functions of IMF, World Bank and WTO; changes in the composition and direction of foreign trade of India since 1991. Cause of persistent deficit in India's BOP and corrective measures.

Reading List :

1. Adelman 1 (1961), Theories of Economics Growth and Development. Stanford University Press, Stanford.
2. Behrman, S and T.N. Srinivasan (1995)m Handbook of Development Economics, Vol. 1 to 3 Elsevire, Amsterdam.
3. S(1996) An introduction to Development Economics, Allen and Unwin London.
4. Hayami, Y (1997) Development Economics Oxford University Press, New York.
5. Higgins, (1997), Economics Development, Noreton, New York
6. Kindleberger, C.P. (1977) Economic Development 30, Mc Graw Hill New york.

7. Meier, G.M. (1995), Leading issues in Economic Development Co. Oxford University Press, New York.

8. Myint, Hie (1971), Economic Theory and under Development Countries* Oxford University Press, New York

9. Kindleberger, C.P. (1973), international Economy R.B. Irwin Homewood.

PAPER CODE DEBA-306

संस्कृत (एच्छिकम्)

लिखित : 70

आंतरिक मूल्यांकन : 30

Note:

1. The examiner is required to set question paper as per the guidelines/instructions given in the syllabi of the paper. The students are required to attempt the questions accordingly.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit-I

संस्कृत वाग्व्यवहार

एकक-1 संस्कृत व्यवहारसाहस्री (प्रकाशक संस्कृत भारती, माता मन्दिर गली वाणिज्यम् 20 वातावरणम् 21 गृहसम्भाषणम् 22 पितर: च-23 माता पितरौ 24 पुत्रा: 25 अतिथि: 26 संकीर्ण, वाक्यानि)   8 अंक

Unit-II

संस्कृत ग्रन्थानु शीलनम्

एकक-2 अभिज्ञान शाकुन्तलम्   16 अंक

(श्लोकों व सूक्तियों की व्याख्या आलोचनात्मक प्रश्न व सार)

Unit-III

संस्कृत साहित्येनिहास :

एकक-3 (क) संहिता, ब्राह्मण, आरण्यक, उपनिषद् व वेदाड.क साहित्य   8 अंक

(ख) रामायण, महाभारत, अश्वघोष, भास, कालिदास, बाणभट्ट, सुबन्धु, दण्डी,

भवभूति, भारवि श्री हर्ष, माघ, अम्बिकादत् व्यास।

(लेखकों व कृतियों का सामान्य परिचय)   8 अंक

Unit-IV

लघु सिद्धांत कौमुदी

एकक-4 (क) कारक प्रकरण   8 अंक

(ख) स्त्री प्रत्यय प्रकरणम्   8 अंक

अशुद्धि शोधन, वाक्य रचना व सूत्रों की व्याख्या।

Unit-V

अलंकार निबन्धेश्च

एकक–5 (क) अलंकार अनुप्रास श्लेज़, यमक, उपमा, उत्प्रेक्षा, रुपक, अर्थान्तरन्यास, अतिश्योक्ति, विभावना, विशेषोक्ति   7 अंक

     (ख) सरल विषयों पर सरल संस्कृत में निबन्ध   7 अंक

MATHEMATICS
PAPER-I - ANALYSIS
PAPER CODE DEBA-307 A

External: 25
Internal: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section - I (3 Questions)

Riemannintegal Integrability of continuous and monotonic functions. The fundamental theorem of integral calculus, Mean value theorems of integral calculus.

Countable and uncountable sets. Cantor's set series of arbitrary terms. Convergance, divergence and oscillation, abel's Dirichlets's tests , Multiplication of series, Double series.

Section- II (3 Questions)

Improper integrals and their convergence. Comparison tests. Abel's and Dirichlet's tests. Frullani's integral. Integral as a function of a parameter Continuity, derivability and integrability of an integral of a function of a parameter.

Fourier Series, Fourier expansion of piecewise-monotonic function.

Section- III (2 Questions)

Definition and examples of metric spaces Neighbourhoods. Limit Points, Interior points. Open and closed sets. Closure and interior. Boundary points. Sub-space cauch sequences completeness contor's intersection theorem. Contraction principle Construction of real numbers as the completion of the incomplete metric space of rationals. Real numbers as a complete ordered field. Dence subsets. Baire category theorem.

