



# बिलासपुर विश्वविद्यालय, बिलासपुर (छ.ग.)

पाठ्यक्रम  
SYLLABUS

सत्र: 2017-18

बी.ए. भाग-3  
B.A. PART-3

**B.A./B.A. (CLASSICS) PART-III**

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## REVISED ORDINANCE NO.11

(As per State U.G.C. Scheme)

### BACHELOR OF ARTS

1. The three year course have been broken up in to three Parts.  
Part-I Examination : at the end of the first year.  
Part-II Examination : at the end of the second year and  
Part-III Examination : at the end of the third year.
2. A candidate who after passing (10-2) or intermediate examination of C.G. Board of Secondary Education, Raipur or any other examination recognised by the University or C.G. Board of Secondary Education as equivalent thereto, has attended a regular course of study in an affiliated college or in the Teaching Department of the University for one academic year shall be eligible for appearing at the B.A. Part-I examination.
3. A candidate who after passing B.A. Part-I examination of the University or any other examination recognised by the University as equivalent thereto has attended a regular course of study for one academic year in an affiliated college or in the Teaching Department of the University shall be eligible for appearing at the B.A. Part II Examination.
4. A candidate who after passing B.A. Part II examination of the University has completed a regular course of study for one academic year in an affiliated college or in the Teaching Department of the University shall be eligible for appearing at the B.A. Part-III examination.
5. Besides regular students, subject to their compliance with this ordinance, ex-students and non-collegiate candidates shall be eligible for admission to the examination as per provisions of Ordinance N. 6 relating to Examinations (General). Provided that non-collegiate candidates shall be permitted to offer only such subjects/papers as are taught to the regular students at any of the University Teaching Department or College.
6. Every candidate for the Bachelor of Arts examination shall be examined in :
  - A. Foundation Course :
    - i Group B - Hindi Language
    - ii Group C - English Language
  - B. Three Core subjects : One subject from any three groups out of the following six groups :
    - 1 Sociology/Ancient Indian History/Anthropology.
    - 2 Political Science/Home Science/Vocational Course.
    - 3 Hindi Literature/Sanskrit Literature/Urdu Literature/Math.
    - 4 Economics/Music/Linguistics/Defence studies.
    - 5 Philosophy/Psychology/Geography/Education/Management.

6. History/English Literature/Statistics.
7. Practicals (if necessary) for each core subject.
7. Any candidate who has passed the B.A. examination of the University shall be allowed to present himself for examination in any of additional subjects prescribed for the B.A. examination and not taken by him at the degree examination. Such candidate will have to first appear and pass the B.A. Part I examination in the subject which he proposes to offer and then the B.A. Part II and Part III examination in the same subject. Successful candidate will be given a certificate to that effect.
8. In order to pass at any part of the three year degree course examination, an examinee must obtain not less than 33% of the total marks in each subject/group of subjects. In subject/group of subjects, where both theory and practical examination are provided, an examinee must pass in both theory and practical parts of the examination separately.
9. Candidate will have to pass separately at the Part-I, Part II and part-III examination. No division shall be assigned on the result of the Part-I and Part-II examination. In determining the division of the Final examination, total marks obtained by the examinees, in their Part-I, Part-II and Part-III examination in the aggregate shall be taken into account. Candidate will not be allowed to change subjects after passing Part I Examination.  
  
Provided in case of candidate who has passed the examination through the supplementary examination having failed in one subject only the total aggregate marks being carried over for determining the division shall include the actual marks obtained in the subject in which he appeared at the supplementary examination.
10. Successful examinees at the Part-III examination obtaining 60% or more marks shall be placed in the First division, those obtaining less than 60% but not less than 45% marks in the Second division and other successful examinees in the third division.

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**SCHEME OF EXAMINATION**

Subject	Paper	Max. Marks	Min. Marks
<b>A. Compulsory Subject - Foundation Course :</b>			
Hindi Language	I	75	26
English Language	I	75	26
<b>B. Three Core Subject :</b>			
1. Hindi Literature	I	75	150
	I	75	
2. Sanskrit Literature	I	75	150
	I	75	
3. English Literature	I	75	150
	I	75	
4. Philosophy	I	75	150
	I	75	
5. Economics	I	75	150
	I	75	
6. Political Science	I	75	150
	I	75	
7. History	I	75	150
	I	75	
8. Ancient Indian History Culture & Archaeology	I	50	100
	I	50	
	Practical	50	
9. Sociology	I	75	150
	I	75	
10. Geography	I	50	100
	I	50	
	Practical	50	
11. Mathematics	I	50	150
	I	50	
	III	50	
12. Statistics	I	50	100
	I	50	
	Practical	50	

Subject	Paper		Max. Marks	Min. Marks
13. Anthropology	I	50		
	I	50	100	33
		Practical	50	17
14. Linguistics	I	75		
	I	75	150	50
15. Indian Music	I	50		
	I	50	100	33
		Practical	50	17
16. Home Science	I	50		
	I	50	100	33
		Practical	50	17
17. Education	I	75		
	I	75	150	50
18. Psychology	I	50		
	I	50	100	33
		Practical	50	17
19. Management	I	75		
	I	75	150	50
20. Defence Studies	I	50		
	I	50	100	33
		Practical	50	17
21. Urdu	I	75		
	I	75	150	50

### USE OF CALCULATORS

The Students of Degree/P.G. Classes will be permitted to use of Calculators in the examination hall from annual 1986 examination on the following conditions as per decision of the standing committee of the Academic Council at its meeting held on 31-1-1986-

1. Student will bring their own Calculators.
2. Calculators will not be provided either by the university or examination centres.
3. Calculators with, memory and following variables be permitted +, -, x, , square, reciprocal, exponentials log, square root, trigonometric functions, wize, sine, cosine, tangent etc. factorial summation, xy, yx and in the light of objective approval of merits and demerits of the viva only will be allowed.

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## हिन्दी भाषा

( पेपर कोड-0231 )

प्रथम प्रश्न पत्र

पूर्णांक - 75

(बी.ए., बी.एस.सी., बी.एच.एस-सी., बी.काम., तृतीय वर्ष के पुनरीक्षित एकीकृत आधार पाठ्यक्रम एवं पाठ्य सामग्री का संयोजन 2000-2001 से लागू है)

॥ सम्प्रेषण कौशल, हिन्दी भाषा और सामान्य ज्ञान ॥

आधार पाठ्यक्रम की संरचना और अनिवार्य पाठ्य पुस्तक- हिन्दी भाषा एवं समसामयिकी- का संयोजन इस तरह किया गया है कि सामान्य ज्ञान की विषय वस्तु- विकासशील देशों की समस्याओं- के माध्यम, आधार और साथ-साथ हिन्दी भाषा का ज्ञान और उसमें सम्प्रेषण कौशल अर्जित किया जा सके। इसी प्रयोजन से व्याकरण की अन्तर्वस्तु को विविध विधाओं की संकलित रचनाओं और सामान्य ज्ञान की पाठ्य सामग्री के साथ अन्तर्गुस्फित किया गया है। अध्ययन-अध्यापन के लिए पूरी पुस्तक की पाठ्य सामग्री है और अभ्यास के लिये विस्तृत प्रश्नावली है। यह प्रश्नपत्र भाषा का है अतः पाठ्य सामग्री का व्याख्यात्मक या आलोचनात्मक अध्ययन अपेक्षित नहीं है। पाठ्यक्रम और पाठ्य सामग्री का संयोजन निम्नलिखित पाँच इकाइयों में किया जाता है। प्रत्येक इकाई दो भागों में विभक्त किया गया है।

- इकाई - 1** (क) भारत माता : सुमित्रानंदन पंत, परशुराम की प्रतीज्ञा : रामधारी सिंह दिनकर, बहुत बड़ा सवाल : मोहन रकेश, संस्कृति और राष्ट्रीय एकीकरण : योगेश अटल ।  
(ख) कथन की शैलियाँ : रचनागत उदाहरण और प्रयोग ।
- इकाई - 2** (क) विकासशील देशों की समस्यायें, विकासात्मक पुनर्विचार, और प्रौद्योगिकी एवं नगरीकरण ।  
(ख) विभिन्न संरचनाएँ ।
- इकाई - 3** (क) आधुनिक तकनीकी सभ्यता, पर्यावरण प्रदूषण तथा धारणीय विकास ।  
(ख) कार्यालयीन पत्र और आलेख ।
- इकाई - 4** (क) जनसंख्या : भारत के संदर्भ में और गरीबी तथा बेरोजगारी ।  
(ख) अनुवाद ।
- इकाई - 5** (क) ऊर्जा और शक्तिमानता का अर्थशास्त्र ।  
(ख) घटनाओं, समारोहों आदि का प्रतिवेदन और विभिन्न प्रकार के निमंत्रण-पत्र ।

**मूल्यांक योजना :** प्रत्येक इकाई से एक-एक प्रश्न पूछा जायेगा। प्रत्येक प्रश्न में आंतरिक विकल्प होगा। प्रत्येक प्रश्न के 15 अंक होंगे। प्रत्येक इकाई दो-दो खंड (क्रमशः 'क' और 'ख' में) विभक्त है, इसलिए प्रत्येक प्रश्न के भी दो भाग, (क्रमशः 'क' और 'ख') होंगे। 'क' अर्थात् पाठ एवं सामान्य ज्ञान से संबद्ध प्रश्न के अंक 8 एवं 'ख' अर्थात् भाषा एवं सम्प्रेषण कौशल से संबद्ध प्रश्न के अंक 7 होंगे। इस प्रकार पूरे प्रश्न पत्र के पूर्णांक 75 होंगे।

**PART - II**

**ENGLISH LANGUAGE**

**M.M. 75**

**(Paper Code-0232)**

The question paper for B.A./B.Sc./B.Com./B.H.Sc. III Foundation course, English Language and General Answers shall comprise the following items :

Five question to be attempted, each carrying 3 marks.

<b>UNIT-I</b>	Essay type answer in about 200 words. 5 essay type question to be asked three to be attempted.	15
<b>UNIT-II</b>	Essay writing	10
<b>UNIT-III</b>	Precis writing	10
<b>UNIT-IV</b>	(a) Reading comprehension of an unseen passage	05
	(b) Vocabulary based on text	10
<b>UNIT-V</b>	Grammar Advanced Exercises	25

**Note :** Question on unit I and IV (b) shall be asked from the prescribed text. Which will comprise of popular create writing and the following items. Minimum needs housing and transport Geo-economic profile of M.P. communication Educate and culture. Women and Worm in Empowerment Development, management of change, physical quality of life. War and human survival, the question of human social value survival, the question of human social value, new Economic Philosophy Recent Diberaliation Method) Demoration docontralisation (with reference to 73, 74 constitutional Amendment.

**Books Prescribed :**

Aspects of English Language And Development - Published by M.P. Hindi Granth Academy, Bhopal.

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## हिन्दी साहित्य

### प्रथम प्रश्न पत्र

### जनपदीय भाषा - साहित्य ( छत्तीसगढ़ी )

( पेपर कोड-0233 )

#### प्रस्तावना-

हिन्दी केवल खड़ी बोली नहीं है, बल्कि एक बहुत बड़ा भाषिक समूह है। हिन्दी जगत में अनेक विभाषाएं बोलियाँ और उपबोलियाँ विद्यमान हैं जिनमें पुष्कल साहित्य सम्पदा है। इनके सम्यक अध्ययन और अन्वेषण की आवश्यकता है। जनपदीय भाषा छत्तीसगढ़ी निरन्तर विकास की ओर अग्रसर हो रही है। अस्तु, इस भाषा का और इसमें रचित साहित्य का इतिहास-विकास स्पष्ट करते हुए इनसे संबंधित प्रमुख रचनाकारों का आलोचनात्मक अनुशीलन करना हिन्दी के वृहत्तर हित में होगा। छत्तीसगढ़ी भाषा का पाठ्यक्रम निम्न बिन्दुओं पर आधारित है -

- (क) छत्तीसगढ़ी भाषा का इतिहास - विकास।
- (ख) छत्तीसगढ़ी भाषा में रचित साहित्य का इतिहास।
- (ग) छत्तीसगढ़ी भाषा के प्रमुख प्राचीन एवं अर्वाचीन रचनाकारों की कृतियों का अध्ययन।

#### पाठ्य विषय -

##### रचनाएँ-

#### ( 1 ) प्राचीन कवि संत धर्मदास के 3 पद

1. गुरू पईया लागों नाम लखा दीजो हो।
  2. नैन आगे ख्याल घनेरा।
  3. भजन करौ भाई रे, अइसन तन पाय के।
- (सन्दर्भ - धर्मदास के शब्दावली से उद्धृत)

#### ( 2 ) लखनलाल गुप्त का गद्य -

1. सोनपान
- (गद्य - पुस्तक 'सोनपान' के उद्धृत)

#### ( 3 ) अर्वाचीन रचनाकार

डॉ. सत्यभामा आडिल रचित गद्य

1. सीख सीख के गोठ
- (गद्य पुस्तक 'गोठ' के उद्धृत)

#### ( 4 ) डॉ. विनय पाठक की कविताएँ -

1. तँय उठथस सुरुज उथे
  2. एक किसिम के नियाव
- ( 'अकादसी और अनचिन्हार' पुस्तक से उद्धृत )

( 5 ) मुकुन्द कौशल - छत्तीसगढ़ी गजल

“ छै बिता के मनखे देखों..... से - मछरी मन लाख लेथे ” तक

( पुस्तक ' छत्तीसगढ़ी गजल ' के पृष्ठ 17 से उद्धृत )

द्रुतपाठ के रचनाकार - ( व्यक्तित्व एवं कृतित्व )

1. सुन्दर लाल शर्मा
2. कविलनाथ कश्यप
3. रामचन्द्र देशमुख ( रंगकर्मी )

**अंक विभाजन**

3 व्याख्याएँ	-	21 अंक
2 आलोचनात्मक प्रश्न	-	24 अंक
5 लघुत्तरी प्रश्न	-	15 अंक
15 वस्तुनिष्ठ/अति लघुत्तरी प्रश्न	-	15 अंक

**कुल - 75 अंक**

**इकाई विभाजन**

इकाई एक	-	व्याख्या
इकाई दो	-	प्राचीन एवं अर्वाचीन रचनाकार
इकाई तीन	-	( अ ) छत्तीसगढ़ी भाषा का इतिहास ( ब ) छत्तीसगढ़ी साहित्य का इतिहास
इकाई चार	-	द्रुत पाठ के तीन रचनाकार
इकाई पाँच	-	वस्तुनिष्ठ / अतिलघुत्तरीय प्रश्न ( सम्पूर्ण पाठ्यक्रम से )

**द्वितीय प्रश्न पत्र**

**हिन्दी भाषा - साहित्य का इतिहास तथा काव्यांग विवेचन**

( पेपर कोड-0234 )

**प्रस्तावना -**

हिन्दी भाषा का इतिहास जितना प्राचीन है, उतना ही गुढ़-गहन भी । इसमें रचित साहित्य ने लगभग डेढ़ हजार वर्षों का इतिहास पूरा कर लिया है । इसलिए हिन्दी भाषा और साहित्य के ऐतिहासिक विवेचन की बड़ी आवश्यकता है । इसी के साथ-साथ हिन्दी ने अपना जो स्वतंत्र साहित्य शास्त्र निर्मित किया है, उसे भी रूपायित करने की आवश्यकता है । इसके संज्ञान द्वारा विद्यार्थी की मर्मग्राहिणी प्रतिभा का विकास होगा और ऐतिहासिक परिप्रेक्ष्य में शुद्ध साहित्यिक विवेक का सन्निवेश होगा ।

**पाठ्य विषय -**

- ( क ) हिन्दी भाषा का स्वरूप विकास - हिन्दी की उत्पत्ति, हिन्दी की मूल आकर भाषाएँ तथा विभिन्न विभाषाओं का विकास । हिन्दी भाषा के विभिन्न रूप -

1. बोलचाल की भाषा
2. रचनात्मक भाषा
3. राष्ट्रभाषा
4. राजभाषा
5. सम्पर्क भाषा
6. संचार भाषा

हिन्दी का शब्द भण्डार - तत्सम, तद्भव, देशज, आगत शब्दावली ।

(ख) हिन्दी साहित्य का इतिहास :- आदिकाल, पूर्व मध्यकाल, उत्तर मध्यकाल और आधुनिक काल की सामाजिक, सांस्कृतिक पृष्ठभूमि, प्रमुख युग प्रवृत्तियाँ, विशिष्ट रचनाकार और उनकी प्रतिनिधि कृतियाँ, साहित्यिक विशेषताएँ ।

(ग) काव्यांग - काव्य का स्वरूप एवं प्रयोजन ।

रस के विभिन्न भेद, विभिन्न अंगह, विभावादि तथा उदारहण ।

प्रमुख 5 छंद - दोहा, सोरठा, चौपाई, कुण्डलियाँ, सवैया ।

शब्दालंकार - अनुप्रास, यमक, श्लेष, वक्रोक्ति, पुनरुक्ति प्रकाश ।

अर्थालंकार - उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति, भ्रांतिमान ।

**संदर्भ ग्रन्थ -** (1) हिन्दी साहित्य का इतिहास

संपादक - डॉ. सुशील त्रिवेदी व बाबूलाल शुक्ल । (प्रकाशक - म.प्र. उ.शि. अनुदान आयोग)

(2) राजभाषा हिन्दी - मलिक मोहम्मद (प्रभात प्रकाशन दिल्ली)

(3) हिन्दी भाषा - डॉ. भोलानाथ तिवारी ।

**अंक विभाजन -**

4 आलोचनात्मक प्रश्न - 44 अंक

4 लघुत्तरीय प्रश्न - 16 अंक

15 वस्तुनिष्ठ प्रश्न - 15 अंक

**कुल अंक - 75 अंक**

**इकाई विभाजन -**

इकाई - 1 हिन्दी भाषा का स्वरूप - विकास - (खण्ड - 'क')

इकाई - 2 हिन्दी का शब्द भण्डार - (खण्ड 'क' का अंतिम भाग)

इकाई - 3 हिन्दी साहित्य का इतिहास - (खण्ड - ख)

इकाई - 4 काव्यांग - रस, छंद, अलंकार (भाग-ग)

इकाई - 5 लघुत्तरीय एवं वस्तुनिष्ठ प्रश्न (सम्पूर्ण पाठ्यक्रम से)

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## प्राचीन भारतीय इतिहास, संस्कृति एवं पुरातत्व

### प्रथम प्रश्न पत्र

#### भारतीय वास्तु तथा कला के मूल तत्व ( पेपर कोड-0266 )

पूर्णांक - 50

- इकाई-1 हड़प्पा कालीन वास्तु, मौर्य कालीन वास्तु, स्तूप वास्तु (सांची, भरहुत तथा अमरावती), पश्चिमी भारत के चैत्यगृह तथा विहार - भाजा, कार्ले, कोण्डाने, अजंता और एलोरा ।
- इकाई-2 मंदिर वास्तु - गुप्तकालीन मंदिर, चंदेल कालीन, चालुक्य, पल्लव, कलचुरि मंदिर ।
- इकाई-3 मूर्तिकला - हड़प्पा कालीन, मौर्यकालीन, शुंगकालीन, कुषाण कालीन (गांधार एवं मथुरा)
- इकाई-4 गुप्तकालीन मूर्तिकला, कलचुरि मूर्तिकला ।
- इकाई-5 प्रागैतिहासिक चित्रकला, अजंता और बाघ की चित्रकला, सिंघनपुर की चित्रकला, काबरा पहाड़ ।

