

# BHAGWANT UNIVERSITY



SIKAR ROAD, AJMER - 305004  
RAJASTHAN (INDIA)

COURSE STRUCTURE

&

DETAILED SYLLABUS

of

Humanities

for

(B.A. Three Year Degree Course)

Bhagwant University, Ajmer

ORDINANCE III

BU/Ord./2008/0



**BHAGWANT UNIVERSITY**

Faculty of Humanities

ORDINANCES GOVERNING

UG - (B.A./B.A.(Hon's))

Course for Year Scheme

2008-2009

Approved in Academic Council Meeting held on June, 2010

## Ordinances Governing UG courses (Humanities)

### 3 year Course Leading to Bachelors Degree

#### 1. APPLICABILITY :

This Ordinance shall apply to Bachelors Degree [B.A., B.A.(Hon's)] for Yearly scheme

#### 2. DEFINITIONS :

- a) Academic Programme /Programmes shall mean a programme of course and /or any other Component leading to the degree of UG & PG courses.
- b) Academic Year is a period of 12 months devoted to completion of requirements specified in the scheme of teaching and the related examinations.
- c) Board of Studies (BOS) shall mean the Board of Studies of the Faculty / Institute concerned.
- d) Course means a component of the academic programme, carrying a distinctive code no. and specific Marks assigned to it.
- e) Three hour lecture each theory Paper /2 hour lab/ per week.
- f) University shall mean Bhagwant University.
- g) Faculty shall mean Faculty of Humanity, Social Science, Faculty of Life Science & Applied Science & Faculty of Commerce
- h) Examiner shall mean an examiner who is not in the employment of the University.
- i) Year System – A programme wherein each academic year is apportioned into two parts known as Years.
- j) Student shall mean a person admitted and registered for degree programme in the Faculty of Humanity & Social Science, Faculty of Life Science & Applied Science.

#### 3. ADMISSION

Admission to 3 year (UG) course leading to degree programmes will be made as per the rules prescribed by the Academic Council of the University.

#### ELIGIBILITY FOR ADMISSION

- (a) No candidate shall be eligible for admission unless he/she has passed as per detail given below

Course	Name of Faculty	Duration in Year		Eligibility
		Min	Max	
B.A., B.A.(Hon's)	Faculty of Humanities and Social Science	3- UG	5	10+2 (Arts Stream)

- (b) Has cleared the eligibility test such as University Entrance Exam/Any other National or State examination which is considered to be equivalent.
- (c) Rules for student migrated from other university/ Board- Student pursuing UG courses of recognized state university/ board may be permitted to migrate to this university in accordance of this university. For such case student admitted upto 3rd Year has to reappear in the subject in the university exam back paper for which for

which equivalence standard has not been met as per standard of Bhagwant University. University shall make an Equivalence Committee for the determining purpose of equivalence and decision of Vice- Chancellor shall be final.

#### DURATION OF COURSE

- (a) Total duration of the Course leading to degree programmes shall be 3 years for UG Course Course, each year comprising of two Years.
- (b) The Maximum permissible period for completing a programmes for which the prescribed UG programme duration is n (number of Year) Years, shall be (n+4) Years. Under very special circumstances, the total period may further be extended by 2 Years with the approval of the Vice-Chancellor. This excludes the period of expulsion or suspension by the University/medical leave.

#### 4. MINIMUM REQUIREMENT TO PASS A SUBJECT

The student should prepare two assignment / quiz submitted to respected HOD's as per Academic calendar to pass the sessional + Theory part of the subject 30% Marks with Complete continuous evaluation.

#### 5. MINIMUM REQUIREMENT TO GET PROMOTED IN NEXT SESSION

- a. The student should clear at least 25 % subject (Theory + Practical) of studying year to get promoted in next year, (this includes fail and absent subject) even after missing or not appear in any Year.

[Example Sem -I Comprising 6 Theory and 4 Practical's, Sem-2 comprising 6 Theory and 2 Practical total 18 subjects. Candidate to pass at least 25% of 18 equal 4.5 % total courses to pass in both sem I & II]

All the student will be promoted to next academic year provided they have fulfilled attendance and Examination requirement.