Section-IV (2 Questions)

Separable, second countable and first countable spaces. Countinuous functions. Extension theorem. Uniform countinuity Isometry and homeomorphism Equivalent metrics. Compactness. Sequential Compactness. Totally bound spaces. Finite intersection property. Continuous functions and compact sets. Connectedness . components continuous function and connected sets.

Books Recommended

T.M. Apostol, Mathematical Analysis, Narosa Publishing House,New Delhi, 1985.

R.R. Goldberg, Real Analysis, Oxford & IBH Publishing Co. NewDelhi, 1985.

E.T. Copson, Metric Spaces, Cambridge University Press, 1968.

G.F. Simmons, Introductions to Topology and Modern AnalysisMcGraw-Hill, 1963.

Babu Ram, Metric Spaces, Vinayaka Publishers, New Delhi.

Mursaleem-Elements of Metric Spaces, Anamaya Publications,New Delhi.

Jain, P.K. and Ahmad, K. Metric Spaces, Naroasa Publishing -House, New Delhi.

Peter V.O. Neil, Advanced Engineering Mathematics, 11 Company, USA.

Alan Jafferey, Advanced Engineering Mathematics, Harcouf Academic Press, USA.

K.A. Stroud, Advanced Engineering Mathematics, Industry Press, Inc. New York.

K.A. Stroud,.Engineering Mathematics (Indian Edition), Repi Press, Pvt. Ltd.

Erwin Kreyszig, Advanced Engineering Mathematics, John Wiland Sons.

Lipschtz Set Theory and Related Topics, Schaum, Outline Series.Tata Mc Graw Hill, New Delhi.

PAPER II ABSTRACT ALGEBRA

PAPER CODE DEBA-307 B

External: 25

Internal: 10

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (3 Questions)

Group-Automorphisms, inner automorphism, Automorphisim groups and their computations. Conjugacy relation. Normalized Counting principle and the class equation of a finite group. Center for Group of prime-order. Abelianizing of a group and its universal property. Sy low's theorems. p-Sylow sybgroup structure theorem for finite Abelian groups.

Section II (2 Questions)

Ring theory-Ring homomorphism, Ideals and Quotient Rings. Field of Quantients of an Integral Domain. Enclidean Rings. Polynomial, Rings. Polynomials over the Rational Field. The Eisenstein Criterion. Polynomial Rings over Commutative Rings. Unique factorization domain. Unique factorization domain implies so is R[x1, x 2, …………..x n   .'

Section Ill (3 Questions)

 Definition an examples of vector spaces. Subspaces Sum and direct sum of subspaces. Linear span Linear-dependence, independence and their basic properties. Basis Finite dimensional vector spaces. Existence theorem for bases. Invariance of the number of elements of a basis set, Dimension Existence of complementary subspace of a subspace of finite dimensional vector space. Dimensional of sums of subspaces Quotient space and its dimension. Linear transformations and their representation as matrices. The Algebra of linear transformations. The tank nullity theorem. Change of basis. Dual space. Bidual space and natural isomorphism. adjoin of a linear, transformation. Eigen values and eigenvectors of a linear transformation Diagonalisation. Annihilator of a subspace Bilinear, Quadratic and hermitian forms.

Section IV (2 Questions)

Inner Product Spaces-Cauch-Schwarz inequality. Orthogonal vectors, Orthogonal complements. Orthonormal Sets and bases. Bessel's inequality for finite dimensional spaces. gram-Schmidt Orthogonalization process. Modules, Sub modules, Quotient modules Homomorphism and Isomorphism theorems.