#### अनुशंसित ग्रंथ -

- |  |   |                                      |
|--|---|--------------------------------------|
| 1. वासुदेव शरण अग्रवाल                       | - | भारतीय कला भाग-1                     |
| 2. रामनाथ मिश्र                              | - | भारतीय मूर्तिकला                     |
| 3. कृष्णदत्त बाजपेयी                         | - | भारतीय वास्तुकला का इतिहास           |
| 4. वासुदेव उपाध्याय                          | - | प्राचीन भारतीय स्तूप, गुहा एवं मंदिर |
| 5. कृष्णदत्त बाजपेयी एवं संतोष कुमार बाजपेयी | - | भारतीय कला                           |
| 6. सच्चिदानंद सहाय                           | - | मंदिर स्थापत्य का इतिहास             |
| 7. जयनारायण पांडेय                           | - | भारतीय कला                           |
| 8. मारुतिनंदन प्रसाद तिवारी तथा कमल गिरी     | - | भारतीय प्रतिमा विज्ञान               |
| 9. ए. एल. श्रीवास्तव                         | - | भारतीय कला                           |
| 10. A.K. Coomarswami                         | - | History of Indian and Indonesian Art |
| 11. Percy Brown                              | - | Indian Architecture, Vol. - I        |
| 12. Krishnadeva                              | - | Temples of north India               |
| 13. S. Kramrisch                             | - | Hindu Temples Part I & II            |

### द्वितीय प्रश्न पत्र

#### ( अ ) भारतीय पुरातत्व के मूलतत्व ( पेपर कोड-0267 )

पूर्णांक - 50

- इकाई-1 पुरातत्व विज्ञान की परिभाषा, विस्तार क्षेत्र, अध्ययन की अन्य शाखाओं से सम्बन्ध ।
- इकाई-2 भारत में पुरातत्व का इतिहास, प्राचीन स्थलों की खोज, तिथि निर्धारण ।
- इकाई-3 उत्खनन-विधियाँ, सर्वेक्षण स्तर विन्यास, उत्खनन का लेखा-जोखा ।
- इकाई-4 भृदभाण्ड, गैरिक भृदभाण्ड, चित्रित धूसर भृदभाण्ड, काले और लाल भृदभाण्ड, उत्तरी कृष्ण मार्जित भृदभाण्ड ( एन.वी.पी. ) ।
- इकाई-5 प्रमुख पुरास्थलों का अध्ययन -  
कालीबंगा, एरण, कौशाम्बी, हस्तिनापुर, ब्रह्मगिरी, सिरपुर, मल्हार ।

- अनुशंसित ग्रंथ -
- |                         |   |                        |
|-------------------------|---|------------------------|
| 1. के. डी. बाजपेयी      | - | मध्यप्रदेश का पुरातत्व |
| 2. आर. एम. व्हीलर       | - | पृथ्वी से पुरातत्व     |
| 3. बी.एन. पुरी          | - | पुरातत्व विज्ञान       |
| 4. जयनारायण पाण्डेय     | - | पुरातत्व विमर्श        |
| 5. राकेश प्रकाश पाण्डेय | - | पुरातत्व विज्ञान       |
| 6. मदन मोहन सिंह        | - | पुरातत्व की रूपरेखा    |

“अथवा”

द्वितीय प्रश्न पत्र

( ब ) पुराभिलेख एवं मुद्राशास्त्र के मूल तत्व ( पेपर कोड-0268 )

पूर्णांक - 50

- इकाई-1 1. प्राचीन भारतीय इतिहास की पुनर्रचना में अभिलेखों का महत्व ।  
2. लेखन कला का उद्भव एवं विकास ।  
3. अभिलेखों में प्रयुक्त भाषायें, लिपियाँ तथा सामग्री ।

इकाई-2 निम्नलिखित अभिलेखों का ऐतिहासिक महत्व :

1. अशोक का द्वितीय शिलालेख ।
2. अशोक का बारहवां शिलालेख ।
3. हेलियोडोरस का बेसनगर स्तम्भलेख ।
4. रूद्रदामन का जूनागढ़ अभिलेख ।
5. समुद्रगुप्त की प्रयाग प्रशस्ति ।
6. पुलकेशिन द्वितीय का ऐहोल अभिलेख ।

- इकाई-3 1. इतिहास की पुनर्रचना में मुद्रा का महत्व ।  
2. मुद्रा का उद्भव तथा प्राचीनता ।  
3. आहत सिक्के ।

इकाई-4 जनपदीय सिक्के : तक्षशिला, कौशम्बी, एरण, कोसल जनपद के सिक्के ।

इकाई-5 गुप्त सिक्के, महेन्द्रादित्य क्रमादित्य प्रकार के सिक्के, (छत्तीसगढ़ अंचल से प्राप्त), नल नरेशों के सिक्के ।

अनुशासित ग्रंथ -

- |  |   |
|--|---|
| 1. डी. सी. सरकार   | - इंडियन एपिग्राफी                          |
| 2. डी. सी. सरकार   | - सेलेक्ट इन्सक्रिप्शन्स भाग 1 व 2          |
| 3. एस. एच. दानी  | - इंडियन पैलियोग्राफी                       |
| 4. वासुदेव उपाध्याय  | - प्राचीन भारतीय अभिलेखों का अध्यय          |
| 5. कृष्णदत्त बाजपेयी, कन्हैयालाल अग्रवाल संतोष कुमार बाजपेयी | - ऐतिहासिक भारतीय अभिलेख                    |
| 6. परमेश्वरी लाल गुप्ता                                      | - प्राचीन भारतीय मुद्राएँ                   |
| 7. डी. सी. सरकार   | - स्टडीज एव इंडियन क्वाएन्स                 |
| 8. ए. के. शरण  | - ट्राइबल क्वाएन्स                          |
| 9. भास्कर चट्टोपाध्याय                                       | - द एज ऑफ दि कुषाणाज: ए न्यूमिस्मेटिक स्टडी |
| 10. ए. एस. अल्लेकर   | - गुप्तकालीन मुद्राएं                       |
| 11. राजवन्त राव  | - प्राचीन भारतीय मुद्राएं                   |

प्रायोगिक तथा मौखिक परीक्षा

पूर्णांक - 50

- |  |                 |
|--|-----------------|
| 1. किसी महत्वपूर्ण पुरातात्विक / ऐतिहासिक स्थान का भ्रमण एवं विवरण प्रस्तुति | - 20 अंक        |
| 2. पुरावस्तुओं की पहचान  | - 20 अंक        |
| 3. मौखिकी  | - 10 अंक        |
| <b>योग</b>   | <b>- 50 अंक</b> |

## ENGLISH LITERATURE

### PAPER - I

#### INDIAN WRITING IN ENGLISH

M.M. : 75

(Paper Code-0235)

All questions are compulsory.

- Note :
1. Unit - I is compulsory. Two passages from each of the units II to V to be set and three to be attempted. (3x5 = 15)
  2. Short answer questions from unit VII, seven to be set and five to be attempted. (5x2 = 10)
  3. Long-answer questions from unit II to VI. Five questions from each unit with internal choice to be set. (5x10 = 50)

**UNIT-I** Annotations and short answer questions.

**UNIT-II Poetry -**

Toru Dutt	-	'Our Casurina Tree'
Tagore	-	Songs 1 & 103 from 'Gitanjali'
Sarojini Naidu	-	'The Ecstasy', 'The Lotus'

**UNIT-III** Kamla Das - 'The old playhouse'

Gauri Deshpandey	Or	'The female of the species'
Jayant Mahapatra	-	'Dawn at Puri'
K.N. Daruwala	Or	'Death by Burial'
Shiv K. Kumar	-	'Indian Women'

**UNIT-IV Prose -**

Nirad C. Choudhary	-	My Birth Place.
Dr. S. Radhakrishnan	-	The call of the suffering.

**UNIT-V Drama -**

Girish Karnad	-	Hayavadana
	Or	
Tendulkar	-	Silence ! The Court is in session.

**UNIT-VI Fiction -**

R.K. Narayan	-	Guide
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**UNIT-VII** 1. Lyric, 2. Subjective poetry, 3. Couplet, 4. Fable, 5. Hymn, 6. Allegory, 7. Autobiography,

**BOOK RECOMMENDED :**

1. Indian Poetry in English, Ed. Hari Mohan Prasad, Sterling Publication.
2. An Introduction to the study of English Literature, B. Prasad.
3. A Glossary of Literary Terms - M.H. Abrams.
4. Prose of To day - M.C. Millan.

### PAPER - II

#### (A) AMERICAN LITERATURE

(Paper Code-0236)

All questions are compulsory.

- Note :
1. Unit-I is compulsory. Two passages from each of the units II to V to be set and three to be attempted. (3x5 = 15)

- 2 Short answer questions from unit VII, seven to be set and five to be attempted. (5x2 = 10)
- 3 Long-answer questions from unit II to VI. (word limit for each answer is 300-400 words) internal choice to be set. (5x10 = 50)

**UNIT-I** Annotations and short answer question.

**UNIT-II Poetry -**

Wait whitman - O Captain ! My Captain, when the Lilacs Last in the Dooryard Bloomed.

Carl Sandberg - 'Who Am I ?', 'I am the People, The Mob'

**UNIT-III** Emily Dickinson - 'Hope is the thing with Feather' I Felt a funeral in My Brain'

E.E. Cummings - 'The Cambridge Ladies'  
'As Freedom is a Breakfast food'

**UNIT-IV Prose -**

William Faulkner - Nobel Award Acceptence Speech

W. Carlos Williams - In the American Grain

Walt Whitman - Preface to "Leaves of Grass"

**UNIT-V Drama -**

Miller - All My Sons

Or

Eugene O'Neill - The Hairy Ape

**UNIT-VI Fiction -**

E. Hemingway - A Farewell to Arms

Or

W. Faulkner - The Sound and the Fury

**UNIT-VII** 1. Naturalism, 2. Realism, 3. Art for Art's sake, 4. Poetic-Drama, 5. Symbolism, 6. American Renaissance, 7. Existentialism.

**BOOK RECOMMENDED :**

- 1 American Literature, An Anthology, Ed. Fr. Egbert S. Oliver.
- 2 A Glossary of Literary Terms - M.H. Abrams.

## PAPER - II

### (B) 20TH CENTURY LITERATURE IN ENGLISH

(Paper Code-0237)

The paper will be taught as an optional paper to Paper-II(A) which is a paper on American Literature. The Principle focus will be to probe the students a general background and cultural history of this period and also to make them aware of the Literary trends of the twentieth century. The Paper will comprise six units and in all six quetions are to be attempted, one from each unit.

**UNIT-I** The following historical and literary topics will be included in this unit. Students are required to write short notes of not more than three hundred words on any two of the following topics. (10 Marks)

i The Two world wars.

ii The Russian Revolution.

- iii) The Great Depression.
- iv) The Vietnam war.
- v) Freudian Thought
- vi) Existentialism.
- vii) Absurdism.
- viii) Modernism and Post Modernism.
- ix) New Development in fiction and Drama.

**UNIT-II** Ten objective type questions on the life History and major poetical works of the following poets of the twentieth century will be asked in this unit. (10 Marks)

- i) W.B. Yeats (1865-1939)
- ii) Siegfried Sasson (1886-1967)
- iii) Rupert Brooke (1887-1915)
- iv) T.S. Eliot (1888-1965)
- v) Wilfred Owen (1893-1918)
- vi) W.H. Auden (1907-1937)
- vii) Louis Macneice (1907-1963)
- viii) Stephen Spender (1909- )
- ix) Dylan Thomas (1914-1953)
- x) Philip Larkin (1922-1985)

**UNIT-III** (15 marks)

T.S. Eliot - 'The Waste Land'

Or

Wilfred Owen - 'Disabled'

Siegfried Sassoon - 'Attack', 'Falling Asleep'

Rupert Brooke - 'The Hill'

W.H. Auden - 'Miss Gee'

**UNIT-IV** (15 marks)

Joseph Conrad - 'Heart of Darkness'

Or

Chinua Achebe - 'Things Fall Apart'

**UNIT-V** (Non Fictional Prose) (10 marks)

Virginia Woolf - 'The Death of the Moth'

Graham Greene - 'The Lost Childhood'

**UNIT-VI** (Drama) (15 marks)

Bernard Shaw - 'Pygmalion'

Or

Samuel Beckett - 'Waiting for Godot'

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## संस्कृत साहित्य

### प्रथम प्रश्न पत्र

#### नाटक, छन्द तथा व्याकरण

पूर्णांक - 75

( पेपर कोड-0257 )

- इकाई-1 अभिज्ञान शाकुन्तलम् ( कालिदास)
1. दो श्लोकों की ससन्दर्भ व्याख्या 20
  2. एक श्लोक का अनुवाद 10  
( प्रथम, चतुर्थ, पंचम और सप्तम अंक, व्याख्या हेतु, द्रुतपाठ - शेष अंक)
- इकाई-2 अभिज्ञान शाकुन्तलम् - समीक्षात्मक प्रश्न 10
- इकाई-3 निर्धारित छन्दों के लक्षण तथा उदाहरण 15  
अनुष्टुप्, इन्द्रवज्रा, उपेन्द्रवज्रा, उपजाति, वंशस्थ, आर्या, मालिनी, शिखरिणी, वसन्ततिलका, शार्दूलविक्रीडित, स्त्रग्धरा, मन्दाक्रान्ता ।
- इकाई-4 व्याकरण - लघुसिद्धान्त कौमुदी 10  
कृदन्त प्रकरण  
तव्यत्, अनीयर्, यत्, क्यप्, क्यच्, शतृ, शानच्, क्त्वा, ल्यप्, तुमुन्, क्त, क्तवतु, ण्वुल्, तृच्, ल्युट्, अण्
- इकाई-5 व्याकरण - लघुसिद्धान्त कौमुदी
1. तद्धित प्रत्यय  
अण्, ढक्, ष्यञ्, त्व, तढक्, इमनिच्, तठक्, अञ्, मतुप्, इनि, इतच्, ईयसुन्, इष्टन्, तरप्, तमप्, ण्य, यञ्
  2. स्त्री प्रत्यय  
टाप्, डीष्, डीप्, डीन् ।

#### अनुशासित ग्रन्थ -

1. शीघ्रबोध व्याकरणम् - डॉ. पुष्पा दीक्षित, पाणिनीय शोध संस्थान, तेलीपारा, बिलासपुर
2. लघुसिद्धान्त कौमुदी - श्रीधरानंद शास्त्री
3. संस्कृत हिन्दी कोश - वामन शिवराम आपटे
4. छन्दोमंजरी - चौखंबा प्रकाशन

### प्रश्न पत्र द्वितीय

#### काव्य, अलंकार तथा निबन्ध

पूर्णांक - 75

( पेपर कोड-0258 )

- इकाई-1 किरातार्जुनीय ( भारवि) प्रथम सर्ग  
दो श्लोकों की ससन्दर्भ व्याख्या 20

इकाई-2 किरातार्जुनीयम् - आलोचनात्मक प्रश्न 10

इकाई-3 मूलरामायणम् - वाल्मीकि  
व्याख्या अथवा आलोचनात्मक प्रश्न 15

इकाई-4 अलंकार -  
उपमा, रूपक, उत्प्रेक्षा, अर्थान्तरन्यास, स्वाभावोक्ति, काव्यालिङ्ग, अतिशयोक्ति, दीपक, विभावना, विशेषोक्ति, अपह्नुति, दृष्टांत, प्रतिवस्तूपमा, निदर्शना, यमक, शब्दश्लेष, अनुप्रास, अनन्वय, ससन्देह, भ्रान्तिमान् ।  
टिप्पणी : अलंकारों के लक्षण चन्द्रालोक, साहित्य दर्पण, अथवा काव्य प्रकाश से अध्येतव्य हैं, उदाहरण पाठ्यक्रमों से भी दिये जा सकते हैं ।

इकाई-5 निबन्ध (संस्कृत भाषा में) 15 वाक्यों में 15  
टिप्पणी : निबन्ध समीक्षात्मक अथवा विश्लेषणात्मक न होकर वर्णनात्मक पूछे जायेंगे ।

अनुशासित ग्रन्थ -

1. संस्कृत निबन्ध शतकम् - डॉ. कपिलदेव द्विवेदी, चौखंबा प्रकाशन, वाराणसी
2. निबन्ध पारिजात - डॉ. रजनीकान्त लहरी, चौखंबा प्रकाशन, वाराणसी
3. रचनानुवाद कौमुदी - डॉ. कपिलदेव द्विवेदी, चौखंबा प्रकाशन, वाराणसी
4. प्रबन्ध रत्नाकर - डॉ. रमेशचन्द्र शुक्ल, चौखंबा प्रकाशन, वाराणसी

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## राजनीति विज्ञान

प्रश्न पत्र - प्रथम

### अंतर्राष्ट्रीय राजनीति

( पेपर कोड-0244 )

पूर्णांक - 75

- इकाई-1 अंतर्राष्ट्रीय राजनीति का अर्थ, प्रकृति, क्षेत्र, अंतर्राष्ट्रीय राजनीति के अध्ययन के उपागम ।
- इकाई-2 अंतर्राष्ट्रीय राजनीति के विभिन्न सिद्धांत - शक्ति, परिभाषा, तत्व ।  
शक्ति संघर्ष, शक्ति संचय, शक्ति वृद्धि, शक्ति प्रदर्शन ।
- इकाई-3 शक्ति सन्तुलन की अवधारणा - सैद्धांतिक लाभ एवं मूल्यांकन ।  
शांति एवं सुरक्षा की अवधारणा - सामूहिक सुरक्षा का सिद्धांत ।
- इकाई-4 राजनय परिभाषा, प्रकार, कार्य, उद्देश्य एवं साधन निःशस्त्रीकरण - अर्थ, परिभाषा एवं विकास, निःशस्त्रीकरण के मार्ग की बाधाएं एवं निराकरण ।
- इकाई-5 अंतर्राष्ट्रीय राजनीति के नए प्रतिमान :
1. पर्यावरणवाद,
  2. वैश्वीकरण,
  3. मानव अधिकार ।

#### संदर्भ ग्रन्थ -

1. महेन्द्र कुमार - अन्तर्राष्ट्रीय राजनीति के सैद्धांतिक पत्र
2. विजय कुमार अरोरा - अन्तर्राष्ट्रीय राजनीति
3. दीनानाथ वर्मा - अन्तः संबंध - ज्ञानदा प्रकाशन, दिल्ली
4. मथुरालाल शर्मा - अन्तः संबंध - 1945 से, कॉलेज बुक डिपो, जयपुर
5. डी.सी. चतुर्वेदी - अन्तः संबंध 1945 से वर्तमान तक, रस्तौगी प्रकाशन, मेरठ
6. रमेश भारद्वाज - नवीन विश्व व्यवहार और भारती विदेश नीति
7. पंत एवं जैन - अन्तर्राष्ट्रीय संबंध, मीनाक्षी प्रकाशन, मेरठ
8. बी.के. खन्ना एवं अरोरा - भारतीय विदेशनीति के नये आयाम, डी.के. प्रकाशन, नई दिल्ली
9. Palmar and Prkins - International Relations.
10. R. Aron - Peace & war - A theory of International Relations, London.
11. Organski - World Politics
12. C.P. Schliccher - International Relations, Co-operation and Competition.
13. J. Frankel - The making of Foreign policy, london, 1963.
14. H.J. Morgenthau - Politics Among Nations, 6th adition, New York, 1985.
15. K.N. Waltz - Theory of International Politics, Addison - Wesley, 1979.