- b. Grace

1% of Grand Total Marks of a Year distributed up to 25% of total subjects.

#### 6. CURRICULAM AND MINIMUM MARKS REQUIREMENT

2 Year per Year	Total 6 Year for U.G course Total 4 Year for P.G.
Time	16-18 Week /Year
Class hours per week	24 Class Hours

A candidate for a pass at each of the Year examination shall be required to obtain

- a) At least 40 % marks in the aggregate of each papers with Continuous Evaluation through Assignment / Quiz Viva, Seminar, Test prescribed for the examination

Paper	Max Marks	Total Marks	Min. Pass Marks
Theory	70	100	40
Continuous Assignment / quiz/ test/ Viva/ Seminar	30		
Practical (Internal =50, External=50)	100	100	40

- b) Provided that if a candidate fails to secure at least 40% marks in each individual paper in the examination and also in the project work/seminar.
- c) The minimum Marks requirement for Graduate/ Post Graduate degree should be 40% marks aggregate.

## 7. ATTENDANCE

All Students are normally expected to have attendances of 75% in each subject. The Vice-Chancellor may give relaxation up to 15% on account of illness and other pre-approved occasion. However, under no circumstances. A student with an attendance of less than 60% in a subject, shall be allowed to appear in the Year-end examination of that subject

In case any student appears in the examination by default, who has been detained by the institute on account of attendance shortage his or her result shall be treated as null and void.

## 8. CANCELLATION OF ADMISSION

The admission of a student at any stage of study shall be cancelled if:

- a) He/She is not found qualified as per UGC/State Government/university norms and guidelines or the eligibility criteria prescribed.
- or
- b) He/She is involved in ragging.
- or
- c) He/She is found unable to complete the course within the stipulated time as prescribed.
- d) He/She is found involved in creating indiscipline in the Faculty/College or in the University.
- e) Fee Arrears

## 9. BOARD OF STUDIES

The constitution of the Board of Studies shall be :

- (a) The HOD's of the Faculty (Chairperson)
- (b) All Professors
- (c) Two Associate Professors
- (d) One Assistant Professors
- (e) One Expert Member from outside University
- (f) One external member from within University.

## 10. ACADEMIC PROGRAMME COMMITTEE

- (a) There shall be an Academic Programme Committee in the Department / Faculty of the University.
- (b) All the teachers of an Faculty of Study shall constitute the Academic Programme Committee of which the HOD'S of the Faculty shall act as its Chairperson. This Committee shall coordinate the implementation of the courses for optimum utilization of resources and shall also take care of the coordination of the UG & PG programmes with the other programmes run by the different Faculty of the University.

- (c) The Academic programmes Committee shall meet as and when required. But at least once every Year. The Chairperson of the Committee will convene the meetings.

## 11. EVALUATION

The examination of the university will be open to all regular/ re-admitted / ex-student who have undergone a course of study in the university for a period specified for the programmed of study in the teaching and evaluation scheme and are not debarred from appearing in the end – Year examinations as provided in the applicable ordinance of the university.

- (a) The overall weightage of a course in the Syllabi shall be determined in terms of marks assigned to the course.
- (b) The distribution of weightage for various components of evaluation shall be as defined in the Teaching & Evaluation Scheme.
- (c) Conduct of Year-End Examination :-
- (i) All Year – end examination shall be conducted by the Controller of Examinations.
- (ii) The schedule of examination shall be notified by the Controller of Examination at least 10 days prior to the first day of the commencement of Year – end examination.
- (iii) For theory as well as practical examination as viva-voce, the concerned subject teacher (s) shall be the Internal Examiners. In case any External Examiners are desired, then the same shall be appointed by the Controller of Examinations the recommendations of the Head of the Department and approval of Vice-Chancellor of the university.
- (d) Assessment :

All courses undertaken by students are evaluated during the Year using internal system of continuous assessment. The students are evaluated on Seminar, Viva, class, tutorial participation, lab work, assignment, quiz and end Year examinations, which contribute to the final marks awarded for the subject. Students will be notified at the commencement of each courses about the evaluation methods being used for the courses and weightage given to the different assignments and evaluated activities.