Books Recommended

1. I.N. Herstein, Topics in Algebra, Wiley Esatern Ltd., New Delhi, 1975.
2. N. Jacobson, Basic algebra, Vols. I & II, W.H. Freeman, 1989.
   (also published by Hindustan Publishing Company).
3. K. Hoffman and R. Kunze, Linear Algebra, 2nd Edition, Prentics Hall, Englewood Cliffs, New Jersey,   1971.
4. S.K. Jain, a Gunawardena & P.B. Bhattacharya Basic Linear Algebra with MATLAB Key College Publishing (Springer-Verlag)2001.
5. S.Kumaresan, Linear Algebra, A Geometric Approach, Prentice Hall of India, 2000.
6. Vivek Sahal and Vikas Bist Algebra, Narosa Publishing House, 1997
7. L.S.Luther and I.B.S. Passi Algebra, Vol 1 Group, Vol 2 Rings, Narosa Publishing House (Vol-I 1996, Vol-II,J999) ..."
8. Peter V O'Neil, Advanced Engineering Mathematics, Harcount/ Academic Press, USA.
9. Alan Jafferey, Advanced Engineering Mathematics, Industry- Press, Inc. New York.
10. K.A. Stroun, Advanced, Engineeing Mathematics, (India Edition, replika Press Pvt. Ltd.
11. Erwin Kreyszig, Advanced Engineering Mathematics, John Wile and Sons.
12. Jai Singh, abstract Algebra, Schaum Outline Series, Tata Mc Graw Hill, New Delhi.

PAPER III PROGRAMMING IN C AND NUMERICAL ANALYSIS

PAPER CODE DEBA-307 C (THEORY)

External: 20

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.
2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I (3 Questions)

Programmer's model of a computer, Algorithms Flow Charts, Data Types. Arithmetic and input/output instructions. Decisions control structures. Decision statements. Functions. Recursions Preprocessor.

Section II (2 Questions)

Arrays Puppeting of string. Structures Pointers, File formatting.

Section III (3 Questions)

Solution of Equations : Bisection, Secant, Regular Falsi, Newton's Method, Roots of Polynomials.

Interpolation : Lagrange and Hermite Interpolation, Divided Differences, Difference Schemes, Interpolation Formula, Besse Interpolation Formula.

Numerical Differentiation using Newton's Formulae and Neown's divided differences'

Numerical Quardrature : Newton-Cote's formulas, Gauss Quardrature Formulas.

Linear Equations ; Direct Methods for solving Systems of Linear Equations (Gauss Elimination. LU Decomposition, Cholesky Decomposition). Iterative Methods (Jacobi, Gauss, Seidel, Relaxation Methods)

Algebraic, Eignevalue problem : Jacobi's Method Givens Method. Householder's Method, Power Method, QR Method, Lanczos' Method

Section IV (3 Questions)

Ordinary Differential equations : Euler method, Single step Methods, Runge-Kutta's Method. Multi-step Methods, Milne-Simpson Method, Methods Based on Numerical integration methods Based on Numerical Differentiation, Boundary Value Problems, Eigenvalue Problems.

Approximation : Different Types of Approximation, Least Square Polynomial Approximation, Polynomial Approximation using Orthgonal Polynomials, approximation with exponential Functions. Monte Carlo integration, hit or miss Monte Carlo integration, Monte Carlo integration for improper integrals, error analysis for Monte Carlo integration.

Books Recommended

1. Byron S. Gottfried, Theory and Problems of Programming with C, Tata Mc Graw-Hill, Publishing Co. Ltd. 1998.
2. C.E. Froberg, Introduction to Numberical Analysis, (Second Edition), Addison Wesley 1979.
3. Melvin, J Maron, Numerical Analysis A Practical Approach, MAcmillan Publishing Co., Inc. New York, 1982.
4. M.K. Jain, S.R.K. Lyenger, R.K. Jain, Numerical Methods Problems and Solutions, New Age International (P) Ltd., 1996.
5. R.Y. Rubistein, Simulation and the Monte Carlo Methods, John Wiley, 1981.
6. Peter V. O'Neil, Advanced Engineering Mathematics, ITP Company, USA.
7. Alan Jafferey, Advanced Engineering Mathematics, Hartcourt/ Academic PRess USA.
8. K.A. Stroud, Advanced engineering Mathematics, (Indian Edition), Replika Press Pvt. Ltd.
9. K.A. Stroud, Advanced Engineering Mathematics, Industrial Press, Inc. New York.
10. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley and sons.
11. Scheid, Theory and Problems of Numerical Analysis, Schaum Outline Series, Tata McGraw Hill, New Delhi.

COMPUTER PRACTICAL IN C
PAPER CODE DEBA-307 D

Practical: 10

Section – A

List of Practical

1. Program to convert a decimal number to its binary equivalent
2. Program to generate first in prime numbers.
3. Program to calculate compound interest.
4. Program to compute the value of (pie) from the series/4=1–1/ 3 + 1/5+……..   Correct up to four decimal places.
5. Program to count numbers using pointers.
6. Program to count number of vowels and consonants in a given sentence.
7. Program for pattern matching of two strings.
8. Program to reverse the strings character by character and word by word.
9. Program to illustrate encryption and decryption of a string.