**प्रश्न पत्र - द्वितीय**  
**लोक प्रशासन**  
( पेपर कोड-0245 )

पूर्णांक - 75

- इकाई-1** लोकप्रशासन का अर्थ, प्रकृति एवं क्षेत्र  
एक अनुशासन के रूप में लोक प्रशासन का मल्यांकन लोक प्रशासन एवं व्यक्तिगत प्रशासन में समानताएं एवं व्यक्तिगत प्रशासन में समानताएँ एवं असमानताएँ ।
- इकाई-2** लोक प्रशासन के अध्ययन की पद्धति एवं उपागम,  
नवीन लोक प्रशासन ।
- इकाई-3** राजनीति एवं लोकप्रशासन  
प्रशासनिक व्यवहार - नेतृत्व, निर्णय, निर्माण संचार, जवाबदेही ।
- इकाई-4** नौकरशाही एवं बजट प्रक्रिया  
वैश्वीकरण एवं उदारीकरण के युग में लोक प्रशासन के नये आयाम ।
- इकाई-5** प्रशासन पर विधायी नियंत्रण,  
प्रशासन पर न्यायिक नियंत्रण ।

**संदर्भ ग्रन्थ -**

- |     |                      |   |  |
|-----|----------------------|---|--|
| 1.  | सी.पी. भाम्भरी       | - | लोक प्रशासन की सिद्धांत                                  |
| 2.  | पी.डी. शर्मा         | - | भारत में लोक प्रशासन                                     |
| 3.  | खान एवं वर्मा        | - | प्रशासनिक विचारधाराएँ, भाग 1, 2                          |
| 4.  | इन्द्रीजीत कौर       | - | लोक प्रशासन, साहित्यभवन, आगरा                            |
| 5.  | जे.पी. शर्मा         | - | लोक प्रशासन, रायपुर                                      |
| 6.  | आर. बसु              | - | लोक प्रशासन, नई दिल्ली, जवाहर पब्लिशर्स                  |
| 7.  | बी.एल. फातिया        | - | लोक प्रशासन - साहित्य भवन, आगरा                          |
| 8.  | निशा वशिष्ठ          | - | भारत में नौकरशाही की कार्यप्रणाली                        |
| 9.  | सी.एन. चतुर्वेदी     | - | तुलनात्मक लोक प्रशासन, जयपुर (कॉलेज बुक डिपो)            |
| 10. | Pfittner J.M.        | - | Public Administration.                                   |
| 11. | White L.D.           | - | Introduction to the Principles of Public Administration. |
| 12. | Bhambhari C.P.       | - | Bureaucracy and Politics in India, Delhi Vikas 1971.     |
| 13. | Bhattacharya M.      | - | Public Administration.                                   |
| 14. | Maheshwari S.R.      | - | Indian Administration system.                            |
| 15. | Awasthi & Maheshwari | - | Public Administration.                                   |

## **ECONOMICS**

### **PAPER - I**

#### **DEVELOPMENT AND ENVIRONMENTAL ECONOMICS M.M. 75**

**(Paper Code-0242)**

- UNIT-I** Economic Growth and Development - Factors affecting economic growth, Capital and Technology Development & under development, Population of Under-developed Countries, Poverty - Absolute & Relative, Measuring development and Underdevelopment, gap per capita income, inequality of income and wealth.  
Human Development index GDI, GEM, Poverty Index of development & Quality of life.
- UNIT-II** Population problem and growth, pattern of population. Theory of demographic transition. Population poverty & Environment. Theory of Social Change Immutability laws of Capital Development - Crisis in capitalism. Karl Marx - Theory of Development, Mahalanobis four sectoral Model. Schumpeter's development in Capitalistic economy, Big-Push Balance and unbalanced Growth, Critical Minimum Effort thesis, Low Income Equilibrium Trap-Dualism : Technical, Behavioural & Social.
- Unit-III** Harrod and Domar Growth Model, Neo Classical models, So low, Meade & Mrs. Joan Robinson's Growth model, Unlimited supply of Labour.
- UNIT-IV** Environment and Ecology : Economic linkage, Environment as a necessary and luxury, Population environment linkage, Environmental use & environmental disruption as an allocation problem. Market failure for environmental goods, environment as a public good, the Common problem. Property Human right approach to environmental problem, valuation of environmental damages-land, water, air & forest Pollution Control-Prevention. Control and abatement of pollution Choice of policy instruments in developing Countries, Environmental legislation Indicators of Sustainable Development, environmental accounting.
- UNIT-V** Concept of Intellectual Capital - Food Security, Education Health & Nutrition, Efficiency & Productivity in Agriculture New Technology & Sustainable Agriculture, Globalization & Agriculture growth, the Choice of Technique & appropriate technology & employment. Role of Monetary & Fiscal policies in developing Countries.

### **PAPER - II**

#### **STATISTICAL METHODS M.M. 75**

**(Paper Code-0243)**

- UNIT-I** Statistical Methods Statistics - Definition Statistical Data, Statistical Methods, Functions of Statistics. Importance of Statistics, Limitations of Statistics. Statistical Survey & Report writing. Collection of Data, Primary & Secondary Data, Sampling & Sampling Designs. Sampling Errors, Frequency Distribution, Diagrammatic & Graphic Presentation.
- UNIT-II** Central Tendency. Measurement of Mean, Median, Mode, Geometric Mean & Harmonic Mean and their uses.
- Unit-III** Dispersion : Meaning of Dispersion, Properties good measure of Variation - Methods

of Dispersion Range, Quartiles Deviation - Mean Deviation, Standard Deviation, Coefficient of Variation, Lorenz Curve, Skewness & Kurtosis.

**UNIT-IV** Coefficient of Correlation - Karl Pearson's Method, Probable Error, Spearman's Rank Correlation Coefficient.

**UNIT-V** Index Number - Construction of Index Numbers Simple & weighted Index Number's- Fisher's Ideal Index Number & Reversal Test. Consumer Price Index Numbers and Time Series Analysis - components of Time-Series.

Measurement of Trend - Graphic Method, Semi Average Method. Moving averages, Least Square Method, Measuring Trend by logarithms.

**BOOK RECOMMENDED :**

1. Salvatore, D.L. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J.
2. Sodersten, Bo (1991), International Economics, Macmillan Press Ltd. London.
1. Aggarwal, M.R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co. New Delhi.
2. Bhagwati J. (Ed.) (1981), International Trade, Selected Readings, Cambridge University Press, Mass.
3. Creckjell A. (1982), International Money, Issue and Analysis, E.I.B.S and Nelson, London.
4. Greenaway, D. (1983) International Monetary Economics, Prentice Hall India.
5. Joshi V. and I.M.D. Little (1998), India's Economic Reforms, 1999-2001, Oxford University Press, Delhi.
6. Panchmukhi, V.R. (1978) Trade Policies of India : A Quantitative Analysis, Concept Publishing Company. New Delhi.
7. Patel, S.J. (1995) Indian Economy Towards the 21st Century. University Press Ltd. India.
8. Singh M. (1964), India Export Trends and the Prospects for sustained growth Oxford University Press, Oxford.

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## इतिहास

प्रश्न -पत्र प्रथम

भारत का इतिहास सन् 1761 ई. से 1950 ई. तक

M.M. 75

( पेपर कोड-0240 )

**उद्देश्य :** इस पाठ्यक्रम का उद्देश्य आधुनिक काल में भारत के राजनीतिक, सामाजिक आर्थिक एवं सांस्कृतिक इतिहास से विद्यार्थियों को अवगत कराना है ।

- इकाई-1**
1. ब्रिटिश साम्राज्य का विस्तार एवं सुदृढीकरण - युद्ध एवं कूटनीति - कर्नाटक युद्ध
  2. ब्रिटिश साम्राज्य का विस्तार एवं सुदृढीकरण - प्लासी एवं बक्सर
  3. सहायक संधि एवं हड़प नीति (व्यपगत का सिद्धांत)
  4. ब्रिटिश प्रशासन एवं सुधार - बेंटिंग, लिटन, रिपन, कर्जन

- इकाई-2**
1. वाणिज्यवाद - उद्योगों का पतन
  2. वाणिज्यवाद - व्यापार का पतन
  3. कृषि का ह्रास एवं कृषक आन्दोलन
  4. भूराजस्व व्यवस्थाएं - स्थाई बन्दोबस्त, रैयतवाड़ी, महालवाड़ी

- इकाई-3**
1. भारतीय पुनर्जागरण - ब्रह्म समाज, आर्य समाज, प्रार्थना समाज,
  2. रामकृष्ण मिशन, थियोसोफिकल सोसायटी, अलीगढ़ आन्दोलन
  3. पाश्चात्य शिक्षा का विकास एवं प्रेस
  4. विभिन्न सामाजिक वर्ग - कृषक, मजदूर, मध्यम वर्ग एवं महिलाएं

- इकाई-4**
1. राष्ट्रवाद का उदय एवं 1857 की क्रान्ति
  2. भारतीय राष्ट्रीय कांग्रेस - उदारवादी, उग्रवादी
  3. क्रान्तिकारी आन्दोलन
  4. गांधीवादी आन्दोलन

- इकाई-5**
1. साम्प्रदायिकता : उदय एवं विकास
  2. सुभाषचन्द्र बोस एवं आजाद हिन्द सेना
  3. भारत का संवैधानिक विकास : 1919 ई. - द्वैध शासन, 1935 - प्रान्तीय स्वायत्तता
  4. भारत की स्वतंत्रता तथा भारतीय संविधान की विशेषताएं ।

### संदर्भ ग्रंथ :

1. Sarkar and Dutt - Modern India (English and Hindi Version)
2. Singh, Gurumukh Nihal - Landmarks in Indian Constitutional Development and National Movement.
3. Agrawal R.C. - Indian Constitutional Development and National Movement in India.
4. राधेशरण - भारत की सामाजिक एवं आर्थिक संरचना और संस्कृति के मूल तत्व (आदिकाल से 1950 ई. तक) (म.प्र. हिन्दी ग्रंथ अकादमी का प्रकाशन)

- |     |                              |   |  |
|-----|------------------------------|---|--|
| 5.  | मिश्रा जे.पी.                | - | आधुनिक भारत का इतिहास                          |
| 6.  | नागौरी एस.एल. लाल            | - | आधुनिक भारत का इतिहास                          |
| 7.  | ग्रोवर बी.एल.                | - | आधुनिक भारत का इतिहास                          |
| 8.  | दुबे सत्यनारायण              | - | आधुनिक भारत का इतिहास                          |
| 9.  | मजूमदार दत्त राय चौधरी       | - | भारत का वृहत् इतिहास                           |
| 10. | जैन एम. एस.                  | - | आधुनिक भारत का इतिहास                          |
| 11. | सिंह प्रताप                  | - | आधुनिक भारत का सामाजिक एवं आर्थिक इतिहास       |
| 12. | सिंह प्रताप                  | - | आधुनिक भारत (1858 - 1919)                      |
| 13. | सिंह प्रताप                  | - | आधुनिक भारत (1919 - 1950)                      |
| 14. | दिल्ली विश्वविद्यालय प्रकाशन | - | आधुनिक भारत का इतिहास                          |
| 15. | दिवाकर ब्रज मोहन             | - | आधुनिक भारत                                    |
| 16. | छाबड़ा जी.एस.                | - | आधुनिक भारत का इतिहास (तीन खण्डों में)         |
| 17. | नागपाल ओभ                    | - | भारत का राष्ट्रीय आंदोलन और...                 |
| 19. | सीताराम शर्मा                | - | उन्नीसवीं सदी भारतीय धार्मिक तथा सामाजिक जागरण |
| 20. | डॉ. सीताराम जी 'श्याम'       | - | भारतीय स्वतंत्रता संग्राम की रूपरेखा           |
| 21. | विपिन चन्द्रा                | - | भारत का स्वतंत्रता संग्राम                     |
| 22. | रामलखन शुल्क                 | - | आधुनिक भारत                                    |
| 23. | रमेशचन्द्र दत्त              | - | ब्रिटिश भारत का आर्थिक इतिहास                  |
| 24. | डॉ. अयोध्यासिंह              | - | भारत का मुक्ति संग्राम                         |
| 25. | डॉ. एग्नेस ठाकुर             | - | आधुनिक भारत का इतिहास                          |

### प्रश्न - पत्र द्वितीय

विश्व इतिहास - सन् 1871 ई.से 1945 ई.तक

M.M. 75

( पेपर कोड-0241 )

**उद्देश्य :** इस पाठ्यक्रम का उद्देश्य विश्व इतिहास की प्रमुख घटनाओं से विद्यार्थियों को अवगत कराना है । साथ ही अन्तर्राष्ट्रीय परिदृश्य का ज्ञान भी इन्हें देना है ।

- इकाई-1**
1. फ्रांस का तृतीय गणतंत्र
  2. बिस्मार्क : सह एवं विदेश नीति
  3. विलियम द्वितीय की विदेश नीति
  4. अफ्रीका का विभाजन

- इकाई-2**
1. जापान का आधुनिकीकरण
  2. रूस - जापान युद्ध : कारण एवं परिणाम
  3. चीन की क्रान्ति - कारण एवं परिणाम
  4. डॉ. सन-यत- सेन



- इकाई-3**
1. पूर्वी समस्या - बर्लिन कांग्रेस, युवा तुर्क आन्दोलन
  2. बाल्कन युद्ध : कारण एवं परिणाम
  3. प्रथम विश्व युद्ध : कारण एवं परिणाम
  4. रूस की क्रान्ति 1917

- इकाई-4**
1. वर्साई की संधि
  2. फासीवाद - मुसोलिनी
  3. नाजीवाद - हिटलर
  4. जापान का सैन्यवाद - तोजो

- इकाई-5**
1. राष्ट्रसंघ : स्थापना एवं विल्सन के 14 सूत्र
  2. द्वितीय विश्वयुद्ध - कारण एवं परिणाम
  3. संयुक्त राष्ट्र संघ - स्थापना एवं संगठन
  4. संयुक्त राष्ट्र संघ - उपलब्धियां

**अनुशंसित ग्रंथ :**

1. Grant and Temperley - Europe in the 19th and 20th Century (also Hi-- Version)
2. Kettelby - History of the Modern Times
3. Moon - Imperialism in World Politics
4. Plamor & Parkins - International Politics
5. Parks, Hengy Bamford - The United States of America A History
6. Panikkar K.M. - Asia and Western Dominance
7. Schuman - International politics
8. Taylor, A.J.P. - Struggle for Mastery over Europe
9. Vinacke, H.M. - A History of Far East in Modern Times
10. Fay - Origins of the World War
11. Robert. Engong - Europe since waterloo
12. Manazir Ahmad - Europe ka Itihas (in Hindi)
13. Satyaketu Vidyalkar - Sudurpurva ka Itihas (in Hindi)
14. Deonath Verma - Angla ka Itihas (in Hindi)
15. वर्मा भगवान सिंह - विश्व इतिहास की प्रमुख धारायें (1871-1956)  
(म.प्र. हिन्दी ग्रंथ एकादमी का प्रकाशन)
16. शर्मा भथुरालाल एवं बघेला हेतसिंह - यूरोप का इतिहास (1789-1945) : एक शोध पूर्ण अध्ययन  
एवं माथुर कौशिक इत्यादि
17. अहमद लइक - आधुनिक विश्व का इतिहास

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## GEOGRAPHY

1. The B.A. Part III Examination in Geography will be of 150 marks. There will be two theory papers and one practical each of 50 marks as follows :  
Paper - I            Resource and Environment  
Paper - II            Geography of India (with special reference to Chhattisgarh)  
Paper - III            Practical Geography
2. Each theory paper shall be of three hours' duration.
3. Candidates will be required to pass separately in theory and practical examinations.
4. Each theory paper is divided into five units.
5. (a) In the practical examination the following shall be allotment of time and marks.

i) Lab work	-	20 marks	up to three hours
ii) Survey	-	10 marks	Two hours
iii) Field Report	-	10 marks	
iv) Practical Record and viva-voce	-	10 marks	
- (b) The external and internal examiners shall jointly submit marks.
- (c) The candidates shall present at the time of the practical examination their practical records regularly signed by the teachers concerned.

### PAPER - I

#### RESOURCES AND ENVIRONMENT

M.M. 50

(Paper Code-0248)

#### A. Resources

**UNIT-I** Meaning, nature and components of resources and environment. Resources and environment interface. Classification of resources : renewable and nonrenewable : biotic (forests, wild-life, live-stock, fisheries, agricultural crops) and abiotic (land, water, mineral)

**UNIT-II** Distribution and utilization of water mineral and energy resources, their economic and environmental significance and conservation. Types and distribution of forests, fauna and fisheries, their economic, and environmental significance and conservation. Major soil types and their distribution; problems of soil erosion and soil conservation.

**UNIT-III** Number, density, growth and distribution of population; population pressure and resource utilization.

#### B. Environment

**UNIT-IV** Classification of environment : Natural and Human. Man environment interrelations with respect to population size, types of economy and technology; exploitation of natural resources and environmental hazards.

**UNIT-V** Emerging environmental issues - population explosion; food security; deforestation; global warming, conservation of bio-diversity; sustainable development.

### PAPER - II

#### GEOGRAPHY OF INDIA

M.M. 50

(With Special reference to Chhattisgarh)

(Paper Code-0249)

**UNIT I** Physical features : Structure, Relief and Physiographic regions, Drainage, Climate-origin and mechanism of monsoon, and regional and seasonal variation.

**UNIT-II** Natural resources : Soils - types, their distribution and characteristics. Water resources (major irrigation and hydel power projects); Forests-types, distribution, economic significance and conservation. Mineral and Power resources-Iron-ore, Manganese, Copper, Coal, Petroleum and Natural gas, Non conventional sources of energy.

**UNIT-III** Cultural Features : Agriculture - Major crops, impact of green revolution and agricultural regions; Industries - Iron and steel, Cotton Textile, Cement, Sugar, Population - growth, density and distribution. Transport, Foreign Trade.

**UNIT-IV** Chhattisgarh :  
Physical Features : Structure, Physiography, Drainage, Climate, Soils, Natural vegetation, Water resources - availability and development. Mineral and Power resources, Power projects.

**UNIT-V** Chhattisgarh :  
Cultural features : Agriculture, Industries, Population - growth, distribution and density, social groups, literacy and sex-ratio, urbanisation. Major tribes-their habitat, economy and society. Transport and Tourism.

**SUGGESTED READING :**

1. Sharma, T.C. and Coutinho, O. : Economic and Commercial Geography of India, Vikas Pub. House, New Delhi, 1988.
2. Singh, R.L. (Ed.) : India : A regional Geography, Nat. Geog. Soc. of India, Varanasi, 1971.
3. Spate, O.H.K. and Leamonth, A.T.A. India and Pakistan : A General and Regional Geography, Methuen & Co. Ltd. London, 1967.
4. Tiwari, R.C. : Geography of India, Prayag Pustak Bhawan. Allhabad, 2003.
5. प्रमीला कुमार (सम्पादक) : मध्यप्रदेश का प्रादेशिक भूगोल, म.प्र. हिन्दी ग्रंथ अकादमी, भोपाल
6. अग्रवाल, प्रेमचंद : भारत का भौतिक भूगोल

**PAPER - III**

**PRACTICAL GEOGRAPHY**

**M.M. 50**

**UNIT-I** Band graph, Hythergraph and Climograph. Square root, cube-root and vernier scales.

**UNIT-II** Map Projection : Conical Projection : one standard parallel, two standard parallels, Bonne's, Ployconic, Polar Zenithal Projections; Gnomonic, Stereographic and Orthographic.

**UNIT-III** Study and Interpretation of Indian topographical sheets : classification and numbering system, Interpretation of topographical sheets with respect to cultural and physical features.

**UNIT-IV** Surveying - Plane Table Survey, Basic Principles of plane table surveying, Plane table survey including intersection and resection.

**UNIT-V** Importance of field work in Geography. Field work and field report : physical, social and economic survey of a micro-region.

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## MUSIC

### PAPER - I

#### THEORY OF INDIAN MUSIC, VOCAL/INSTRUMENTAL M.M. :50

##### (Paper Code-0264)

- I Definitions and Elementary Knowledge of the following terms : Shruti, Gram, Murchana, Jaati, Sadaj-Pancham Bhav, Sadaj-Madhyam Bhav, Sada-jantar Bhav, Chatuh Sarana by acharya Bharat, Praman Shruti, Kaku Bhed, Jhala, Razakhani gat, Maseetkhani gat, Toda.
- II Introduction of Harmony and Melody Characteristics and comparative study of Harmony and Melody.
- III Methods of Placement of swars :
  - (a) Method of placing shudha and Vilkrit Swaras on Veena by Ahobal, Pt. Srinivas and Pt. V.N. Bhatkhande.
  - (b) Shruti Swar system of different granthakars (authors) Ancient, Medieval and Modern period.
- IV. Evolution and Development of Swar Saptaka of western and Indian scales :
  - (a) Phthogorian Scale.
  - (b) Scale from Sadaj-Pancham Bhav,
  - (c) Scale from Sadaj-Madhyam Bhav,
  - (d) Equally tempered Scale
  - (e) Diatonic Scale
  - (f) Mean tempered Scale
  - (g) Concept of Acharya Bharat and Bilawal Thata.
  - (h) Chromatic Scale.
- V. Definition and prime elements of Gharana and their history.  
Gwalior, Agra, Kirana, Patiyala, Jaipur, Senia Gharana of Instrumental Music.
- VI. Difinition of Gram and Gram Bhed -  
Sadaj Gram, Madhyam Gram, Gandhar Gram and their Swaras.
- VII. Writing of Talas in Natation with Dugun and Chaugun layakarais in all the Talas prescribed in Ist and IInd Year.