In order to make the evaluation system as similar and transparent with any of the globally reputed educational institutions like **MDS & Rajasthan University**. Here marks obtained in the continuous assessment(Assignment / Quiz etc) and end Year examination are added together .

### Distribution of Marks

Courses Theory & Assignment/quiz components	
Assignment / Quiz/ Seminar/Test/Viva	= 30
End – Term Examination	= 70
Total	= 100

### Course with Practical Components

Internal Practical (Exam Continuous evaluation, Record)	= 50
External (Practical Exam, Viva Voce)	= 50
Total	= 100

**12. RE-EVALUATION (MAIN/BACK):**

The students, who are not satisfied with the mark awarded, may opt for re- evaluation of the mark in the subject not more than 25% of total subject. For this he has to submit the prescribed application with fee to examination with in 15 days of the declaration of result.

**13. IMPROVEMENT:**

If the student wishes to improve his final division he may be permitted to apply for improvement is permitted for candidate who wish to improve them division from pass / II division. Students having overall percentage such that they are awarded less then I<sup>st</sup> Division will be permitted to appear for improvement with in a years of declaration of result. They will be permitted to appear in any paper / subject in which score is less 60 (below 1st Division Marks). Improvement examination will be conducted in that subject for which regular/ back examination is being conducted in that period. for conducting special / Improvement examination a special fee to cover incidental expanses will be charged.

**14. DETERMINATION OF DIVISION ON DEGREE:**

S.No	Division	Equivalent percentage %
1	1st Division with Distinction	75.00 but less than 100
2	1st Division	60.00 but less than 75.00
3	2nd Division	48.00 but less than 60.00
4	Pass	40.00 but less than 48.00

Note :

- 1st Division with Distinction: 75% or more in the total aggregate all Year.
- Ist Division: 60% or More in the total aggregate all Year.
- 2nd Division: 48% or more in the total aggregate all Year.
- Pass: 40% or more in the total aggregate all Year.

**15. USE OF UNFAIR MEANS:**

All reported cases for use of unfair means in the examination shall be placed before a Standing 'Unfair Means Hearing Committee' for decision on case basis. The actions under the category of 'Use of Unfair Means' and procedure for dealing with such cases of suspected/alleged/reported use of unfair means shall be specified by the Academic Council.

The following would be considered as unfair means adopted during examinations and other contexts:

- Communicating with the fellow students for obtaining help.
- Copying from the other student's script/report/paper etc.
- Possession of any incriminating document whether used or not.
- Any approach in direct or indirect form to influence teacher/ invigilator.
- Unruly behavior, which disrupts academic environment.

**16. STUDENTS GRIEVANCE COMMITTEE:**

In case of any written representation /complaints received from the students within seven days after completion of the examination regarding setting up of the question paper etc. along with specific recommendations of the course Co-ordinators & HOD's of the Institute, the same shall be considered by the Students Grievance Committee to be constituted by the Vice-

Chancellor The Vice Chancellor shall take appropriate decision on the recommendations of the Students Grievance Committee, before the declaration of result (s) of the said