10. Program to write a function to find the GCD of two integers and use it to find the GCD of three integers.
11. Program to calculate the area and perimeter of a circle using function call by reference.
12. Program to generate first in Fibonacci terms using recursion.
13. Program to find transpose of a matrix.
14. Program to multiplication of matrices- m × n by n × p using function.
15. Program to find the inverse of a square matrix.

Section – B

Program to find roots of an equation by Bisection method.

Program to find roots of an equation by Newton-Raphsh method.

Program to find roots of an equation by Regular -Falsi method.

Program to interpolation by Newtons-Forward method.

Program for interpolation by Lagrange's method.

Program to Numerical integration by Trapezoidal Rule.

Program to Numerical integration by Simpsons Rule.

Program to solution of linear simultaneous equations by Gauss-Elimination method.

Program to solution of linear simultaneous equations by Gauss-seidal method.

Program to solution of linear simultaneous equations by method.

Program for numerical solution of ODE by Euler's method.

Program to numerical solution of ODE by modified Euler's method.

Program for least square polynomial approximation.

Program to find area of region between x-axis and curve y–l/x by Monte Carlo integration.

PUBLIC ADMINISTRATION

OPTION –(II)   LOCAL GOVERNMENT AND ADMINISTRATION IN INDIA ADMINISTRATION.

PAPER CODE DEBA-308

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Local Government : Meaning and significance, evaluation of Local Government in India since 1882.

Municipalities : Composition, Functions, finances, personnel, general working of Municipal bodies with special reference to Haryana and Punjab, State Government's control over municipal bodies.

State Department and Directorate of Municipal bodies, its organization and functions.

Role of the Ministry of Urban Development as well as the Central Council of Local Self-Govt. in regard to municipalities.

Municipal Corporation: Composition, functions and finances, Town and Metropolitan Planning in India, 74th Constitutional Amendment Act, 1992.

District Administration : Its features, purposes, problems.

Deputy Commissioner : Deputy Commissioner : his role and position, administration

change in the context planning and Development at district level,

Division Commissioner : his role and position : State Headquarter's control over district Administration.

Rural Local Government : Zila Parishad, Panchayat Samiti

Panchayat : Their composition, function, finances, personnel State Government's control over their working, role of political parties in Panchayati Raj, 73rd Constitutional amendment 1992.

Role of State and Union Government in regard to Panchayati Rural Institutions in Policy, assistance training and general control problems rural –urban relationship.

SOCIOLOGY

OPTION –I-INDIAN SOCIETY

PAPER CODE DEBA-309

External: 70
Internal: 30

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Unit I

Conceptual Issues: Indian Society : Evolution ; Textual and Field view, Indian Social Structure its Components and characteristics. Unity and diversity.

Unit II

Basic Institution : Kinship, family, marriage, Religion, caste and Class, Changing Dimensions.

Unit III

Social Change: Processes of Reform Movements, Sanskritization Modernization, westernization, Secularization and Globalization.

Unit IV

Social Problems and Issues: communalism, Minority, Backward Classes and Dalits, Population, Gender Discrimination, Terrorism, Ecological Degradation and Environmental Pollution.

Unit V

Society & Enviornment : Issue of Social Justice : Dalits, Backward classes, Minorities and Women, Social Problem : Social Tension Communalism; AIDS; Ecological degradation and Environment Pollutions over Population.