### PAPER - II

#### THEORY OF MUSIC, VOCAL/INSTRUMENTAL M.M. :50

##### (Paper Code-0265)

1. Study of Theoretical details of Ragas prescribed for practical course and their comparative study.
2. Writing in notation of Bandish / Gat of prescribed Ragas.
3. Biographics and contributions of the musicians : Haddu - Hassu khan, Inayat Kan, Pandit Omkar Nath Thakur, Matang, Ramamatya, Srinivas, Lochan, Hrideya Narayan Dev, Sonmath, Bhav Bhatta.
4. History of Indian Music : Medieval and Modern period; Analytical study of the styles, position and effects of granthkaras and eminent musician of medieval and modern Period.
5. Classical Music and Folk Music : Comparative study of Classical and Folk music.  
Intensive study of the Folks of Chhattisgarh.

6. Voice-Culture : Definition, Importance and utility of voice-culture. Construction of throat and production of sound. General scientific methods of voice-culture.
7. Guided listening to Radio and T.V. national Programmes of Indian classical Music and ability to write their critical appreciation.
8. Essay on topics related to music.

**PRACTICAL  
VOCAL/ INSTRUMENTAL**

- I Study of Eight Ragas from the following :  
Ramlali, Jaijaiwanti, Miyan ki Malhar, Pooriya, Basant, Bahar, Darbavi Kanhada, Miyan ki Todi, Adana, Kalavati, Hansdhwani, Shuddhkalyan, Pooriyadhamashri, Marwa.
1. Two Vilambit Khayalas / Maseetkhani Gats in any of the above mentioned Ragas with Alap and Tanas / Todas.  
One Vilambit Khayalas / Maseethkhani / Gat choice Raga and one asked by the examiner.  
(5+5 = 10 marks)
3. Lakshan Geets, Sargams, Madhayalaya Khyals / Razakhani Gats with Tanas / Todas in all the eight Ragas. (5+5 = 10 marks)
4. Study of One Dhrupad and one dhamar with Dwigun, Trigun Chaugun / study of Two Madhayata gats in other than Trital out of the Ragas prescribed in the course. 8 marks
5. Study of one Tarana, One Bhajan / One Dhun. 4 marks
6. Ability to demonstrate (orally by given Tali Khali on hand) Talas prescribed in 1st year and IIInd year Matta Tala, Panjabi Trital, Ganesh Tal, Rudra Tala. 4 marks

**SESSIONAL WORK**

1. Keeping upto date practical and theory note Books. Attendance and activities in the class and college.
2. Ten descriptions of Music programmes of Radio, T.V. or personally attended.

**BOOK RECOMMENDED :**

1. Kramik pustak Malika Part I, II, III, IV by Pt. V.N. Bhatkhande.
2. Sangeetanjali Part I, II, III, IV, V, VI by Pt. Onkarnath Thakur.
3. Raga Vigyan Part I, II, III, IV, V by Pt. V.N. Patvardhan.
4. Rag Bodh. B.R. Devdhar, Part I, II & III.
5. Sitar Vadan, S.G. Vyas.
6. Sangeet Visharad, Vasant
7. Sangeet Bodh - S.C. Paranjape
8. Sangeet Darshika - Navigopal Banerjee
9. Sangeet Shastra Darpan - Shanti Gowardhan Part I, II & III
10. Dawadhavi and Sangeet - Lalit Kishore singh
11. Shrimallakshay Sangeetam - Chatur Pandit.

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## PSYCHOLOGY

### PAPER - I

#### PSYCHOLOGICAL STATISTICS

M.M. :50

(Paper Code-0250)

- UNIT-I** Statistics : Meaning and application in Psychology, nature of score, categorical and continuous variables, frequency distribution, Graphic representation of data.
- UNIT-II** Measures of Central Tendency : Mean, Median and mode of group and un group data, Measures of variability : Range, S.D., Q.D., A.D., applications of measures of central tendency and variability.
- UNIT-III** Nature and characteristics of normal probability curve : concept of skewness and Kurtosis, Correlation : Concept, Types and methods - rank difference and product moment (in ungrouped data), Biserial and Tetrachoric coefficient.
- UNIT-IV** Inferential statistics : Concept of null Hypothesis, level of significance, type I error & type II error, T-test (uncorrelated data)
- UNIT-V** Distribution free statistics : Chi-square, Median and sign test, applications of computer in psychological statistics.

#### REFERENCES :

1. Siegel S., (1994) Non parametric statistics New York : McGraw Hill  
Garret : Statistics in Psychology and Education Times of India Publisher.
2. कपिल एस. के. - सांख्यिकी के मूल तत्व  
गैरेट - मनोविज्ञान एवं शिक्षा में, सांख्यिकी

### PAPER - II (Optional)

#### (A) HUMAN DEVELOPMENT

M.M. :50

(Paper Code-0251)

Candidate has to opt. any one of the following Optional papers.

- UNIT-I** Concept of Human Development, Theories of Human Development : Psychoanalytical and Maslow, Determinants of Human Development - Biological, social, cultural factors, Approaches to study human developments : Longitudinal and cross - sectional.
- UNIT-II** Socialisation : Role of family, peers and school, Media and socialisation, Ecological factors in Human Development, Cognitive Development : Theoretical Perspectives Piaget, Information Processing, Vygotsky.
- UNIT-III** Self and Identity : Emergence of self, Development of personal identity, identity crises, Physical and sexual maturation, Sequential development of emotions.
- UNIT-IV** Development of morality and self concept, Development of gender differences and gender roles. Role of marriage, family and occupation in Human Development.
- UNIT-V** Problems of Aging - Cognitive, conative, affective, Developmental Disabilities.

#### BOOK RECOMMENDED :

1. Berk L.E. (1989) Child Development. Boston : Allyn and Bacon

2. Santrock J.W. (1999) Lifespan development. New York McGraw Hill.
3. E.B. Hurllock (1997) Development Psychology : A life span approach. V, edition.
4. शाह गोवर्धन - विकासात्मक मनोविज्ञान

**PAPER - II (Optional)**

**(B) ENVIRONMENTAL PSYCHOLOGY**

**M.M. :50**

**(Paper Code-0252)**

- UNIT-I** Evaluating environmental ethics from values about nature in the ancient India systems. Earth as a living system, Psychological approaches to environment : Eco cultural Psychology (Berry), Bio-social Psychology (Dawson), Ecological Psychology (Berkar) Person Environment Transactions (Sokol, Ittelson)
- UNIT-II** Effects of environment on behaviour : Noise pollution chemical Pollution, crowding and personal space. Effect of behaviour on environment : Perception, Preferences and awareness of environment.
- UNIT-III** Human Nature and environmental problems : Pro-social and pro environment behaviours, Eco-systems and their components Demography : Mortality and fertility, Resource Use : Common Property resources, Sustainable Development, Ecology : Acculturation and Psychological adaptation.
- UNIT-IV** Methods : Naturalistic observation and field surveys. Environmental Assessment : Naturalistic observation and field surveys Socio - Psychological dimensions of environments impact Environmental deprivation : Nature and consequences, Creating environmental awareness - Social Movements : Chipko, Tehri Namad.
- UNIT-V** Application of Psychology in man environment fit : Education - Classroom environment, Industry - Industrial / Organisational effectiveness, Health - Physical, mental and spiritual, Social - Communal harmony and National integration.

**REFERENCES :**

1. Goldsmith E. (1991) - The way : The ecological world vic Boston : Shambhala.
2. Jain U (1987) The Psychological consequences of crowding New Delhi : Sage.
3. Mishra R.C. Sinha D & Berry, J.W. (1996) Ecology, Community and life style, New Delhi.

**PSYCHOLOGY PRACTICALS**

**M.M. :50**

This paper carries 50 marks. It comprises of two parts. Part A comprises of psychological experiments and testing while part B comprises of completion of Project Report.

**PART - A**

**Note :** From the following experiment any 5 are to be done-

1. Bilateral transfer of training.
2. Measurement of Illusion.
3. Habit interference.
4. Effect of need priority on selection of Advertising material.

5. Effect of mental fatigue upon performance.
6. Reaction Time
7. Effect of frustration on learning.
8. Depth Perception.

**Note :** From the following tests any 4 are to be done-

1. Level of aspiration
2. Need for guidance
3. Maturity scale
4. Attitude Scale.
5. Classroom environment scale.
6. Mental health
7. Family environment test
8. Test of Moral values.

**PART - B**

The candidate will be allotted a topic of project by the departmental committee. He/she is required to carry out a small scale project based on small sample. He/she is required to complete the project and submit its report. 15-20 pages, covering all major steps of scientific enquiry under the supervision of the departmental teacher. This will be the part of practical work. The suggested areas for the project work are as under Mental health, sibling rivalry, deprivation, identity crises, drug abuse aging media effect, woman employment, Job satisfaction, stress, stress management, problems of adolescent etc.

**DISTRIBUTION OF MARKS**

Conduction of Experiment	-	10 marks
Administration of test	-	10 marks
Evaluation of Project Report and Practical record	-	10 marks
Viva - Voce	-	10 marks

**Note :** Candidate is required to attend practical work regularly. His/Her attendance should not be less than 75%. If his / her practical work performance is not satisfactory, he / she shall be debarred from the examinations.

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## ANTHROPOLOGY

### PAPER-I (Paper Code-0275)

#### "FUNDAMENTALS OF HUMAN GENETICS & HUMAN GROWTH"

AIM- The aim of this paper is to introduce the students the basics of Human Genetics and Human Growth.

- UNIT-I** Human Genetics : aims and scope. Cell division : Mitosis and Meiosis. Mendelism, Chromosomes ; Normal and Abnormal chromosomes. Genes, concept of DNA & RNA. Types of Inheritance : autosomal, (Dominant and Recessive). Sex linked Inheritance.
- UNIT-II** Concept of Race. Formation of Racial groups. Criteria for racial classification. Racial elements in India. Major stocks of the world and their broad sub divisions.
- UNIT-III** Types of twins and their importance in genetic investigation. Inheritance of ABO Blood groups, P.T.C., Colour blindness and dermatoglyphics. Genetic counselling, Eugenics. Population Genetics.
- UNIT-IV** Definition and scope of Human growth. Methods of studying human growth and Development. Ageing, Nutritional requirement for normal growth. Common nutritional disorder (Protein, Fat, Carbohydrates, Mineral, Vitamin).
- UNIT-V** Ecology : definition and scope. Varieties of human ecosystems. Environmental Population. Definition, nature and scope of biological demography. Demographic Profiles : Fertility, Mortality, Morbidity.

#### RECOMMENDED READINGS :

1. Agrawal S.N. : India Population Problems
2. Bogue : Principles of Demography
3. Bresler : Human Ecology
4. Gran and Shamir : Methods of Research in Human Growth
5. Hari.II. : Biochemical Genetics Man
6. Harrison. A.E. (editor) : Human Biology
7. Phyllis and Home, P.S. : Basic nutrition in health & disease
8. Race, R.R. & Sanger R. : Blood Group in Man
9. Stern C. : Principles of Human Genetics
10. Tanner, J.M. : Human Growth
11. Theodarson : Studies in Human Ecology
12. Walson and Lowry : Growth and Development of Children
13. Winchester A.W. : Principal of Genetics
14. रघुवंशी अरूण एवं चन्द्रलेखा : पर्यावरण प्रदूषण
15. Sinnot, Dunn & Dozansky : Principles of Genetics

### PAPER-II (Paper Code-0276)

#### THEORIES IN SOCIAL CULTURAL ANTHROPOLOGY

**AIM :** The main aim of this course is to introduce the student about the basic principles and Theories of Social cultural Anthropology to-provide preliminary understanding of various theoretical models evolved by Social and Cultural Anthropology.

- UNIT-I** The contributions made by the following Anthropologists to Social-Cultural Anthropology. (I) E.Durkheim, (II) F. Boas, (III) R. Redfield, (IV) A. L. Kroeber, (V) S.C. Dube, (VI) M.N. Shrinivas, (VII) L.P. Vidyarthi.
- UNIT-II** Evolution: Biological and cultural Evolutionism; classical Evolutionism; E.B. Tylor, L.H. Morgan.

Neo - Evolutionism; jLeslie white, Gordon childe.  
 Culture traits, Culture Complex, Culture Area, Culture focus.  
 Diffusion of Culture : British diffusionist : Gemman - Austrian diffusionist ( Kuttre kriese  
 American diffusionist ( Culture Area).

**UNIT-III** Function and structure: Functionalism ( Malinowski) and Structure Functionalism ( Redcliffe Brown ) Structuralism ( Levi Strauss).

**UNIT-IV** Personality : Basic personality and Model personality.  
 Culture pattern : Configurationalism ( Ruth Benedict). Anthropological study of National character.

**UNIT-V** Field work tradition in Anthropology Major tools of Research: Schedule, Questionnaire, Participant observation, interview, case study, Geneological Method. The main bases of Anthropological Methods: Historical Method, Comparative Method and Functional Method.

**PAPER-III  
 PRACTICAL**

**Objective :** The main of this practical courses is to introduce the student about the tools and Method, analysis & statistical methods used in Human Biology. Laboratory Procedures in blood grouping and dermatoglyphics would give confidence in Dealing with all the applied dimensions they process.

**PART-I : Somatometry :**

- (a) Measurements on body :
  - (i) Height vertex, (ii) Height tragus, (iii) Suprasternale height, (iv) Biacromial Breadth, (v) Bi-illioncristal breadth, (vi) Tibial Height, (vii) Upper extremity Length, (viii) Sitting height, (ix) height dactylic, (x) Body weight.
- (b) Head and Face Measurement :
 

(i) Morphological upper facial length.	(ii) Physiognomic upper facial length.
(iii) Morphological facial length.	(iv) Bizygomatic breadth.
(v) Max head length	(v) Max head breadth
(vi) Nasal length	(vi) Nasal breadth
- (c) Indices :
 

(i) Cephalic Index	(ii) Nasal Index
(iii) Facial Index	

**PART-II Genetic Traits :**

ABO blood group ; colour blindness, PIT taste sensitivity, Dermatioglyphics, Methods of taking finger and palm prints and their analysis.

**PART-III Statistics**

Mean, Median, Standard deviation, X<sup>2</sup> test.

**BOOKS RECOMMENDED :**

1. Basin M.K. and I.P. Singh : Anthropometry
2. Cummins H. and Midlo C. : An Introduction of Dermatoglyphics
3. Dunsford and Bowley : Blood Group Techniques
4. Fisher R.S. : Statistical methods for Research Workers
5. मित्रा, मिताश्री : प्रायोगिक मानव विज्ञान भाग-२
6. Olivia : Practical Anthropology

## भाषाविज्ञान

### प्रश्न -पत्र प्रथम

#### भाषा का सामाजिक परिप्रेक्ष्य ( पेपर कोड-0238 )

कुल अंक : 75

- इकाई-1 व्यक्ति, भाषा, एवं समाज - भाषा-ज्ञान - सहजात एवं सामाजिक संदर्भ, भाषा-समुदाय, भाषा-संप्रेषण, साधन के रूप में, साध्य के रूप में, भाषा एवं अस्मिता, भाषा के माध्यम से सामाजिक संरचना ।
- इकाई-2 भाषा का सामाजिक संदर्भ - मानक भाषा, परिनिष्ठित भाषा, पिजिन एवं क्रियोल, क्षेत्रीय भाषा, संपर्क-भाषा, डिग्लोसिया ( भाषा - द्वैत ) ।
- इकाई-3 भाषा-भेद - सामाजिक एवं क्षेत्रीय भेद, सामाजिक एवं भाषिक भेद में संबंध, समाजभाषिक परिवर्त ।
- इकाई-4 भाषा-नियोजन - उद्देश्य, राष्ट्रीय नियोजन के अंग के रूप में भाषा-नियोजन, भाषा-मानकीकरण ।
- इकाई-5 द्विभाषिकता एवं बहुभाषिकता - कोड-मिश्रण एवं कोड-परिवर्तन ।

#### निर्धारित पुस्तकें :

1. हिन्दी का सामाजिक संदर्भ - रामनाथ सहाय एवं अन्य ( सं. ), केन्द्रीय हिन्दी संस्था, आगरा
2. हिन्दी भाषा का समाज शास्त्र - रवीन्द्रनाथ श्रीवास्तव
3. हिन्दी भाषा की सामाजिक संरचना - डॉ. भोलानाथ तिवारी ( सं. )
4. हिन्दी का सामाजिक भूमिका - डॉ. भोलानाथ तिवारी एवं मुकुल प्रियदर्शिनी
5. Sociolinguistics : R.S. Hudson, Cambridge University Press Cambridge
6. An Introduction to Sociolinguistics : R. Wardhaugh, Penguin, Ham.

### प्रश्न -पत्र द्वितीय

#### भाषा एवं साहित्य ( पेपर कोड-0239 )

कुल अंक : 75

- इकाई-1 भाषा एवं साहित्य का संबंध - मानक भाषा और काव्य भाषा, सामान्य भाषा और काव्य भाषा, भावनात्मक भाषा एवं वैज्ञानिक तथा तकनीकी भाषा, भाषा की सर्जनात्मकता, भाषा का सौंदर्यशास्त्र, काव्यशास्त्र एवं साहित्यिक समीक्षा ।
- इकाई-2 शैली एवं प्रकार्य - शैली विज्ञान एवं भाषाविज्ञान का संबंध, शैली की उपयोगिता, शैली-भेद एवं संदर्भ-भेद, भाषा प्रयोग एवं संदर्भ ।
- इकाई-3 प्रोक्ति - परिभाषा एवं विभिन्न आधारों पर प्रोक्ति के प्रकार; चयन, विचलन, समांतरता, प्रतीकात्मकता एवं बिम्बात्मकता ।
- इकाई-4 भाषा-शिक्षण - सिद्धांत एवं महत्व, भाषा-शिक्षण की विधियाँ, मातृभाषा शिक्षण, अन्य भाषा-शिक्षण, अन्य भाषा के रूप में हिन्दी का शिक्षण, भाषा-शिक्षण में व्याघात, संस्कृति का प्रभाव ।
- इकाई-5 साहित्य-शिक्षण - साहित्य-शिक्षण : उद्देश्य, विधियाँ, एवं सिद्धांत ; कविता-शिक्षण, नाट्य-शिक्षण, निबंध-शिक्षण, कहानी-शिक्षण का परिचय ; साहित्य-शिक्षण में दृश्य-श्रण्य उपकरणों का उपयोग एवं महत्व ।

#### निर्धारित पुस्तकें :

1. शैलीविज्ञान - भोलानाथ तिवारी
2. प्रारंभिक शैलीविज्ञान - डॉ. चित्तरंजनकर
3. शैलीविज्ञान - सुरेश कुमार
4. हिन्दी भाषा-शिक्षण - रवीन्द्रनाथ श्रीवास्तव एवं अन्य
5. भाषाशिक्षण - मनोरमा गुप्त

**STATISTICS**  
**PAPER - I**  
**APPLIED STATISTICS**  
**(Paper Code-0289)**

- UNIT-I** Indian Applied Statistical System : Present official statistical system in India, Methods of collection of official statistics, their reliability and limitations, and the principal publications containing such statistics on the topics- population agriculture, industry, trade, price, labour and employment, transport and communications, banking and finance. (15L)
- UNIT-II** Demographic Methods : Sources of demographic data - census, register, adhoc survey, hospital records, demographic profiles of Indian census. Measurement of mortality and life tables- crude, death rates, infant mortality rates, death date by cause, standardized death rate, complete life table - its main features, mortality rate and probability of dying, use of survival tables. Measurement of fertility - crude birth rate, general fertility rate, total fertility rate, gross reproduction rate, net reproduction rate. (25L)
- UNIT-III** Economic Statistics : Index number - its definition, applications of index numbers. price relatives and quantity or volume relatives, link and chain relatives, problems involved in computation of index numbers, use of averages, simple aggregative and weighted average methods, Laspeyre's, Paasche's and Fisher's index numbers, time and factor reversal tests of index numbers. Consumer Price Index. (20L)
- UNIT-IV** Static laws of demand and supply, price elasticity of demand, analysis of income and allied size distribution - Pareto distribution, graphical test, fitting of Pareto's law, log normal distribution and its properties, Lorenz curve and estimation of elasticity from time series data. Gini's coefficient.
- UNIT-V** Time Series Analysis : Economic time series, its different components, Illustrations, additive and multiplicative models, determination of trend, growth curves, analysis of seasonal fluctuations construction of seasonal indices. (15L)

**REFERENCES :**

1. Croxton F.E. and Cowden D.J. (1969) : Applied General Statistics, Prentice Hall of India.
2. Goon, A.M., Gupta, M.K., Das gupta, B (1986) : Fundamentals of statistics, vol.-II, World Press, Calcutta.
3. Guide to Current Indian Official Statistics : Central Statistical Organization, Govt. of India, New Delhi.
4. Saluja M.P. ( ) Indian Official statistical Systems, Statistical Publishing Society, Calcutta.
5. Srivastava, O.S. (1983) : A textbook of Demography, Vikas Publishing.