**B.A. I<sup>st</sup> Year Examination (Under 10+2+3 Pattern)**

Code No.	Subject		DISTRIBUTION OF MAXIMUM MARKS					
			University Exam			Practical Exam		
			INT.	EXT.	TOTAL	INT.	EXT.	TOTAL
<b>COMPULSORY SUBJECT(3 NOS)</b>								
01ABA101	CHOOSE ANY ONE	GENERAL HINDI	30	70	100	-	-	-
01ABA102		GENERAL ENGLISH	30	70	100	-	-	-
01ABA104	Elementary Computer Application		30	70	100	-	-	-
01ABA105	ENVIRONMENTAL STUDIES		30	70	100	-	-	-
<b>Optional Subjects</b>								
01ABA106.1	Paper-I	ikphu dlo;	30	70	100	-	-	-
01ABA106.2	Paper-II	fglnh Ò'kk , oal kfgR; dk bfrgkl	30	70	100	-	-	-
01ABA107.1	Paper-I	English Poetry and Drama	30	70	100	-	-	-
01ABA107.2	Paper-II	Prose and Fiction	30	70	100	-	-	-
01ABA108.1	Paper-I	Foundation of Indian Culture	30	70	100	-	-	-
01ABA108.2	Paper-II	History of India upto 1200 A.D.	30	70	100	-	-	-
01ABA109.1	Paper-I	Political Theory	30	70	100	-	-	-
01ABA109.2	Paper-II	Representation Political Thinkers	30	70	100	-	-	-
01ABA110.1	Paper-I	Micro Economics	30	70	100	-	-	-
01ABA110.2	Paper-II	Indian Economic Thought	30	70	100	-	-	-
01ABA111.1	Paper-I	Physical Basis of Geography	30	70	100	-	-	-
01ABA111.2	Paper-II	Geography of Rajasthan	30	70	100	-	-	-
01ABA111.3	Practical	Geography Practical	-	-	-	50	50	100
01ABA112.1	Paper-I	Human Physiology	30	70	100	-	-	-
01ABA112.2	Paper-II	Textile and Laundry	30	70	100	-	-	-
01ABA112.3	Practical	Textile and Laundry	-	-	-	50	50	100
01ABA113.1	Paper-I	Principles of Sociology	30	70	100	-	-	-
01ABA113.2	Paper-II	Indian Society	30	70	100	-	-	-
01ABA114.1	Paper-I	Algebra and Metrics	30	70	100	-	-	-
01ABA114.2	Paper-II	Calculus	30	70	100	-	-	-
01ABA114.3	Paper-III	Vector Calculus & Geometry	30	70	100	-	-	-
01ABA115.1	Paper-I	Elements of Public Administration	30	70	100	-	-	-
01ABA115.2	Paper-II	Public Administration in India	30	70	100	-	-	-
01ABA116.1	Paper-I	Basic Psychological Processes	30	70	100	-	-	-
01ABA116.2	Paper-II	Social Psychology	30	70	100	-	-	-
01ABA116.3	Practical	Psychology - Practicals	-	-	-	50	50	100
01ABA117.1	Paper-I	Introduction to Environmental Sciences	30	70	100	-	-	-
01ABA117.2	Paper-II	Social Perspectives on Environment	30	70	100	-	-	-
01ABA118.1	Paper-I	Introduction of Earth System Science	30	70	100	-	-	-
01ABA118.2	Paper-II	Crystallography and Mineralogy	30	70	100	-	-	-
01ABA119.1	Paper-I	PRINCIPLES OF EDUCATION	30	70	100	-	-	-
01ABA119.2	Paper-II	EDUCATIONAL PSYCHOLOGY	30	70	100	-	-	-

**General Hindi**

PAPER CODE : 01 ABA101

Maximum marks =100

External =70

Internal =30

(Mid term15,Assignment-15)