Reference

1. Prabhu, P.H. Hindu Social Organisation.
2. Srinivas, M.N. India : Social Structure, Hindustan Publications, 1980.
3. Srinivas, M.N. Social change in Modern India Orient Longman, New Delhi.
4. Dube, S.C. Indian Society Structure, Hindustan Publication, 1980.
5. Sharma K.L. (Ed.) Caste and Class, Rawat, jaipur 1994.
6. Ahuja, Ram. Society in India; Concept, Theory and Recent Trends, Rawat.
7. Singh, Yogender. Indian, Social Structure; Hindustan Publication, New Delhi.
8. Karve, Iravati. Hindu Society, An Interpretation Deccam College, Poona, 1961.
9. Uberoi, Particia. Family, Oxford University Press 1993.
10. Ghurya G.S, Social Tension, Popular Prakas Bombay, 1968.
11. Beteile Anodre. Backward Classes Contemporary India, OUP, New Delhi, 1992.
12. Mandal Baum. D.G. Society in India, OUP, New Delhi, 1992.
13. Bose, N.K. Structure of Hindu Society
14. Saty Murth, T.V. Region, Religion Caste, Gender and Culture in contemporary India, OUP, New Delhi, 1996.
15. Sethi, Raj Mohni. (Ed.) Globalisation, culture and Woman, rawat Publication, 1999.
16. Kapadia, K.M. Marriage and Family in India, Oxford.
17. Madan, T.N. Religion in India, OUP Delhi 1991.
18. Doshi, S.L. and Jain. Rural sociology, Rawat Publication, Jaipur.
19. Harrison, David. Sociology of Modernisation and Development, Reultedge, 1988.
20. India Society. N.C.E.R.T.

MILITARY SCIENCE
OPTION-1 NATIONAL DEFENCE & SECURITY
PAPER CODE DEBA-310 A

External: 50

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

1. Meaning of National Defence and security.

2. Essentials of National Defence.
   - i) Geographical Factors, Location, Frontiers, Terrain Climate
   - ii) Economic Factors Resources : Industrial and Scientific development, transport and communication.
   - iii) Internal Political conditions.   iv) Defence Mechanism of Modern State.

3. India's Defence Problem from 1947 to date.

4. India's Defence Policy.

5. Nuclear Policy of India.

6. Civil Military relations of India.

7. Civil Defence

    i) Definition

    ii) Need and Importance of Civil Defence.

    iii) Organization and measures of Civil Defence

8. Military in Aid to Civil power.

9. Geostrategic location of India

10. Importance of Indian Ocean in India's Defence

11. India's Relations with :-

    i) Pakistan   ii) China

    iii) Bangla Desh   iv) Sri Lanka

    v) Nepal   vi) Afganistan

12. War Finance Taxation, Borrowing and Inflation.

13. Cost of War (Real cost of war)

14. Economic Mobilization

15. Comparative study of defence budget of India and Pakistan.

Book Suggested:

India's Defence Problem : S.S. Khera.

Defence without Drift : P.V. Rao.

India in the Search of Power : M.K. Chopra

India the Indian Ocean : K.M. Panikar

Restriva Partiraksha : Maik Kumar

India's Quest for Security : L.J. Kevic

Economic Problems of War and Peace L Robbins

Defence Mechanism of the state : Dr. Nagender Singh

Rastriya Partiraksha : B.M. Maliwal

Economic and Commercial Geography of India : a Das Gupta

India Nuclear Estate : Dhirender Sharma

 Dimensions of National Security by Prof. M.C. Maheshweri and Dr. Ashok Kumar Singh.

PRACTICAL

PAPER CODE DEBA-310 B

Practical: 50

Elementary Tactics Upto Infantry Platoon Level

1. Sand Model- Meaning importance and preparing.

2. Detailed study of an infantry platoon including organization weapons and equipments.

3. Study of field craft with reference to the following :

    a)   Ground   b) Cover   c) Camouflage   d) Concealment   e) Observation

4. Application of Fire, Fire control and Fire Control orders.

5. Tactical Formations-section and Platoon.

6. Verbal order.

7. Patrol-Types and stage of Patrolling.

8. Battle procedure.

9. Military Appreciation of a situation in Attack and Defence.

10. Platoon in attack- Types, principles of defence, defence exercise.

11. Platoon Attack-Types, Principles of Attack, Stages of attack Battle craft for platoon in attack and platoon attack exercise.

12. Military Message Writing.

13. Ambush-Organization of ambush party, ambush operation.

14. Lecture on any theory topic.

GEOGRAPHY

PAPER- HUMAN GEOGRAPHY & RESOURCES & ENVIRONMENT

PAPER CODE- DEBA-311 A

External: 50

Note:

1. Examiner is required to set 10 questions covering whole syllabus of the paper and the candidates are required to attempt any 5 questions in all. All questions carry equal marks.