**ADDITIONAL REFERENCES :**

1. Gupta and Mukhopadhyay P.P. ( ) Applied Statistics, Central Book Agency.
2. Pressat R. (1978) : Statistical Demography, Methuen and Co. Ltd.

## PAPER-II

### STATISTICAL QUALITY CONTROL AND COMPUTATIONAL TECHNIQUES

(Paper Code-0290)

- UNIT-I** Importance of statistical methods in industrial research and practice, specification of items and lot qualities corresponding to visual gauging, count and measurements, types of inspection, determination of tolerance limits. General theory of control charts, causes of variation in quality, control limits, sub-grouping, summary of out-of-control criteria, charts for attributes, np chart, p-chart, c-chart, u-chart, Charts for variables- X- and R charts, design of X and R charts versus p-charts, process capability studies. (30L)
- UNIT-II** Principle of acceptance sampling- problem of lot acceptance, stipulation of good and bad lots, producer's and consumers risks, single and double sampling plans, their OC functions, concepts of AQL, LTPD, AOQL, average amount of inspection and ASN function, rectifying inspection plans, Sampling inspection plans, Indian Standards Tables Part-I (including applications), IS 2500 Part I. (15L)
- UNIT-III** Computational techniques : Difference tables and methods of interpolation, Newton's and Lagrange's methods of interpolation, Divided differences, numerical differentiation and integration, Trapezoidal rule, Simpson's one-third formula, iterative solution of non-linear equations. (15L)
- UNIT-IV** Linear Programming : Elementary theory of convex sets, definition of general linear programming problems (LPP), formulation problems of LPP, examples of LPP, Problems occurring in various fields, graphical and Simplex method of solving an LPP, artificial variables, duality of LPP. Transportation Problem (non-degenerate and balanced cases only), Assignment Problem. (30L)
- UNIT-V** Four short notes, one from each unit. Student have to answer any two.

#### REFERENCES :

1. Brownless K.A. (1960) : Statistical theory and Methodology in Science and Engineering. John Wiley and Sons.
2. Grant E.L. (1964) : Statistical Quality Control, McGraw Hill.
3. Duncan A.J. (1974) : Quality Control and Industrial Statistics, Traporewala and Sons.
4. Gass S.I. (1975) : Linear Programming Methods and Applications, McGraw Hill.
5. Rajaraman, V. (1981) : Computer Oriented Numerical Methods, Prentice Hall.
6. Sastry S.S. (1987) : Introductory Methods of Numerical Analysis, Prentice Hall.
7. Taha H.A. (1989) : Operations Research : An Introduction, Macmillan Publishing Company.

#### ADDITIONAL REFERENCES :

1. Bowker H.A. and Liberman G.T. (1962) : Engineering Statistics, Prentice Hall.
2. Cowden D.J. (1960) : Statistical Methods in Quality Control, Asia Publishing Society.
3. Garvin W.W. (1960) : Introduction to Linear Programming, McGraw Hill.
4. Mahajan M. (2001) : Statistical Quality Control, Dhanpat Rai & Co. (P) Ltd.
5. Rao S.S. (1984) : Optimization Theory and Applications, Wiley Eastern.

6. Krishnamurthy E.V. and Sen S.K. (1976) : Computer Based Numerical Algorithms, Affiliated East-West Press.

### **PRACTICAL**

1. Computing measures of mortality & fertility, Construction of life tables and examples involving use of life tables, Graduation of mortality rates by Gompertz curve, fitting of a logistic curve.
2. Construction of Index Numbers by Laspeyre's, Paasche's, Fisher's method.
3. Determination of trend in a time series, construction of seasonal indices.
4. Fitting of Pareto curve to income data, Lorenz curve of concentration, Estimation of price elasticity of demand from time series data.
5. Drawing of X-R, np, p and c- charts. Drawing of OC curve for single and double sampling plans for attributes, AOQ and ATI curves.
6. Construction of difference tables, use of Newton's Lagrange's methods of interpolation and divided difference formulae, numerical evaluation of integrals using Trapezoidal and Simpson's one-third formulae, solution of non-linear equation by Newton-Raphson iterative method.
7. Formulation of LPP's and their duals. Solving LPPs by graphical and simplex methods, transportation and assignment problems.

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## MATHEMATICS

There shall be three theory papers. Two compulsory and one optional. Each paper carrying 50 marks is divided into five units and each unit carry equal marks.

### PAPER - I

### ANALYSIS

(Paper Code-0279)

#### REAL ANALYSIS

**UNIT-I** Series of arbitrary terms. Convergence, divergence and Oscillation. Abel's and Dirichlet's test. Multiplication of series. Double series.

Partial derivation and differentiability of real-valued functions of two variables. Schwarz and Young's theorem. Implicit function theorem.

Fourier series. Fourier expansion of piecewise monotonic functions.

**UNIT-II** Riemann integral. Integrability of continuous and monotonic functions. The fundamental theorem of integral calculus. Mean value theorems of integral calculus.

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.

#### COMPLEX ANALYSIS

**UNIT-III** Complex numbers as ordered pairs. Geometric representation of Complex numbers. Stereographic projection.

Continuity and differentiability of Complex functions. Analytic functions. Cauchy-Riemann equations. Harmonic functions.

Elementary functions. Mapping by elementary functions.

Mobius transformations. Fixedpoints, Cross ratio. Inverse points and critical mappings. Conformal mappings.

#### METRIC SPACES

**UNIT-IV** Definition and examples of metric spaces. Neighbourhoods, Limit points, Interior points, Open and closed sets, Closure and interior. Boundary points, Sub-space of a metric space. Cauchy sequences, Completeness, Cantor'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.

**UNIT-V** Dense subsets. Baire Category theorem. Separable, second countable and first countable spaces. Continuous functions. Extension theorem. Uniform continuity, Isometry and homeomorphism. Equivalent metrics. Compactness, Sequential compactness. Totally bounded spaces. Finite intersection property. Continuous functions and compact sets, Connectedness, Components, Continuous functions and connected sets.

#### REFERENCES :

1. T.M. Apostol, Mathematical Analysis, Narosa Publishing House, New Delhi, 1985.
2. R.R. Goldberg, Real Analysis, Oxford & IBH publishing Co., New Delhi, 1970.
3. S. Lang, Undergraduate Analysis, Springer-Verlag, New York, 1983.
4. D. Somasundaram and B. Choudhary, A First Course in Mathematical Analysis, Narosa Publishing House, New Delhi, 1997.

5. Shanti Narayan, A Course of Mathematical Analysis, S. Chand & Co. New Delhi.
6. P.K. Jain and S.K. Kaushik, An introduction to Real Analysis, S. Chand & Co., New Delhi, 2000.
7. R.v. Churchill & J.W. Brown, Complex Variables and Applications, 5<sup>th</sup> Edition, McGraw-Hill, New York, 1990.
8. Mark J. Ablowitz & A.S. Fokas, Complex Variables : Introduction and Applications, Cambridge University Press, South Asian Edition, 1998.
9. Shanti Narayan, Theory of Functions of a Complex Variable, S. Chand & Co., New Delhi.
10. E.t. Copson, Metric Spaces, Cambridge University Press, 1968.
11. P.K. Jain and K. Ahmad, Metric Spaces, Narosa Publishing House, New Delhi, 1996.
12. G.F. Simmons, Introduction to Topology and Modern Analysis, McGraw-Hill, 1963.

## PART - II

### ABSTRACT ALGEBRA

(Paper Code-0280)

- UNIT-I** Group-Automorphisms, inner automorphism. Automorphism groups and their computations, Conjugacy relation, Normaliser, Counting principle and the class equation of a finite group. Center for Group of prime-order, Abelianizing of a group and its universal property. Sylow's theorems, Sylow subgroup, Structure theorem for finite Abelian groups.
- UNIT-II** Ring theory-Ring homomorphism. Ideals and Quotient Rings. Field of Quotients of an Integral Domain, Euclidean Rings, Polynomial Rings, Polynomials over the Rational Field. The Eisenstein Criterion, Polynomial Rings over Commutative Rings, Unique factorization domain.  $R$  unique factorisation domain implies so is  $R[x_1, x_2, \dots, x_n]$  Modules, Submodules, Quotient modules, Homomorphism and Isomorphism theorems.
- UNIT-III** Definition and 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 a finite dimensional vector space. Dimension of sums of subspaces. Quotient space and its dimension.
- UNIT-IV** Linear transformations and their representation as matrices. The Algebra of linear transformations. The rank nullity theorem. Change of basis. Dual space. Bidual space and natural isomorphism. Adjoint of a linear transformation. Eigenvalues and eigenvectors of a linear transformation. Diagonalisation. Annihilator of a subspace. Bilinear, Quadratic and Hermitian forms.
- UNIT-V** Inner Product Spaces-Cauchy-Schwarz inequality. Orthogonal vectors. Orthogonal Complements. Orthonormal sets and bases. Bessel's inequality for finite dimensional spaces. Gram-Schmidt Orthogonalization process.

#### REFERENCES :

1. I.N. Herstein, Topics in Algebra, Wiley Eastern Ltd., New Delhi, 1975.
2. N. Jacobson, Basic Algebra, Vols. I & II. W.H. Freeman, 1980 (also published by Hindustan Publishing Company).
3. Shanti Narayan, A Text Book of Modern Abstract Algebra, S.Chand & Co. New Delhi.



4. K.B. Datta, Matrix and Linear Algebra, Prentice Hall of India Pvt. Ltd., New Delhi, 2000.
5. P.B. Bhattacharya, S.K. Jain and S.R. Nagpal, Basic Abstract Algebra (2<sup>nd</sup> Edition) Cambridge University Press, Indian Edition, 1997.
6. K. Hoffman and R. Kunze, Linear Algebra, 2<sup>nd</sup> Edition, Prentice Hall. Englewood Cliffs, New Jersey, 1971.
7. S.K. Jain, A. Gunawardena & P.B. Bhattacharya, Basic Linear Algebra with MATLAB. Key College Publishing (Springer-Verlag) 2001.
8. S. Kumaresan, Linear Algebra, A Geometric Approach, Prentice-Hall of India, 2000.
9. Vivek Sahai and Vikas Bist, Algebra, Narosa Publishing House, 1997.
10. I.S. Luther and I.B.S. Passi, Algebra, Vol. I-Groups, Vol. II-Rings. Narosa Publishing House (Vol. I-1996, Vol. II-1999)
11. D.S. Malik, J.N. Mordeson, and M.K. Sen, Fundamentals of Abstract Algebra, McGraw-Hill International Edition, 1997.

**PAPER - III - (OPTIONAL)**

**(I) PRINCIPLES OF COMPUTER SCIENCE**

**(Paper Code-0281)**

- UNIT-I Data Storage** - Storage of bits. Main Memory. Mass Storage. Coding Information of Storage. The Binary System. Storing integers, storing fractions, communication errors.  
**Data Manipulation** - The Central Processing Unit. The Stored-Program Concept. Programme Execution. Other Architectures. Arithmetic/Logic Instructions. Computer-Peripheral Communication.
- UNIT-II Operating System and Networks** - The Evolution of Operating System. Operating System Architecture. Coordinating the Machine's Activities. Handling Competition Among Process. Networks. Networks Protocol.  
**Software Engineering** - The Software Engineering Discipline. The Software Life Cycle. Modularity. Development Tools and Techniques. Documentation. Software Ownership and Liability.
- UNIT-III Algorithms** - The Concept of an Algorithm, Algorithm Representation. Algorithm Discovery. Iterative Structures. Recursive Structures. Efficiency and Correctness. (Algorithms to be implemented in C++)  
**Programming Languages** - Historical Perspective. Traditional Programming Concepts, Program Units. Language Implementation. Parallel Computing. Declarative Computing.
- UNIT-IV Data Structures** - Arrays. Lists. Stacks. Queues. Trees. Customised Data Types. Object Oriented Programming.  
**File Structure** - Sequential Files. Text Files. Indexed Files. Hashed Files. The Role of The Operating System.  
**Database Structure** - General Issues. The Layered Approach to Database Implementation. The Relational Model. Object-Oriented Database. Maintaining Database Integrity. E-R models.
- UNIT-V Artificial Intelligence** - Some Philosophical Issues. Image Analysis. Reasoning, Control System Activities. Using Heuristics. Artificial Neural Networks. Application of Artificial Intelligence.  
**Theory of Computation** - Turing Machines. Computable functions. A Non computable Function. Complexity and its Measures. Problem Classification.

**REFERENCES :**

- 1 J. Glen Brookshear, Computer Science : An Overview, Addison -Wesley.
- 2 Stanley B. Lippman, Josee Lojoie, C++ Primer (3rd Edition), Addison-Wesley.

**PAPER - III - (OPTIONAL)**

**(II) DISCRETE MATHEMATICS**

**(Paper Code-0282)**

**UNIT-I Sets and Propositions** - Cardinality. Mathematical Induction, Principle of Inclusion and exclusion.

Computability and Formal Languages - Ordered Sets. Languages. Phrase Structure Grammars. Types of Grammars and Languages. Permutations. Combinations and Discrete Probability.

**UNIT-II Relations and Functions** - Binary Relations, Equivalence Relations and Partitions. Partial Order Relations and Lattices. Chains and Antichains. Pigeon Hole Principle. **Graphs and Planar Graphs** - Basic Terminology. Multigraphs. Weighted Graphs. Paths and Circuits. Shortest Paths. Eulerian Paths and Circuits. Travelling Salesman Problem. Planner Graphs.

**TREES.**

**UNIT-III Finite State Machines** - Equivalent Machines. Finite State Machines as Language Recognizers. Analysis of Algorithms - Time Complexity. Complexity of Problems. Discrete Numeric Functions and Generating Functions.

**UNIT-IV Recurrence Relations and Recursive Algorithms** - Linear Recurrence Relations with Constant Coefficients. Homogeneous Solutions. Particular Solution. Total Solution. Solution by the Method of Generating Functions. Brief review of Groups and Rings.

**UNIT-V Boolean Algebras** - Lattices and Algebraic Structures. Duality, Distributive and Complemented Lattices. Boolean Lattices and Boolean Algebras. Boolean Functions and Expressions. Propositional Calculus. Design and Implementation of Digital Networks. Switching Circuits.

**REFERENCES :**

C.L. Liu, Elements of Discrete Mathematics, (Second Edition), McGraw Hill, International Edition, Computer Science Series, 1986.

**PAPER - III - (OPTIONAL)**

**(III) APPLICATION OF MATHEMATICS IN FINANCE AND INSURANCE**

**(Paper Code-0283)**

**Application of Mathematics in Finance :**

**UNIT-I Financial Management** - An overview. Nature and Scope of Financial Management. Goals of Financial Management and main decisions of financial management. Difference between risk, speculation and gambling.

Time value of Money-Interest rate and discount rate. Present value and future valuediscrete case as well as continuous compounding case. Annuities and its kinds.

**UNIT-II** Meaning of return. Return as Internal Rate of Return (IRR). Numerical Methods like Newton RaphsonMethod to calculate IRR. Measurement of returns under uncertainty

situations. Meaning of risk. Difference between risk and uncertainty. Types of risks. Measurement of risk. Calculation of security and Portfolio Risk and Return-Markowitz Model. Sharpe's Single Index Model Systematic Risk and Unsystematic Risk.

**UNIT-III** Taylor series and Bond Valuation. Calculation of Duration and Convexity of bonds. Financial Derivatives - Futures. Forward. Swaps and Options. Call and Put Option. Call and Put Parity Theorem. Pricing of contingent claims through Arbitrage and Arbitrage Theorem.

#### **Application of Mathematics in Insurance**

**UNIT-IV** Insurance Fundamentals - Insurance defined. Meaning of loss. Chances of loss, peril, hazard, and proximate cause in insurance. Costs and benefits of insurance to the society and branches of insurance-life insurance and various types of general insurance. Insurable loss exposures feature of a loss that is ideal for insurance. Life Insurance Mathematics - Construction of Mortality Tables. Computation of Premium of Life Insurance for a fixed duration and for the whole life.

**UNIT-V** Determination of claims for General Insurance - Using Poisson Distribution and Negative Binomial Distribution-the Polya Case.

Determination of the amount of Claims in General Insurance - Compound Aggregate claim model and its properties, and claims of reinsurance. Calculation of a compound claim density function. F-recursive and approximate formulae for F.

#### **REFERENCES :**

1. Aswath Damodaran, Corporate Finance - Theory and Practice, John Wiley & Sons Inc.
2. John C. Hull, Options, Futures, and Other Derivatives, Prentice-Hall of Indian Private Limited.
3. Sheldon M. Ross, An Introduction to Mathematical Finance, Cambridge University Press.
4. Mark S. Dorfman, Introduction to Risk Management and Insurance, Prentice Hall, Englewood Cliffs, New Jersey.
5. C.D. Daykin, T. Pentikainen and M. Pesonen, Practical Risk Theory for Actuaries, Chapman & Hall.

#### **PAPER - III - (OPTIONAL)**

**(Paper Code-0284)**

**Theory component will have maximum marks 30.**

**Practical component will have maximum marks 20.**

#### **(IV) PROGRAMMING IN C AND NUMERICAL ANALYSIS (Theory & Practical)**

##### **Programming in C**

**UNIT-I** Programmer's model of a computer. Algorithms. Flow Charts. Data Types. Arithmetic and input/output instructions. Decisions control structures. Decision statements. Logical and Conditional operators. Loop. Case control structures. Functions. Recursions. Preprocessors. Arrays. Puppeting of strings. Structures. Pointers. File formatting.

##### **Numerical Analysis**

**UNIT-II** Solution of Equations : Bisection, Secant, Regula Falsi, Newton's Method, Roots of Polynomials : Interpolation : Lagrange and Hermite Interpolation, Divided Differences, Difference Schemes, Interpolation Formulas using Differences. Numerical Differentiation.

Numerical Quadrature : Newton-Cote's Formulas. Gauss Quadrature Formulas, Chebychev's Formulas.

**UNIT-III** Linear Equations : Direct Methods for Solving. Systems of Linear Equations (Gauss Elimination, LU Decomposition, Cholesky Decomposition), Iterative Methods (Jacobi, GaussSeidel, Relaxation Methods).

The Algebraic Eigenvalue problem : Jacobi's Method, Givens' Method, Householder's Method, Power Method, QR Method, Lanzas' Method.

**UNIT-IV** 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 Orthogonal Polynomials, Approximation with Trigonometric Functions, Exponential Functions, Chebychev Polynomials, Rational Functions.

**Unit-V** Monte Carlo Methods Random number generation, congruential generators, statistical tests of pseudo-random numbers.