- I keku; fgnh  
 I e; %3 ?k/s mYkh. kkd %36 i wkkd %100  
 funz k%bl ç'u&i = dççklrkad Js kh fuekj .k eaI ffefyR ugē fy; k tk; xA  
 vad ; kst uk %v Hkkx½  
 x | , oai | I adyu dh fofo/k fo/kk; ; Øe' k% %25\$25 ¼ 50 vad½  
 1. , d i z u 0; k[; kvkal sl ad/kr Øe' k%/nks0; k[; k; ½ %10\$10 ¼ 20 vad½  
 2. nksi fjp; kRed izu ikB; i qrdkal s %15\$15 ¼ 30 vad½  
 %c Hkkx½
- 'kCn 'kq} & 5 vad
  - okD; 'kq} & 5 vad
  - i kfj Hkkf'kd 'kCnkoyh %vaxst'h 'kCnkad'sfgnh I ekukFkd 'kCn½ & 5 vad
  - I qd .k & 5 vad
  - i Yyou & 5 vad
  - okD; kal dsfy, , d I kFkd 'kCn & 5 vad
  - i k: lk & 5 vad
  - 'kCn; %e & vFkZHkn & 5 vad
  - fucdk & 10 vad
- x | & I adyu
- xte'RFku & ukuk'th ns'ked[k] nhun; ky "k'ek I k'Fku fp=dW
  - i ; kbj .k vq I ukru n'V Nxu egrk I Økfor vq I ukruvk I adyu I sokxnsh çdk'ku chdkuj
  - fBBjrk gqk x .kra= %0; %; %& gfj 'kcdj i j I kA] frj Nh j s[kk, ] ok.kh çdk'ku] fnYyh
  - yNek %j s[kkfp=%½egknsh oekj vrhr dpy fp= ok.kh çdk'ku] uA fnYyh
  - vfxu dh mMku %i fJPNn 16½, -i h-ts vCny dyle çØkr çdk'ku] uA fnYyh
  - ØmkekV%ekcZy jkd I vq ekv'kpkj & ver yky cxM+verL; uehk x[k] eē; çns'k vdkneh Ò'iky eē; çns'k
  - vkot dk uhyke ¼ dkdh½ ekēbhj Økjr h x | & çØk&MkN uoy fd'k'j i p"khy çdk'ku] t; i j
  - I koprh fot; nku nFkk] vkmVypd if=dk 3-10-2005
  - fglnh Ò'kk vq ml dh fojkl r & MkNfo | kfuokl feJ] fglh I kfgR; dk i qj koy' du fo | k fuokl feJ] çOk çdk'ku] fnYyh

- 10- I q x&d q x&l hrkjke egf" k N". k d\hj] j rux<}pq ½kt-½
  - 11- ;sgšç"Qd j "k"kkd & Mkwfo". kpkür "kkL=h Lej.k d" i kFks cuus n" l xg] y"dÖkjrh byklickn] ½m-ç-½
  - 12- ryl h dçdk0; eal jkt vq djkt & ç" l w zçl kn fnf{kr l kfgR; d Mh&54] fujkyk uxj] y[kuÅ ½m-ç-½
- i | & l adyu
- 1- xakorj .k] Ökj rbnqgfj "kplnz "Ökj rbnq l exz l ä knd] gellr Ökela fglinh çdk"ku l lFku] okjk.kl h ½m-ç-½
  - 2- x"ojeku ekj .k] gfj vqk "ç; çokl ^egkdk0; fglinh l kfgR; d\hj] okjk.kl h ½m-ç-½
  - 3- Ökj r onuk ešFkyh"kj .k xlr ^exy&ÄV" dk0; xfk l kfgR; ½uykEcj i fjekku½ l nu fpj xkp >k] h ½m-ç-½
  - 4- l ej "kšk gšjke ekjh fl g fnuclj ^ij "kjk dh çfr{kk\* xfk l j jkt i ky , .M l Ul ] fnYyh
  - 5- ohj"adk dš k g" cl Ur] l Öæk dækjh pçku ^l Öæk dækjh pçku\* l Eiknd %l çkk pçku l kfgR; vdkneh] uÅ fnYyh
  - 6- py i Mšft ekj n" Mx] l "gu yky f}onh ^jk"Vh; xhr l xg" l kfgR; vdkneh] uÅ fnYyh
  - 7- Je n; kN". k fot; \*Je&ekj" vpžk çdk"ku] vtej
  - 8- Ökj rh dh l kekuk blnqkškj rRiq "k \*gekjk nfv d". k Lekfjdk" 70@75 ekul j"oj] t; ij ½kt-½

## GENERAL ENGLISH

PAPER CODE:01 ABA102

Maximum marks = 100

External = 70

Internal = 30

(Mid-term 15, Assignment-15)

### Min. Pass Marks 36

#### 1. Comprehension and vocabulary

- A. Question based on content from the prescribed text 10
- B. Question based on a passage from the prescribed text to test the candidate's comprehension and vocabulary 20
- C. Question based on an unseen passage to test the candidate's comprehension and vocabulary 10