2. Internal assessment marks shall be given on the basis of marks secured by the candidate in the Descriptive Examination to be conducted by the respective study centre. Study centres are required to keep the record of the descriptive examination with them for inspection by the University. The marks of Internal Assessment must be submitted to the University before the termination of the University Examination in the concerned subjects. In the event of non receipt of the Internal Assessment Marks, the theory marks secured by the candidate shall be proportionately enhanced.

Section I

Natural and scope of human Geography ;

Branches of Human Geography

Concepts of man-environment relationship

Division of Mankind spatial distribution of races and tribes of India: early economic activities of mankind food gathering hunting, fishing and vegeculture, shifting cultivation.

Section II

1. Human adaption to the environment

   i) Cold region-Eskimo   ii) Hotregion-Bushman

  iii) Platea-Gonds   iv) Mountain-Gujjars

2. Distribution and world pattern of population concepts of over population under population and optimum population.

3. Population theories : Maihusion and Recardo.

Section III

1. Meaning nature and components of resources and environment.

2. Distribution and utilization and conversation of biotic (flora and fauna) abiotic (water, mineral and energy resources).

Section IV

1. Number density, growth of population pressure and environment degradation.

2. Classification of Environment Natural and Human; Man environment inter-relations with respect to population size types of economy and technology of development, degraded and sustainable development.

Books Recommended:

1. Bergwan, Edward E : Human Geography : Culture, connection and landscape, Printice Hall, New Jersy.

2. *Carr,* M : Patterns, Process and change in Human Geography Machmillan education, London, 1987.

3. Fellman, J .L. Human Geography Landscapes of Human Activities : Brown and benchman Pub, U.S.A. 1997.

4. De Blij H.J. Human Geography Culture society and Scape John Wiley, New York, 1996.

5. Mc Bride, P.J. Human Geography systems/patterns and chanf, neison, U.K. and Canada, 1956.

6. Michael, Can : New Patterns : Process and change in Human-Geography Nelson, 1997.

7. Agarwal, A et. ah: The Citizen's Fifth Report centre for Science & Environment, New Delhi, 1999.

8. Alexender, a et. al.: The Citizen's Fifth Report centre for Science & Environment, New Delhi, 1999.

9. Chandna, R.C : A Geography of population : concepts Determine and patterns, Kalyani Publishers, New Delhi, 1986.

10. Global Encironment Outlok Earthscan, London, 2000.

11. Herpor Petor : Geography-A Nodern Synthesis, Herprer & Ro Publishers, New York, 1975.

12. Janaki, V.A. Economic Geography, Concept Publishing Co. New, Delhi, 1965.

13. Rold, D; Sustainable Development, Earthscan Pub. London

14. Sharma, H.S. and Chattopadhaya S.K., Sustainable Developments concepts and issue : Concepts New Delhi,

15. UNESCO : Use and conservation of the Biosphere, Paris.

PAPER II CARTOGRAPHY (PRACTICAL)

PAPER CODE- DEBA-311 B

Practical: 50

Section I

Use of Mean, Median and Standard Deviation of numerical spatial data and mapping scatter diagram association and relationship.

Section II

Map Projections : General principles, classification, Drawing gratiouly on the following projections by graphical and mathematical methods.

a) Cylindrical   b) Conical   c) Zenithal   d) Conventional at least two exercises from each

Section III

Prismatic compass survey by radiation. Intersection, open traverse and close traverse methods

Section IV

Field work and Field-Report: Select and area near the institution comprising of either agriculture, urban, industrial, transport survey. The field report will be based on primary survey through questionnaire or field investigation.

Distribution of marks

Exercises	20
Field Work	10
Practical record	10
Viva-Voce	10

Books Recommended :

1. Geography, S : Staistical methods and the Geographer, Longman S.S. London, 1963 Geography.

2. Khan, A.A.:TextbookofpracticalGeogi^phy Concept New Delhi, 1995.

3. Lawarence, G.R.P.: Cartgraphic Methods, Methuen, Lndh 1968.

4. Monkhouse, F.J. & Wilkimson, H.R. Maps and Diagrams, MethuenLondon, 1994.

5. Pal, S.K. Statistics for geoscientists - Techniques and Application concept, New Delhi, 1998.

6. Sarkar, A.K. Geography A Systemetic Approach Orient concept. New Delhi, 1997.

7. Singli, R.l. Elements of Practical Geography, Kalyani Pub. New Delhi.