Random variate generation, inverse transform method, composition method, acceptance-rejection method, generation of exponential, normal variates, binomial and Poisson variates.

Monte Carlo integration, hit or miss Monte Carlo integration, Monte Carlo integration for improper integrals, error analysis for Monte Carlo integration.

#### **REFERENCES :**

1. Henry Mullish & Herbert L. Cooper, Spirit of C : An Introduction to Modern Programming, Jaico Publishers, Bombay.
2. B.W. Kernighan and D.M. Ritchie. The C Programming Language 2<sup>nd</sup> Edition, (ANSI features) Prentice Hall, 1989.
3. Peter A. Darnel and Philip E. Margolis, C : A Software Engineering Approach, Narosa Publishing House, 1993.
4. Robert C. Hutcheson and Steven B. Just, Programming using C Language, McGraw Hill, 1988.
5. Les Hancock and Morris Krieger, The C Primer, McGraw Hill, 1988.
6. V. Rajaraman, Programming in C, Prentice Hall of India, 1994.
7. Byron S. Gottfried, Theory and Problems of Programming with C, Tata McGraw-Hill Publishing Co. Ltd., 1998.
8. C.E. Froberg, Introduction to Numerical Analysis, (Second Edition), Addison-Wesley, 1979.
9. James B. Scarborough, Numerical Mathematical Analysis, Oxford and IBH Publishing Co. Pvt. Ltd. 1966.
10. Melvin J. Maron, Numerical Analysis A Practical Approach, Macmillan Publishing Co., Inc. New York, 1982.
11. M.K. Jain, S.R.K. Iyengar, R.K. Jain, Numerical Methods Problems and Solutions, New Age International (P) Ltd., 1996.
12. M.K. Jain, S.R.K. Iyengar, R.K. Jain, Numerical Methods for Scientific and Engineering Computation, New Age International (P) Ltd., 1999.
13. R.Y. Rubinstein, Simulation and the Monte Carlo Methods, John Wiley, 1981.
14. D.J. Yakowitz Computational Probability and Simulation, Addison-Wesley, 1977.

**PAPER - III - (OPTIONAL)**  
**(V) MATHEMATICAL MODELLING**  
**(Paper Code-0285)**

**The Process of Applied mathematics.**

**UNIT-I** Setting up first-order differential equations - Qualitative solution sketching. Difference and differential equation growth models.

**UNIT-II** Single-species population models. Population growth-An age structure model. The spread of Technological innovation.

**UNIT-III** Higher-order linear models- A model for the detection of diabetes. Combat modes. Traffic models - Car-following models. Equilibrium speed distributions.

**UNIT-IV** Nonlinear population growth models. Prey-Predator models. Epidemic growth models. Models from political science - Proportional representation-cumulative voting, comparison voting.

**UNIT-V** Applications in Ecological and Environmental subject areas- Urban waste water management planning.

**REFERENCES :**

1. Differential equation models, Eds. Martin Braun, C.S. Coleman, D.A. Drew.
2. Political and Related Models, Steven. J. Brams, W.F. Lucas, P.D. Straftin (Eds.)
3. Discrete and System models, W.F. Lucas, F.S. Roberts, R.M. Thrall.
4. Life Science Models, H.M. Roberts & M. Thompson.

All volumes published as modules in applied Mathematics, Springer-Verlag, 1982.

5. Mathematical Modelling by J.N. Kapur, New Age International, New Delhi.

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## SOCIOLOGY

### PAPER - I

#### SOCIOLOGY OF TRIBAL SOCIETY

M.M. 75

(Paper Code-0246)

- UNIT-I** The concept of Tribe.  
Characteristics of Tribal society Distinction in Tribe and Caste.
- UNIT-II** Classification of Tribal people :-  
Food gatherers and hunters, shifting cultivates, nomads, peasants settled agriculturists, artisans.
- Unit-III** Sociocultural profile - Kinship, marriage and family, religions beliefs cultural traditions.
- UNIT-IV** Social mobility and change sensitization.  
Schemes of Tribal Development Various tribal movements.
- UNIT-V** Problems of Tribal people -  
Poverty, illitracy, indebtedness, agrarian issues, exploitation study of tribal immunities in Chhattisgarh with special reference to "oraon", "Kanwar" and "Gond".

### PAPER - II

#### SOCIAL RESEARCH METHODS

M.M. 75

(Paper Code-0247)

- UNIT-I** Meaning and significance of Social Research.  
Hypothesis and its fomulation Scientific method and its applicability.
- UNIT-II** Positivism  
Ethnography, observation, case study, content analysis.
- Unit-III** Types of Research -  
Historical, descriptive, comparative exploratory, experimental.
- UNIT-IV** Techniques of data collection - survey sampling, Questionnaire, Interview schedule and Interview guide.
- UNIT-V** Meaning, importance and limitations of social statistics.  
Graphs, diagrams and measures of central tendency - mean mode, mediaJ correlation.

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## नृत्य ( भरत नाट्यम )

इस विषय में दो सैद्धांतिक प्रश्न पत्र एवं एक प्रायोगिक परीक्षा होगी । पूर्णांक एवं उत्तीर्णांक इस प्रकार होंगे -

क्रं.	विवरण	पूर्णांक	उत्तीर्णांक
1.	सिद्धांतिक प्रश्न पत्र प्रथम	50	17
2.	सैद्धांतिक प्रश्न पत्र द्वितीय	50	17
3.	प्रायोगिक	50	17
	योग	150	51

### विस्तृत पाठ्यक्रम - सैद्धांतिक

#### प्रथम प्रश्न पत्र ( पेपर कोड-0287 )

1. गुप्त काल में आधुनिक काल तक नृत्य का इतिहास ।
2. नृत्य का परम्परागत परिवर्तन ।
3. नृत्य विषय संबंधी निबंध ।
4. नवरस विवरण ।
5. भारतीय प्रेक्षागृहों की जानकारी ( भरत नाट्यमशास्त्र के द्वितीय अध्याय के अनुसार)

#### द्वितीय प्रश्न पत्र ( पेपर कोड-0288 )

1. ताण्डव और लाक्ष्य नृत्य का परिचय ।
2. (1) लोकधर्मी नाट्य परम्परा -  
किन्ही तीन की संक्षिप्त जानकारी - यक्षमान, कुचिपूड़ी, ----- ओट्टनदुल्लन ।  
(2) लोकनृत्य परिचय -  
(अ) कोलाट्टम, (ब) पिन्नल कोला पट्टम, (स) कोरतिकुम्मी, (द) कुचिपूड़ी, (इ) भांगड़ा (कोई भी चार) ।
3. नायक - नायिका भेद निरूपण ।
4. भारतीय नृत्य में ताल का महत्व ।
5. नृत्य कलाकारों की जीवनी -  
(1) रुक्मिणी देवी अरूण्डेल, (2) श्रीमती वाला सरस्वती, (3) श्री शंभू महाराज, (4) श्री लच्छू महाराज ।
6. संक्षिप्त टिप्पणियाँ -  
(1) कीर्तनम्, (2) जावली, (3) वर्जम्, (4) तिल्लाना, (5) प्रलीकम् ।

### प्रायोगिक

1. मौखिक मुद्रा प्रदर्शन -  
(1) समस्त असंयुक्त हस्त मुद्राओं का विनियोग एवं पांच संयुक्त हस्त ----- विनियोग  
(2) जाति हस्त  
(3) दशावतार हस्त ।
2. सप्ततालों का जाति के अनुसार प्रयोग ।
3. देहाभ्यास - कूदना, झकना, अरमंडी (अर्धबैठक) मुरुमंडी, नऽय आदि ।
4. अष्टपदी या कीर्तनम् तथा पदम् या जावली का प्रदर्शन ।

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## HOME SCIENCE

### Paper - I

### "HUMAN DEVELOPMENT"

(Paper Code-0253)

- UNIT-I**
- 1 Development-meaning of child growth and development. Defferent aspects of growth, principles of development, factors affecting child development, heredity and environment.
  - 2 Stages of development -
    - 1 Physiology of pregnancy
    - 2 Prenatal
      - (a) Reproductive system
      - (b) Prenatal development
    - 3 Infancy
      - (a) Early infancy
      - (b) Babyhood
    - 4 Childhood
      - (a) Early childhood
      - (b) Late childhood
    - 5 Adolescence
      - (a) Early adolescence
      - (b) Late adolescence
  - (ii) Prenatal growth and development -
    - (a) Sources of studing prenatal life
    - (b) Stages of growth prenatal and development
    - (c) Factors affecting prenatal and development growth
      - (1) Mother's food
      - (2) Health of mother
      - (3) Narcotics
      - (4) Age of parents
      - (5) Effect of season
      - (6) Emotion of mother
- UNIT-2**
- 1 Effect of normal and scissoring delivery.
  - 2 Adjustment to new environment -
    - (a) Temperature
    - (b) Respiration
    - (c) Food consumption
    - (d) Excretion
  - 3 Physical development of infant-
    - (a) Physical proportion
    - (b) Height
    - (c) Weight
    - (d) Pulse rate
    - (e) Respiration rate
    - (f) Body temperature
    - (g) Frequency of hunger.
  - 4 Sensory development of infant
    - (a) Light



- (b) Sound
- (c) Taste
- (d) Smell
- (e) Skin sensitivity
- 5 Motor activity of infants -
  - (a) Mass activities
  - (b) Specific activities -
    - (i) Reflex activities
    - (ii) Advantages of reflex action
- 6 Emotions of infants -
  - (a) Types of emotions
  - (b) Significance of emotions
- 7 Characteristics of infant behaviour -
  - (a) Dependency
  - (b) Individual difference
  - (c) Adjustment

**UNIT-3** Childhood : Adolescence.

- 1 Characteristics of this stage.
- 2 Factors affecting growth and development during childhood and adolescence.
- 3 Physical growth height, weight, body proportion, teeth
- 4 Growth and development of internal organs (a) Nervous (b) Mental (c) Circulatory system (d) Digestive system, (e) Respiratory system (f) Tissues and muscles systems.
- 5 Development of motor abilities (i) Types of motor abilities (ii) importance and characteristics of motor abilities in childhood (iii) Development of motor skills, Types of motor skills (iv) Delayed motor development.

**UNIT-4**

- 6 Development of emotional behaviour-characteristics special emotions (affection, anger, fear, jealousy and worries) factors affecting emotional behaviour.
- 7 Social developments stages - (a) during infancy, (b) nursery school period (c) elementary school period (d) Factor affecting social development.
- 8 Development of intelligence - Types according to throndyke, theories regarding intelligence.

**UNIT-5**

- 9 Play meaning of play, work and play, theories of play, characteristics of children's play, types of play, factors effecting play and importance of play.
10. Habits :
  - 1 Definition.
  - 2 Functions performed by habits.
  - 3 Habits and learning
  - 4 Laws of habit formation-identical to laws of learning.
  - 5 Habit formation.
    - (a) Principles of habit formation.
    - (b) Rules for habit formation.
11. Children delinquency-Types causes and remedial measures.

**द्वितीय - पेपर**  
**आहार एवं पोषण विज्ञान**  
( पेपर कोड-0254 )

पूर्णांक-50

**यूनिट-1 पोषण**

1. पोषण की परिभाषा ।
2. कार्यों के आधार पर पौष्टिक तत्वों का वर्गीकरण ।  
(अ) उष्मा प्रदान करने वाले कार्बोज, वसा ।  
(ब) शरीर का निर्माण करने वाले-प्रोटीन, खनिज तत्व ।  
(स) सुरक्षा व नियमन करने वाले जल, जीवन तत्व ।
3. **कार्बोज** - परिभाषा, कार्य पाचन, अभिपोषण, चयापचय, रक्त शंकरा स्तर व इसके नियमन अधिकता का प्रभाव प्राप्ति का साधन एवं दैनिक आवश्यकता ।
4. **वसा** - परिभाषा, कार्य, वर्गीकरण, पाचन, अभिशोषण, चयापचय, संतृप्त व असंतृप्त वसीय अम्ल, आवश्यक वसीय अम्ल, कोलेस्टेरोल कमी व अधिकता के प्रभाव एवं दैनिक आवश्यकता ।
5. **प्रोटीन** - परिभाषा, कार्य, वर्गीकरण, पाचन, अभिपोषण, चयापचय, नाइट्रोजन संतुलन, प्रोटीन का जैविक मूल्य, प्रोटीन का पूरक मूल्य, प्रोटीन व कैलोरी कुपोषण, प्राप्ति के साधन एवं दैनिक आवश्यकता ।
6. **खनिज तत्व** - सामान्य वर्गीकरण व कार्य, कार्य, अभिपोषण को प्रभावित करने वाले तत्व कमी व अधिकता के प्रभाव, साधन (कैल्शियम, फास्फोरस, लौहलवण, आयोडीन सोडियम, व क्लोराईड)
7. **विटामिन्स** - (जीवन तत्व) सामान्य वर्गीकरण व कार्य, कमी व अधिकता के प्रभाव, प्राप्ति के साधन, (जीवन सत्व ए.बी.सी.डी.ई. के)
8. **जल** - सामान्य कार्य, जल का संतुलन अधिकता के प्रभाव व निर्जलीकरण ।

**यूनिट-2 आहार**

1. आहार का वर्गीकरण व कार्य, आधारीय चार-भोज्य समूह व सात-भोज्य समूह
2. **अनाज** - प्रकार, रचना, संगठन, पकाने से पहले की प्रक्रिया - मौलिंग, पालिशिंग, पारवाईलिंग, फनोरिंग, पारचिंग, अनाज को उपयोग करने के विभिन्न तरीके, अनाज-ताप, क्षार, खमीरीकरण व ब्रीडिंग के प्रभाव ।
3. **दालें** - प्रकार, संलग्न, अंकुरण व खमीरीकरण के प्रभाव
4. **दूध** - प्रकार, संगठन, दूध से बने पदार्थ - दही, मक्खन, चीज आदि पाश्चुराइलेशन एवम् होमोजीनाइजेशन ।
5. **फल व सब्जियां** - वर्गीकरण, संगठन, वर्णक, प्रोटीन का महत्व, परिपक्व होने की प्रक्रिया ।
6. **अण्डा** - संगठन, पकाने का प्रभाव
7. **मांस मछली, पोल्ट्री** - संगठन, पकाने से होने वाले परिवर्तन ।
8. **शक्कर, गुड़, शहद** - संगठन, प्रकार, विधियों में उपयोग
9. **पेय पदार्थ** - वर्गीकरण, पोषण की दृष्टि से महत्व, अत्याधिक उपयोग का प्रभाव ।
10. **मसाले** - प्रकार, संगठन, पोषण की दृष्टि से महत्व ।

**यूनिट-3**

1. **खाद्य संरक्षण** - उद्देश्य, विधियां, घरेलू संरक्षण, औद्योगिक संरक्षण ।
2. **खाद्य पदार्थों में सड़द** - कारण, पहचान, उपचारात्मक विधियां
3. **भोज्य विषाक्तता** - कारण, प्रकार, पहचान, उपचारात्मक तरीके
4. **खाद्य मिलावट** - आवश्यकता, प्रकार, महत्वपूर्ण मिलावटी पदार्थ, मिलावटी पदार्थों को पहचानने की सरल विधियां ।

5. **आहार, स्वास्थ्य व स्वच्छता** - प्रकार, उपचारात्मक तरीके ।
6. **खाद्य संग्रहण** - आवश्यकता, प्रकार, उपयोग में होने वाले महत्वपूर्ण रसायन ।

#### यूनिट-4 आहार नियोजन :

1. **महत्व** - आहार नियोजन के सिद्धांत प्रतिदिन की निर्धारित मात्रा (आर.डी.ए.) आहार आयोजन को प्रभावित करने वाले तत्व समय व शक्ति बचाने वाले आहार का आयोजन करना -  
 (अ) पहले से योजना बनाना  
 (ब) क्रय करने की योजना  
 (स) सरल आहार तालिका  
 आर्थिक स्तर के आधार पर आहार का आयोजन करना । चुनाव संग्रहण पूरक पदार्थों का उपयोग, बचे खाद्य पदार्थों का उपयोग ।
2. शिशु विभिन्न आयु में पौष्टिक तत्वों व खाद्य पदार्थों की आवश्यकता, आहार माता का दूध, फार्मूला फीडिंग ।
3. **बालक का पोषण** - आयु समूह की विशेषताएँ, पौष्टिक तत्व एवं आहार को आवश्यकता, शालेय आहार कार्यक्रम-प्रकार, महत्व, कीमत, पोषण स्तर, आहार्य व लक्षण, परीक्षण शरीर मापन विधियाँ ।
4. **गर्भावस्था व छात्रीवस्था में पोषण** - शारीरिक परिवर्तन, पौष्टिक तत्वों की आवश्यकता, असामान्य परिस्थितियाँ,
5. **वृद्धावस्था में आहार एवम् पोषण** - शारीरिक परिवर्तन, पौष्टिक तत्वों की आवश्यकता । असामान्य स्थितियाँ ।

#### यूनिट-5 उपचारात्मक पोषण - परिभाषा

सामान्य आहार परिवर्तन - तरलता, पौष्टिक तत्व, गंध की उपस्थिति/अनुपस्थिति, कुछ खाद्य पदार्थों का सम्मिलित न करना ।

#### चयापचयी रोग -

1. **मधुमेह** - परिभाषा, लक्षण, कारण, इन्सुलेशन के प्रकार, आहार का प्रभाव, हाइपोग्लोसेमिक दवाईयाँ, मधुमेह में असामान्य स्थितियाँ, मधुमेह व गर्भावस्था, मधुमेह व बाल्यावस्था ।
2. **अधिक वजन/कम वजन** - परिभाषा, कारण, उपचारात्मक तरीके, असामान्य स्थितियाँ ।

#### पौष्टिक तत्वों की कमी से होने वाले रोग -

1. **रक्तहीनता** - प्रकार, कारण, पहचान, आहार ।
2. **ए-विटामीनोसिस** - प्रकार, कारण, उपचार ।
3. **प्रोटीन कैलोरी कुपोषण** - कारण, उपचारात्मक तरीके ।

#### रोग जिसमें आहार्य चिकित्सा सम्मिलित है -

1. **यकृत के रोग** - प्रकार, कारण, आहार (पौष्टिक तत्वों की आवश्यकता)

#### अमाशय के रोग -

1. **पेप्टिक अल्सर** - कारण, लक्षण, आहार (पौष्टिक तत्वों की आवश्यकता)
2. **अपचन** - कारण, पौष्टिक तत्वों की आवश्यकता ।
3. **अतिसार** - प्रकार, कारण, आहार ।
4. **कब्ज** - प्रकार, कारण, आहार ।
5. **उक्त रक्तचाप** - कारण, आहार ।

## गृह विज्ञान

### प्रायोगिक

पूर्णांक : 50

1. अनाज - दालें, अण्डा, दूध, मेवे, सब्जियाँ, फलों के उपयोग तैयार करना, हर भोज्य पदार्थ की कोई भी तीन पात्र विधियों के प्रायोगिक रिकार्ड बुक में लिखना । कैलोरी एवं प्रोटीन की गणना ।
2. आहार आयोजन -
  - (अ) गर्भवती महिला
  - (ब) कब्ज की स्थिति
  - (स) मधुमेह रोग
  - (द) अधिक वजन की स्थिति
3. विभिन्न आर्थिक स्थिति में आहार योजना ।
4. खाद्य संरक्षण कोई भी चार पाक विधि से बनायी जाये ।
5. सम्पूरक भोजन - आयोजन, गणना
6. व्यक्तित्व मापन विधि
7. बुद्धियापन विधि

#### प्रायोगिक परीक्षा अंकों का विभाजन

सेशनल	10
योजना	10
तैयारी	10
गणना	10
मौखिक प्रश्न	10

कुल अंक 50

#### REFERENCES BOOKS :

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3. M. Swaminathan - Essentials of Nutrition Vol. I & II.
4. P. Rajalaxmi - Applied Nutrition.
5. C. Gopalan-et al - The Nutrition value of Indian Foods. ICHR. 1991.
6. Mangode Konge - Normal & Therapeutic Nutrition (In Hindi).
7. Jyoti kulkarni - Normal & Therapeutic Nutrition.
8. Geeta Pushpa Shaw -
9. Kreuse M.N. - Food Nutrition & Diet Therapy.
10. आहार एवं पोषण विज्ञान - डॉ. अरुणा पल्टा, शिवा प्रकाशन, इन्दौर
11. खाद्य परिरक्षण - डॉ. अमिता सहगल, शिवा प्रकाशन, इन्दौर ।