(there will be text of essays and short stories between 100 and 120 pages in length. The text book prescribed is "Language Through Literature" (OUP, NEW DELHI)

#### 2. Composition

- A. Letter/application writing
- B. Paragraph writing/ precis writing
- C. Report writing

#### 3. Translation

- A. Elements of a sentence
- B. Transformation of sentence
- C. Modals
- D. Tense usage
- E. Determiners 2 marks
- F. Common errors in English
- G. Phrasal verbs

#### Phrasal verbs

- Break : Break away, Break down, Break off, Break up  
 Bring : Bring about, Bring in, Bring up, Bring down  
 Come : Come by, Come across, Come upon  
 Carry : Carry out, Carry on, Carry off, Carry over  
 Call : Call on, Call off, Call at  
 Get : Get Along, Get Away, Get By, Get Through, Get Over  
 Give : Give up, Give away, Give in  
 Hard : Hard up, Hard of hearing, Hard nut to crack, Hard to please  
 Look : look after, look in to, look forward to, look upto



- Put : put out, put off, put up, put up with  
 Run : run after, run down, run over, run out of  
 Take : take after, take up, take to

**Books recommended**

1. A.J. Thomson and : A Practical English Grammar A.V. Martinet (Oxford Paper Back)
2. S.Pit Corder : Intermediate English Practice Book ( Orient Longman )
3. Bhaskaran and : Strengthen Your English Hordburgh (OUP 1973)
4. T.l.h. Smith – Pearce : The English Errors Of Indian Students (OUP)
5. I.K. Sharma and : A Practical Course of English ( Ramesh Book V.D. Singh Depot, Jaipur)

**ELEMENTARY COMPUTER APPLICATIONS**

PAPER CODE:01 ABA104

Maximum marks = 100

External = 70

Internal = 30

(Mid-term15, Assignment-15)

**Compulsory in I year for all streams at undergraduate level**

1. Introduction to Information Technology, evolution and generation of computers, type of computers, micro, mini, mainframe and super computer. Architecture of a computer system: CPU, ALU, Memory (RAM, ROM families) cache memory, input/output devices, pointing devices.
2. Number system (binary, octal, decimal and hexadecimal) and their inter-conversions, character codes (ASCII, EBCDIC and Unicode). Logic gates, Boolean Algebra, machine, assembly and high level language including 3GL and 4GL.
3. Concept of Operating system, need and types of operating systems, batch, single user, multi-processing, distributed and time-shared operating systems. Process and memory management concepts. Introduction to Unix, Linux, Windows, Windows NT systems and their simple commands.
4. Internet: Concepts, email services, world wide web, web browsers, search engines, simple programs in HTML, type of HTML documents, document structure element, type and character formation, tables, frames and forms.
5. Word processing packages, standard features like tool bar, word wrap, text formatting, paragraph formatting, effect to text, mail-merge.
6. Presentation Packages: Slide creation, slide shows, adding graphics, formatting, customizing and printing.
7. Computer Networking: Type of networks, LAN, MAN and WAN concept of technology, bridges and routers, gateways and modems, ISDN and leased lines, teleconferencing and videoconferencing.
8. Multimedia technology: Introduction, framework for multimedia devices, image compression standards, JPEG, MPEG and MIDI formats.
9. Database Management Systems: Data, field and records, information database, creation of a database file, insertion, deletion and updating of records, modifying structure, editing and browsing of records, searching, sorting and indexing of records, retrieving of records and report generation. Data processing in government organizations.
10. E-commerce: Concept of e-commerce, benefits and growth of e-commerce, security considerations and hazards of virus and other security risks, anti-virus software, electronic payment system.

**Laboratory:**

The laboratory exercises will be designed to help in the understanding of concepts of computer and the utilization in the areas outlined in the theory syllabus. The emphasis should be on practical usage rather than on theoretical concepts only. In addition, MS-Office package is to be practiced in the lab.