## दर्शन शास्त्र

बी.ए. भाग तीन दर्शन शास्त्र विषय में कुल दो प्रश्न पत्र होंगे तथा प्रत्येक में 75 अंक होंगे । प्रत्येक प्रश्न पत्र 5 इकाईयों में विभाजित है । प्रथम प्रश्न पत्र, 'तर्कशास्त्र' अनिवार्य है । द्वितीय प्रश्न पत्र में दो विकल्प दिये गये हैं -

1. ज्ञान मीमांसा एवं तत्व मीमांसा ( भारतीय एवं पाश्चात्य)
2. ग्रीक दर्शन ।

### प्रश्न -पत्र प्रथम

### तर्क शास्त्र (Logic)

( पेपर कोड-0259 )

- इकाई-1**
1. तर्क शास्त्र : अर्थ, परिभाषा स्वरूप, उपयोगिता
  2. आगमनात्मक एवं निगमनात्मक तर्क
  3. तर्कदोष : आकस्मिक एवं अनाकारिक
- इकाई-2**
1. सत्यता एवं वैधता
  2. विचारों के नियम
  3. प्रतिज्ञप्ति - वर्गीकरण, प्रतिज्ञप्ति की बुलीय व्याख्या
  4. निरपेक्ष न्याय वाक्यों के मानक आकार एवं न्याय वाक्यों के परीक्षण हेतु वेन-रेका पद्धति
- इकाई-3**
1. तार्किक संयोजन तथा कुछ महत्वपूर्ण तार्किक संयोजक  
(अ) संयोजन, (ब) निषेधक, (स) वियोजक, (द) आपादान, (इ) द्विआपादान तुल्यता
  2. संयोजकों की अंतर्परिभाषिता
  3. तार्किक युक्तियों की वैधता की परीक्षा के लिए सत्यता सारिणी विधि
- इकाई-4**
1. वैज्ञानिक व्याख्या की प्रकृति
  2. वैज्ञानिक एवं अवैज्ञानिक व्याख्या में भेद
  3. विज्ञान एवं प्रकल्पना
- इकाई-5**
- न्याय एवं बौद्ध तथा जैन परम्परा में अनुमान
1. न्याय - बौद्ध जैन दर्शन में अनुमान की परिभाषा, अवयव एवं पक्षता
  2. अनुमान के प्रकार
  3. हेत्वाभास

### अनुशासित ग्रंथ :

- |    |                    |   |                              |
|----|--------------------|---|------------------------------|
| 1. | रमाशंकर मिश्र      | - | आधुनिक तर्कशास्त्र, एक परिचय |
| 2. | राज्य श्री अग्रवाल | - | तर्कशास्त्र                  |
| 3. | केदारनाथ           | - | प्रतीकात्मक तर्कशास्त्र      |
| 4. | ब्रजनारायण शर्मा   | - | अनुमान का विवेचन             |
| 5. | बी.एन. सिंह        | - | भारतीय दर्शन                 |
| 6. | डॉ. शोभा निगम      | - | भारतीय दर्शन                 |
| 7. | Copi I. M.         | - | Introduction of logic        |
| 8. | S.C. Chatterjee    | - | Nyaya theory of Knowledge    |
| 9. | Cohen & Negel      | - | Introduction to logic        |

प्रश्न -पत्र द्वितीय ( वैकल्पिक )

( अ ) ज्ञान मीमांसा एवं तत्व मीमांसा ( भारतीय एवं पाश्चात्य )

( पेपर कोड-0260 )

- इकाई-1 ज्ञान मीमांसा एवं तत्व मीमांसा : स्वरूप एवं विषय वस्तु  
ज्ञान प्रमाण : प्रमा एवं अप्रमा
- इकाई-2 प्रामाण्य : स्वतः प्रामाण्य एवं परतः प्रामाण्य  
ख्यातिवाद : सत्ख्यातिवाद, अख्यातिवाद, अन्यथा अनिवर्चनीय ख्यातिवाद
- इकाई-3 1. कारणता का सिद्धांत ( कारणकार्यवाद)  
अ. सत्कार्यवाद : प्रकृति परिणामवाद, ब्रह्म परिणामवाद, विवर्तवाद  
ब. असत्कर्तवाद
2. सत्य के सिद्धांत  
अ. संवादिता  
ब. संसक्तता  
स. अर्थक्रियावादी सिद्धांत
- इकाई-4 1. जड़वाद  
2. अध्यात्मवाद  
3. वस्तुवाद
- इकाई-5 1. बुद्धिवाद  
2. अनुभववाद  
3. कांट का परीक्षावाद

अनुशासित ग्रंथ :

1. दिवाकर पाठक एवं अविनाश श्रीवास्तव : भारतीय दर्शन की मूल समस्याएँ  
2. अर्जुन मिश्र : दर्शन की मूल धाराएँ  
3. डॉ. शोभा निगम : पाश्चात्य दर्शन के सम्प्रदाय  
4. डॉ. शोभा निगम : भारतीय दर्शन  
5. सुरेन्द्र वर्मा : भारतीय दर्शन  
6. बंदिष्टे : भारतीय दार्शनिक निबंध  
7. Patric : Introduction of Philosophy  
8. Chhaya Rai : Studies in Philosophical methods  
9. ब्रजगोपाल तिवारी : पाश्चात्य दर्शन

प्रश्न-पत्र द्वितीय ( वैकल्पिक )

ग्रीक दर्शन

( पेपर कोड-0261 )

इकाई-1 ग्रीक दर्शन : मुख्य विशेषताएँ

माइलेशियन विचारक

1. थेलिस
2. एलेक्जिमेंडर
3. एनेक्जिमेनीज

इकाई-2

1. हेराक्लाइट्स
2. जेनोफीनीज
3. पार्मेनाइडीज
4. जीनो

इकाई-3

1. एम्पीडोक्लीज
2. एनेक्जागोरस
3. ल्यूगिपस
4. डेमोक्राइट्स

इकाई-4

1. सोफिस्ट विचारक : प्रोटागोरस, गार्जियस
2. सुकरात

इकाई-5

1. प्लेटो
2. अरस्तू

अनुशासित ग्रंथ :

- |                         |   |                           |
|-------------------------|---|---------------------------|
| 1. जगदीश सहन श्रीवास्तव | : | ग्रीक एवं मध्ययुगीन दर्शन |
| 2. शोभा निगम            | : | ग्रीक एवं मध्ययुगीन दर्शन |
| 3. नरेन्द्र तिवारी      | : | ग्रीक दर्शन               |
| 4. रामनाथ शर्मा         | : | पाश्चात्य दर्शन का इतिहास |
| 5. Stace                | : | Greek Philosophy          |
| 6. Burnet               | : | Greek Philosophy          |
| 7. Gorpers              | : | The Greek Thinkers        |

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**निसाब उर्दू अदब**  
**पहला पर्चा**  
**'नस्र' ( पेपर कोड-0262 )**  
**( दास्तान, ड्रामा, अफसाना )**

नं. 75

**निसाब :**

<b>दास्तान :</b>	1. किस्सा आजाद बख्त	इन्तेखाब बागोबहार मीर अमान ।
	2. मुलात मलकए महन निगार	इन्तेखाब फसनए अजाइब रजब अली बेग शुरु ।
<b>ड्रामा</b>	1. डाक्टर तयकीन की उलझन	अज इब्राहीम युसुफ
	2. आगरा बाजार	अज हवीब तनवीर
<b>अफसाना</b>	1. कफन	प्रेमचंद
	2. नया कानून	सजादत हुसैन मन्टी
	3. यूकिलिप्टस की हाली	कृष्ण चन्द्र
	4. लाजवंती	राजेन्द्र सिंह वैदी
	5. दो भीगे हुए लोग	इकबाल मजीद
	6. झूठा संच/काठ का घोड़ा	रतन सिंह
	7. दीमक	गयास अहमद गद्दी
	8. अफसाना	जीलानी बानो

**इकाईयाँ :**

<b>इकाई-1</b>	शामिले निसाब असनाप पर सवालात	नं. 15
<b>इकाई-2</b>	दास्तान निगारों पर सवालात	नं. 15
<b>इकाई-3</b>	ड्रामा निगारों पर सवालात	नं. 15
<b>इकाई-4</b>	अफसाना निगारों पर सवालात और अफसानों का खुलासा और जायजा	नं. 15
<b>इकाई-5</b>	दास्तान और अफसानों से तशरीह	नं. 15

**दूसरा पर्चा ( शायरी ) ( पेपर कोड-0263 )**  
**( कसायूद, मरासी और मजमून निगारी )**

नं. 75

**निसाब :-**

<b>कसायूद :</b>	1. फज्र होते जो गई आज मेरी आँख झपकअज सौदा देहलबी	
	2. सावन में दिया फिर महे शव्वाल दिखाईअज जौक देहलबी	
	3. समते काशी से जानिबे मथुरा बादल अज मोहसिन काकोरवी	
<b>मरासी :</b>	1. किस शेर की आमद है के रन कॉफ रहा हैअज दबीर	( 15 बंद )
	2. ब खुदा फारसे मैदाने तहवुर या हुर अज अनील	( 15 बंद )

**मजमून निगारी :** किसी अदबी मोजू पर मजमून

**इकाईया :**

<b>इकाई-1</b>	शामिले निसाब असनाफ पर सवालात	नं. 15
<b>इकाई-2</b>	कसोदा निगारों पर सवालात	नं. 15
<b>इकाई-3</b>	मर्तिया निगारों पर तन्कीदी सवालात	नं. 15
<b>इकाई-4</b>	तशरीहजशारे कसायूद और मरासी	नं. 20
<b>इकाई-5</b>	अदबी मोजू पर मजमून	नं. 10



## MANAGEMENT ( प्रबंध )

### PAPER - I

#### MONEY, BANKING TRADE & FOREIGN EXCHANGE

M.M. : 75

(Paper Code-0269)

- UNIT-I** Definition of Money : Functions, importance & types Value of money, quantity theory. Cash transactions approach case balance approach & income approach.
- UNIT-II** Inflation : Cost push demand pull-effects of inflation and methods of control, deflation measures against deflation monetary standards gold and paper standards.
- UNIT-III** Banking types and their function : Credit creation & methods of control nationalisation of commercial banks - R.B.I. and its functions financing.
- UNIT-IV** International and inter regional trade theory of comparative costs general equilibrium theory. Terms of trade, free trade versus protection. Dumping balance of trade and balance of payments.
- UNIT-V** Foreign exchange : Meaning, rate of exchange, its determination mint per theory, purchasing power parity theory Balance of payment theory Exchange control objects and methods of IMI.

#### BOOKS RECOMMENDED :

1. K.P.M. Sundram : Money, Banking & International Trade.
2. K.R. Gupta : International Economics.
3. Charles. P. : International Economics.
4. हरिश्चंद्र शर्मा : मुद्रा एवं बैंकिंग

### PAPER - II

#### AUDITING, COSTING AND INCOME TAX

M.M. : 75

(Paper Code-0270)

#### UNIT-I Principles of auditing :

Origin of Audit, the nature & definition of audit objects of audit, various class of audits and their advantages, audit under statute. The accounts of private firms, the audit of the accounts of private individuals the audit of the trust accounts.

#### UNIT-II Audit procedure and conduct of an audit :

Internal audit the qualities required of an auditor. Continuous and final or completed audit, consideration of the commencement of a new audit, audit note book methods of work.

#### UNIT-III The audit of cash transactions :

Audit of bank transactions : Audit of petty of cash book : Audit of trading transactions. Internal check as regards cash, vouching, Internal check as regards wages. Audit of trading transaction : Purchases Purchases returns, sales, sales returns, sales ledger.

#### UNIT-IV Fundamental of cost accountancy. Definition, Advantages, disadvantage and

functions. Methods of cost accounting Unit costing. departmental costing. process costing. contract costing.; Elementary know ledger of Break even Analysis.

**UNIT-V** Income : tax on salary and capital gains, tax deduction at source, Rates of income tax and surcharge on income tax. Deduction in respect of C.P.F., L.I.C. premiums and commulative time deposits short term capital gains and long term capital gains deduction in respect of capital gains.

**BOOKS RECOMMENDED :**

- 1 Agrawal & Khanuja : Cost Accounting
- 2 Grewal & Shukla : Advanced Accounts
- 3 Dr. R. R. Gupta : Cost Accounting
- 4 D. N. Agarwal : The Higher Science of Accountancy.
- 5 Bhagwati Prasad : Income Tax-Law & Practice
- 6 Choudhary & Patel : Income Tax
- 7 Dr. B. K. Agarwal : Income Tax
- 8 Dr. S. M. Shukla : Auditing
- 9 मेहरोत्रा : आयकर विधान एवं लेखे ।

- - - - -

**FUNCTIONAL ENGLISH**

**PAPER - I**

**COMMUNICATION SKILL AND BROADCASTING**

**M.M. 50**

**(Paper Code-0271)**

- I Oral Communication
- |                      |                             |
|----------------------|-----------------------------|
| (1) Interview        | (2) Dictation               |
| (3) Meetings         | (4) Seminars and Conference |
| (5) Group Discussion | (6) Audio Visual Aids       |
- II Writing Skill
- |                              |                         |
|------------------------------|-------------------------|
| (1) Business Correspondence. | (2) Agenda and Minutes. |
| (3) Advertising.             | (4) Reports             |
- III Broadcasting.
- |   |
|---|
| (1) Fundamentals, of Broadcasting         |
| (2) Radio as a medium of Broadcasting.    |
| (3) T.V. as a medium of Broadcasting.     |
| (4) Current affairs of general Knowledge. |

**PAPER - II**

**ADVANCED GRAMMER**

**(Paper Code-0272)**

**Section A**

- (1) Constituent-  
Students will be required to divide each Sentence into its Constituent and label each A, V, C, O, or E.
- (2) Use of dynamic and stative verb :-
- (3) Use of Adjective and Adverb :-
- (4) use of Prepositions :-
- (5) Question Tag :-
- (6) Nodal verb :-
- (7) Introducing word 'it' There '
- (8) Use of Sentence in the Passive.

**Section - B**

20

- (1) Use of Radio and its Sentence.
- (2) Use & Function of T.V.
- (3) Importance of Non Communication.
- (4) Importance of News papers in the modern context.

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# PRINCIPAL OF INSURANCE & PRACTICE

## PAPER- I

### PROPERTY AND LIABILITY INSURANCE

50 Marks

(Paper Code-0273)

#### UNIT-I INTRODUCTION

Risk and Insurance; Insurable and non-Insurable; Nature of Property and liability insurance, crop and cattle insurance, types of liability insurance reinsurance.

#### UNIT-II Basic concepts of Liability Insurance

- (a) Basic concepts :- Specific and all risk insurance; valuation of risk; Indemnity contracts and specific value contracts; Average and contribution; Excess and short insurance careers.
- (b) Liability Insurance:- Procedure for obtaining liability insurance. Legal position of insurance agent; construction and issue of policy; Records of liability insurance; policy conditions.

#### UNIT-III Types of liability Insurance policy-

Mandatory public Liability Insurance.

Dwelling Property losses; Business interruption and related losses, Theft Insurance contracts, Budgetary covers, m Auto Insurance, Medical Benefit Insurance; Dishonesty, disappearance and destruction insurance; Employer's Liability; Aviation Insurance Personal and residential Insurance; Boiler Machinery insurance; commercial enterprises and industrial property insurance.

#### UNIT-IV Insurance Problems of Institutions

Insurance Problems of educational and religious institutions hospitals, clubs and association; Professional package contracts; Errors and omissions insurance; professional liability insurance; Accountants liability insurance; Limits on amount of insurance Marketing and underwriting of liability insurance; Finance of liability insurance.

#### UNIT-V Adjustment of Losses and claims compensation:-

Nature of Losses and their adjustment: Procedure of adjustment Functions of adjuster's; Responsibilities of adjuster's; survey of losses; Procedure for preparing claims statements; Documents in use in claim settlements. Requirement of the insured in the event of loss. Apportionment and loss valuation; statutory control over liability insurance in India.

Liability policies by General Insurance Corporation of India.

## PAPER - II

### GROUP INSURANCE AND RETIREMENT BENEFIT SCHEMES

(Paper Code-0274)

50 Marks

#### UNIT - I Introduction

Superannuation Schemes I

- Superannuation Schemes II
- UNIT-II** Superannuation Schemes III  
Gratuity Schemes
- UNIT-III** Group Life Insurance Schemes I  
Group Life Insurance Schemes II
- UNIT-IV** Provident Fund & Employees Family, Pension and Deposit linked insurance Schemes.  
Taxation Treatment of provisions for retirement Benefits-I
- UNIT-V** Taxation Treatment of Provisions for Retirement Benefits II  
Group Schemes and Data Processing.

### THEORY

#### HISTORY OF INDIAN PAINTING (Paper Code-0286)

(Bangal School to Modern age)

50 Marks

- Bangal School** - Abanendra Nath Tagor  
Rabindra Nath Tagor  
Gaganendra Nath Tagor  
Nandalal Bose
- Modern Age** - Raja Ravi Varma  
Amrita Sher Gil  
Yamini Ray
- Progresive Art Group**
- Souza** - M.F. Husain  
S.H. Raza  
N.S. Bendra  
K.K. Hebber

**List of Book Recomendded for theory :**

- Bharatiya Chitrakala Ke Itihas - Shym Bihari Agrawal
- Kala Vilas - R.A. Agrawal

### PRACTICAL

There will be two practical paper. Evaluation will be made by the external and the internal examiners together, and sessional marking is made by the class teacher.

The time of each paper is four hour's and there will be a half hour's recess in between.

### PAPER - I

Copy from Indian meniatue painting  
Scheme of examination

Total Mark - 50  
Examination - 40

Time - 4 Hours

Sessional - 10

Paper - 1/4 Imp size

Medium - Water colour or potter colour

Sessional mark - 10

Minimum class work to be submitted five painting size 1/4 Imp paper

Copying from the Indian miniature painting style Mugal. Pahadi, Rajsthani.

## **PAPER - II**

### **CREATIVE COMPOSITION**

Scheme of examination

Total Mark - 50

Time Four hour's

Examination - 40

Size 1/2 Imp. paper

Sessional - 10

Medium - Water, Oil, acrylic or any

Sessional mark - 10

Minimum Class work to be submitted -

Five painting size 1/2 Imp.

Student will be experimented ith any media and form.

Above syllabus based on the syllabus of following Universities.

1. Vikram University, Ujjain
2. Rani Durgavati Vishwavidyalaya, Jabalpur.
3. Indira Kala Sangeet Vishwavidyalaya, Khairagarh.

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## DEFENCE STUDIES

### PAPER-I

#### PROBLEMS OF WAR AND PEACE (Paper Code-0277)

**Aim :** The objective of this paper is to acquaint the students about the multidimensional problems of war and peace.

**Note :** Question will be set from each unit, there will be only internal choice.

#### Unit-I U.N.O. AND WORLD PEACE

1. Organs and its role.
2. Main specialized agencies of U.N.O.
3. Role of U.N.O. in world peace.
4. Peace keeping forces of the U.N.O.
5. Veto power and Security Council.

#### Unit-II WAR AND PEACE

1. Settlement of International Disputes.
2. Diplomatic agents and Consuls.
3. War Crimes.
4. Neutrality.
5. Intervention.

#### Unit-III HUMANITARIAN LAW

1. Basic concepts and development of Humanitarian law.
2. UN General Assembly declaration of human rights on Dec. 10, 1948.
3. Protection of Victims and defenceless in armed conflict, POWs, wounded and civilians in Armed Forces.
4. Central Human Right Commission : Organisation and Function.
5. State Human Right Commission : Organisation and Function.

#### Unit-IV REFUGEE LAW

1. Meaning, Concept and causes of Refugee.
2. Refugee and IDPs.
3. Refugee law in India.
4. Refugee Problem in South Asia.
5. Role of International Committee of Red Cross and UNO in Refugee Problems.

#### Unit-V LAWS OF WAR

1. Law of Land war.
2. Law of Sea war.
3. Law of Air war.
4. Space law.
5. The International Court of Justice.

#### SELECTED READINGS :

1. Maunce Clark, J : Readings in the Economics of War.
2. International Security : Modern political Science series.
3. Rajani Kothari : Word order.
4. Openhem, I : Use of Forces by states and International law.

### PAPER - II

#### MODERN WARFARE (Paper Code-0278)

**Aim :** To enable students to appreciate the impact of Political, economic and technological developments on the patterns of conflicts between nations.

**Note :** Question will be set from each unit, there will be only internal choice.

- UNIT-I**
1. Development of Nuclear weapons.
  2. Effects of Nuclear Explosion.
  3. Spread of Nuclear Weapons.
  4. Missile and their characteristics.
  5. Type of Missiles.

- UNIT-II**
1. Trends in Science and Technology and their impact on war.

- 2 Role of Research and Development.
  - 3 Development of Weapons and their impact on tactics
  - 4 Command, Control, Communication and Intelligence (C<sup>3</sup>I) in Modern Warfare.
  - 5 Elements of National Power.
- UNIT-III**
- 1 Military Satellites.
  - 2 Explosive Bombs.
  - 3 War Gases.
  - 4 Micro Organs : as a weapons.
  - 5 Smart Weapons.
- UNIT-IV**
- 1 Rocket Technology and India.
  - 2 Missile Technology and India.
  - 3 Nuclear Technology and India.
  - 4 Atomic Minerals and India.
  - 5 Space Technology and India.
- UNIT-V**
- 1 New world order - Political, Social and Economical.
  - 2 Alliance and Regional co-operation.
  - 3 Mobilisation of resources for war.
  - 4 War time economics.
  - 5 New trends.

**SELECTED READINGS :**

- 1 Halailan Morton : Coutemporary Military strategy
- 2 Brodue, Y. : Strategy in the Missile Age.
- 3 Markabi, Y. : Nuclear war and Nuclear peace
- 4 Osanka. F.M. : Modern Guerilla warfare
- 5 Gerald. J. : Defence Psychology
- 6 Know Kalus : Science and Defence
- 7 Pandey Girish Kant : Yudh mein Vigyan avem Tackniki

**PRACTICALS**

There shall be practical examination of 3.5 hours duration carrying. 50 marks

The division of marks shall be as follows :

- (1) Plain Table Survey : 15 Marks.
- (2) Experimental Military Psychology : 15 Marks.
- (3) Group Descussion & Lectring : 05 Marks.
- (4) Viva-Voce : 05 Marks.
- (5) Sessional work & Record : 10 Marks.

**SECTION - A**

Plain Table Survey by inter section methods.

(Ateast ten exercises in a session).

**SECTION - B**

Military psychology Experiment :

- (1) Muller-Layer-Illusion test.
- (2) Koh's Block Design Test.
- (3) Allexander Pass Along Test.

**SECTION - C**

Group Discussion and Lectures based on current topic on any international Problems as issue.

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**EDUCATION**  
**PAPER - I**  
**EDUCATIONAL MANAGEMENT AND EDUCATIONAL TECHNOLOGY**  
**(Paper Code-0255)**

**COURSE OBJECTIVES**

1. To develop knowledge and understanding of the meaning, scope process and types of management.
2. To develop the ability to identify the roles of participating members (individual or collective) and to plan various institutionalized managerial activities.
3. To develop the ability of making objective decisions in educational management.
4. To enable the students to understand about the concept, nature and scope of educational technology.
5. To expose the students to the basic developments in Educational Technology.

**COURSE CONTENTS**

- UNIT-I** - Concept of Educational Management : Meaning, nature, need and scope.
- Types of Educational Management : Centralized and decentralized, external and internal. Authoritarian / autocratic and democratic, dynamic / creative and Laissez-faire.
- UNIT-II** - Managerial Behaviour : Factors affecting managerial behaviours; personal, social, cultural, political, institutional etc.
- Aspects of institutional management : Curricular and co-curricular programmes; student welfare auxiliary services including school health services; school plant including equipment and assets; sanitation and beautification; institutional planning; time table; interpersonal relationship; institutional climate and discipline; hostel and staff accommodation; management of finance; home, school and community relationships; evaluation of students achievement and promotion; admission, office management etc.
- UNIT-III** - Educational planning : Meaning, need and significance of educational planning; types of educational planning, strategies in educational planning; steps in educational planning.
- UNIT-IV** - Communication Process : theory, concept, nature, process, components, types of classroom communication, mass media approach in educational technology.
- UNIT-V** - System Approach to Instruction : System approach in instructional process, instructional system designing : concept, components, physical and human resources, steps.
- Innovations in Educational Technology : Programmed learning, micro and macro teaching, team teaching.
  - Personalized system of instruction, computer assisted instruction, simulated teaching distance teaching.

**BOOKS :**

1. Educational Technology. R.A. Dhaowa, Lall Book Depot, Meerut.
2. शैक्षिक तकनीकी, आर.ए. शर्मा, लाल बुक डिपो मेरठ ।

**PAPER - II**  
**PHILOSOPHY OF EDUCATIONAL**  
**(Paper Code-0256)**

- UNIT-I** - Naturatism  
- Progmation
- UNIT-II** - Realism  
- Ideatims
- UNIT-III** - Dayanand  
- Gandhi  
- Tagore
- UNIT-IV** - Aurbindo  
- Vivekanand  
- Azkir Hussan
- UNIT-V** - Montesson  
- Froebel  
- Festalloggi.

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## ORDINANCE NO.-12

### BACHELOR OF ARTS - CLASSICS

1. The three year course has been broken up into three Parts, Part-I known as B.A. Classics Part-I Examination at the end of the First year, Part-II known as B.A. Classics Part-II examination at the end of the Second year and Part-III known as B.A. Classics Part-III examination at the end of the Third year.
2. A candidate who, after passing (10+2) or Intermediate Examination of C.G. Board of Secondary, Education, Raipur or any other Examination recognised by the University or C.G. Board of Secondary Education as equivalent there to has attended a regular course of study in an affiliated College or in the teaching department of the University for one academic year, shall be eligible for appearing at B.A. Classics Part-I examination.
3. A candidate who, after passing B.A. Classics Part I examination of the University, has attended a regular course of study for one academic year in an affiliated college or in the teaching department of the University, shall be eligible for appearing at the B.A. Classics Part-II Examination.
4. A candidate who, after passing the B.A. Classics Part-II examination of the University, has completed a regular course of study for one academic year in an affiliated college or in the Teaching department of the University, shall be eligible for appearing at the B.A. Classics Part-III examination.
5. Besides regular students and subject to their compliance with this Ordinance, ex-students and non-collegiate candidates shall be eligible for admission to the examination as per provisions of Ordinance No. 6 relating to Examinations (General). Provided that non-collegiate candidate shall be permitted to offer only those subjects/papers as are taught to the regular students at any of the University Teaching Department or College.
6. Every candidate for the Bachelor of Arts classics Examination shall be examined in :
  - A- Foundation Course :
    - (1) Hindi Language
    - (2) Sanskrit Language or English Language.
  - B- Compulsory-Vyakaran Sahitya
  - C- Any one of the following branches of studies-

1- Veda	2- Vyakaranam
3- Sahityam	4- Darshanam
5- Puranam	6- Jyotisham
7- Dharmashastram	8- Niruktam
  - D- Any one of the following branches of studies :

1 English Literature	2 Hindi Literature
3 Economics	4 History
5 Political Science.	
  - E- Viva voce in Sanskrit subject at the final examination (i.e. Part-III)

**NOTE :** Syllabus (E) will be common as prescribed by UGC (Part I,II,III)

7. Any candidate who has passed B.A. Classics Examination of the University shall be allowed to present himself for examination in any of the additional subjects prescribed for B.A. Classics examination and not taken at the Degree examination. Such candidate will have to first appear and pass B.A. Classics Part I & Part-II examination in the subject which he proposes to offer and then the B.A. Classics Part-III examination in the same subject. Successful candidates will be given a certificate to that effect.
8. In order to pass at any part of the three year degree course examination an examinee must obtain not less than 33% of the total marks in each subject/group of subjects. In groups where both theory and practical examinations are provided an examinee must pass in both theory and practical part of the examination separately.
9. Candidates will have to pass separately to the B.A. Classics Part-I, Part-II and Part-III examinations. No division shall be assigned on the result of Part-I and II examinations. The division in which a candidate is placed at the Part-III examination shall be determined on the basis of the aggregate of total marks obtained in the part I, II and III examinations. Provided in case a candidate who has passed the B.A. Classics Part I &II examination through the Supplementary Examination having failed in one subject only, the total aggregate marks for being carried over for determining the division shall include actual marks obtained in the subject in which he appeared at Supplementary examination.
10. Successful examinees at the Part-III examination obtaining 60% or more marks shall be placed in the First Division. Those obtaining less than 60% but not less than 45% marks in the Second Division and other successful examinees in the Third Division.

### **USE OF CALCULATORS**

The Students of Degree/P.G. Classes will be permitted to use Calculators in the examination hall from annual 1986 examination on the following conditions as per decision of the standing committee of the Academic Council at its meeting held on 31-1-1986-

1. Student will bring their own Calculators.
2. Calculators will not be provided either by the university or examination centres.
3. Calculators with, memory and following variables be permitted +, -,  $\times$ ,  $\div$ , square, reciprocal, exponentials log, square root, trigonometric functions, wize, sine, cosine, tangent etc. factorial summation, xy, yx and in the light of objective approval of merits and demerits of the viva only will be allowed. F-Practical (if necessary) for each core subject.

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बी.ए. क्लासिक्स ( प्राच्य पद्धति ) भाग-३

अनिवार्य विषय : प्रथमः

प्रथमं प्रश्न-पत्रम्

आधार पाठ्यक्रम

- |                                  |    |
|----------------------------------|----|
| ( १ ) हिन्दी भाषा                | ७५ |
| ( २ ) अंग्रेजी अथवा संस्कृत भाषा | ७५ |

द्वितीयं प्रश्न-पत्रम्

संस्कृत भाषा

( पेपर कोड-0731 )

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|--|-----------|
| ( १ ) मनुस्मृतिः अध्याय - १, श्लोकाः १-१०० पर्यन्तम्       | अंका : ३० |
| ( २ ) प्रारंभिक रचनानुवाद कौमुदी ( पाठाः २१-३० पर्यन्तम् ) | अंका : ३० |
| ( ३ ) संस्कृत-साहित्येतिहासः ( रामायण-महाभारत-पुराणानि )   | अंका : १५ |

सहायक ग्रन्था :

- |                                 |   |                                  |
|---------------------------------|---|----------------------------------|
| ( १ ) संस्कृत साहित्य का इतिहास | - | पं. बलदेव उपाध्याय               |
| ( २ ) संस्कृत साहित्य का इतिहास | - | चंद्रशेखर पाण्डेय/बाबू राम व्यास |

अनिवार्य विषयः द्वितीयः

प्रथमं प्रश्न-पत्रम्

साहित्यम्

( पेपर कोड-0732 )

- |   |           |
|---|-----------|
| ( १ ) उत्तर-रामचरितम् ( भवभूति विरचितम् ) | अंका : ३० |
| ( २ ) मेघदूतम् ( कालीदास विरचितम् )       | अंका : ३० |
| ( ३ ) काव्य मीमांसा ( अध्याय १, २, ३ )    | अंका : १५ |

द्वितीयं प्रश्न-पत्रम्

व्याकरणम् अनुवादश्च

( पेपर कोड-0733 )

- |   |           |
|---|-----------|
| ( 1 ) मध्य सिद्धान्त कौमुदी-वरदराज प्रणीता                | अंका : ६० |
| ( पूर्व कृदन्ततः ग्रन्थ समाप्ति-पर्यन्तम् ( उणादिवर्जम् ) |           |
| ( 2 ) रचनानुवाद कौमुदी ( पाठाः ४१-६० पर्यन्तम् )          | अंका : १५ |
| लेखक - कपिलदेव द्विवेदी                                   |           |

तृतीयं प्रश्न-पत्रम्  
प्रायोगिकी/मौखिकी

अंका : ५०

- (१) गृहीतेषु वैकल्पिक-विषयेषु प्रश्नाः अंका : ४०  
(२) कला-संस्कृति-विषयकाः प्रश्नाः अंका : १०

वैकल्पिक विषयाः

( क ) वेदः

प्रथमं प्रश्न-पत्रम्

अंका : ७५

( पेपर कोड-0734 )

- (१) ऋग्वेद-मण्डलं - १ सूक्तम् १-१५ अंका : ३५  
(सायणभाष्यानुसारम्)  
(२) ऋग्वेदभाष्य भूमिका - सायणरचिता (सम्पूर्णम्) अंका : ४०

द्वितीयं प्रश्न-पत्रम्

अंका : ७५

( पेपर कोड-0735 )

- (१) निरुक्तम् - यास्काचार्य प्रणीतम् (पंचमषष्ठाध्यायौ) अंका : ४०  
(२) धन्दः सूत्रम् - पिङ्गलाचार्य प्रणीतम् (सम्पूर्णम्) अंका : ३५

( ख ) व्याकरणम्

प्रथमं प्रश्न-पत्रम्

अंका : ७५

( पेपर कोड-0736 )

- (१) वैयाकरण सिद्धान्त कौमुदी (कारक-अव्ययीभाव - तत्पुरुष बहुब्रीहि द्वन्द्वसमास, प्रकरणानि) अंका : ६०  
(२) प्रौढ रचनानुवाद कौमुदी (पाठाः ४१-६० पर्यन्तम्) अंका : १५  
लेखक - कपिलदेव द्विवेदी, प्रकाशक - विश्वविद्यालय प्रकाशन - वाराणसी ।

द्वितीयं प्रश्न-पत्रम्

अंका : ७५

( पेपर कोड-0737 )

- (१) महाभाष्यम् (पतञ्जलि विरचितम्) आह्निकाः १, २, ३) अंका : ६०  
(२) शुद्धाशुद्धि विवेचनम् अंका : १५

सहायक ग्रन्थाः

- (१) काशिका - न्याय पदमञ्जरी सहिता - प्राच्य भारती प्रकाशनम्, वाराणसी  
(२) गुप्ता-शुद्धि-प्रदर्शनम् - पं. अम्बिकादत्त व्यासः, पण्डित पुस्तकालय, वाराणसी

( ग ) साहित्यम्  
प्रथमं प्रश्न-पत्रम्  
( पेपर कोड-0738 )

अंका : ७५

- ( १ ) काव्य प्रकाशः-मम्मट प्रणीतः  
( १, २, ३, ४, ९, १० उल्लासाः ) अंका : ४०
- ( २ ) दशरूपकम् - धनंजय प्रणीतम्  
( १, २, ३ प्रकाशाः ) अंका : ३५

द्वितीयं प्रश्न-पत्रम्  
( पेपर कोड-0739 )

अंका : ७५

- ( १ ) कादम्बरी - बाणभट्ट विरचिता ( कथा मुखान्ता ) अंका : ४०
- ( २ ) नैषधीयचरित महाकाव्यम् - श्री हर्ष प्रणीतम्  
( प्रथम-द्वितीय-सर्गौ ) अंका : ३५

सहायक ग्रन्था :

- ( १ ) संस्कृत साहित्य विमर्शः - पं. द्विजेन्द्रनाथ शुक्ल
- ( २ ) संस्कृत साहित्य का इतिहास - पं. बलदेव उपाध्याय
- ( ३ ) संस्कृत साहित्य की रूपरेखा - चंद्रशेखर पांडेय

( घ ) दर्शनम्

प्रथमं प्रश्न-पत्रम्

अंका : ७५

- ( १ ) न्याय सिद्धान्त मुक्तावली - विश्वनाथ कृता ( प्रत्यक्ष खण्डे आत्मनिरूपणान्तम् ) अंका : ४५
- ( २ ) सर्वदर्शन संग्रहः - माधवाचार्य विरचितः ( चार्वाक, जैन, बौद्ध दर्शनानि ) अंका : ३०

द्वितीयं प्रश्न-पत्रम्

अंका : ७५

- ( १ ) ब्रह्मसूत्रम् - वादरायणप्रणीतम्-शाङ्कर भाष्य सहितम्, चतुः सूत्र्यन्तम् अंका : ४०
- ( २ ) ईशावास्योपनिषद् ( शाङ्कर भाष्यसंहिता ) अंका : ३५

सहायक ग्रन्था :

- ( १ ) भारतीय दर्शनशास्त्र का इतिहास - देवराज तथा रामजन्द्र तिवारी

( ङ ) ज्योतिषम्

प्रथमं प्रश्न-पत्रम्

अंका : ७५

( पेपर कोड-0740 )

- ( १ ) ग्रहलाघवम् ( पञ्चतारास्पष्टीकरणमात्रम् ) अंका : ४५
- ( २ ) चमत्कार चिन्तामणिः अंका : ३०

द्वितीयं प्रश्न-पत्रम्

अंका : ७५

( पेपर कोड-0741 )

- ( १ ) मुहूर्तचिन्तामणिः ( संस्कार प्रकरणादारभ्य विवाहप्रकरणं यावत् ) अंका : ४५
- ( २ ) अर्वाचीनं ज्योतिर्विज्ञानम् ( १-३ अध्यायाः ) अंका : ३०

( च ) पुराणेतिहासः

प्रथमं प्रश्न-पत्रम्

- ( १ ) मार्कण्डेय पुराणम्-अध्याया १-३, ५  
( २ ) ईशकेन-कठोपनिषद्

अंका : ७५

अंका : ४५

अंका : ३०

द्वितीयं प्रश्न-पत्रम्

- ( १ ) शिवपुराणम् ( वायवीय संहिता १-७ )  
( २ ) महाभारतम् शान्ति पर्वणि राजधर्म अध्यायाः ५९-८०  
( ३ ) श्रीमद्भागवत पुराणम् ( रासपञ्चाध्यायीमायम् )

अंका : ७५

अंका : २०

अंका : २५

अंका : ३०

( छ ) धर्मशास्त्रम्

प्रथमं प्रश्न-पत्रम्

- ( १ ) आपस्तम्ब धर्मसूत्रम्  
( २ ) धर्मशास्त्रस्येतिहासः

अंका : ७५

अंका : ४५

अंका : ३०

सहायक ग्रन्था :

- ( १ ) धर्मशास्त्र का इतिहास - म.म.पी.व्ही. काणे

द्वितीयं प्रश्न-पत्रम्

- ( १ ) प्रायश्चित्त विवेकः ( पञ्च महापातकानां प्रायश्चित्तान्तम् )  
( २ ) धर्मशास्त्री ग्रन्थानां ऐतिहासिक महत्वम्

अंका : ७५

अंका : ६०

अंका : १५

सहायक ग्रन्था :

- ( १ ) धर्मशास्त्र का इतिहास - म.म.पी.व्ही. काणे

( ज ) कर्मकाण्डम्

प्रथमं प्रश्न-पत्रम्

- ( १ ) श्राद्ध विवेक-म.म. रुद्रधर कृतः  
( २ ) अनुष्ठान प्रकाशः-चतुर्थीलाल कृतः  
( ३ ) उपाकर्म पद्धतिः-दुर्गादत्त

अंका : ७५

अंका : ४५

अंका : १५

अंका : १५

द्वितीयं प्रश्न-पत्रम्

- ( १ ) श्रौत पदार्थनिर्वचनम् - प्रभुदत्त अग्निहोत्रकृतम्  
( २ ) नित्यकर्म विधिः - पं. माया प्रसाद शास्त्रिकृतः  
प्रकाशक - रतन लाल सुरेका ( नित्यहोमविधि पर्यन्तम् )  
( ३ ) वर्ष क्रिया कौमुदी - गोविन्दानन्द कृतः

अंका : ७५

अंका : ४५

अंका : १५

अंका : १५