## ENVIRONMENTAL STUDIES

PAPER CODE:01 ABA105

Maximum marks=100

External =70

Internal =30

(Mid term15,Assignment-15)

**Compulsory in I year for all streams at undergraduate level**

### CORE MODULE SYLLABUS FOR ENVIRONMENTAL STUDIES FOR UNDER GRADUATE COURSES OF ALL BRANCHES OF HIGHER EDUCATION

#### Unit 1: The Multi disciplinary nature of environmental studies

Definition, scope and importance Need for public awareness.

#### Unit 2: Natural Resources: Renewable and non-renewable resources:

- Natural resources and associated problems.
  - a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
  - b) Water resources: Use and over-utilization of surface and groundwater, floods, drought, conflicts over water, dams-benefits and problems.
  - c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
  - d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
  - e) Energy resources: Growing energy needs, renewable and nonrenewable energy sources, use of alternate energy sources. Case studies.
  - f) Land resources: Land as a resource, Land degradation, man induced Landslides, soil erosion and desertification.
- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles.

#### Unit 3: Ecosystems

- Concept of an ecosystem.
- Structure and function of an ecosystem.
- Producers, consumers and decomposers.
- Energy flow in the ecosystem
- Ecological succession
- Food chains, food webs and ecological pyramids
- Introduction, types, characteristic features, structure and function of the following ecosystem:
  - a. Forest ecosystem
  - b. Grassland ecosystem

- c. Desert ecosystem
- d. Aquatic ecosystems ( ponds, streams, lakes, rivers, oceans, estuaries)

#### Unit 4: Biodiversity and its conservation

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

#### Unit 5: Environmental Pollution Definition

- Causes, effects and control measures of:-
  - a. Air pollution
  - b. Water pollution
  - c. Soil pollution
  - d. Marine pollution
  - e. Noise pollution
  - f. Thermal pollution
  - g. Nuclear hazards
- Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution
- Pollution case studies.
- Disaster management: floods, earthquake, cyclone and landslides.

#### Unit 6: Social Issues and the Environment

- From Unsustainable to Sustainable development
- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case Studies.
- Environmental ethics: Issues and possible solutions.
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation.
- Consumerism and waste products.
- Environmental Protection Act.
- Air (Prevention and Control of Pollution) Act.
- Water (Prevention and Control of Pollution) Act.

- Wilde life Protection Act.
- Forest Conservation Act.
- Issues involved in enforcement of environmental legislation.
- Public Awareness.

**Unit 7: Human Population and the Environment**

- Population growth, variation among nations.
- Population explosion- Family Welfare Programme.
- Environment and Human health.
- Human Rights.
- Value Education.
- HIV/AIDS.
- Women and Child Welfare.
- Role of Information Technology in Environment and human health.
- Case Studies.

**Unit 8: Field Work**

- Visit to a local area to document environmental assets- river / forest / grasslands / hill/ mountain.
- Visit to local polluted site- Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds.
- Study of simple ecosystems- pond, river, hill slope, etc.

fgUrh I kfgR;  
i kB; Øe % i kphu dk0;  
i Fke ç' u&i =

PAPER CODE:01 ABA106.1

Maximum marks = 100

External = 70

Internal = 30

(Mid term15, Assignment-15)

ukV; i qrd%l dfyr i | kãk l yXu gã  
dk0; "kkL= %bl eafuEufyf[kr i kB; I kexh g" xh &  
dk0; & xqk] dk0; & n"ki "kCn & "kfdR] uhfr] vyãkj  
%vuçkl ] eud] Lyšk LoÖko"for] mi ek] I e{k] mRçKk] vfrR; "fdR] è; frjç[kk] I Ung] Ökflreku]  
n"Vkr] mnkj .k] -----?NUn dk0; dcefVrãk eai z qR Nin"adk i fjp; A

1- <yk ek: jk n'gk

2- dchj

3- l rök.kh

4- tk; I h

5- I jnkl

6- ryl h

7- ehjk

8- j l [kku

Hindi Missing

Hindi Missing

## ENGLISH LITERATURE

### PAPER-I : ENGLISH POETRY AND DRAMA

PAPER CODE:01 ABA107.1

Maximum marks=100

External =70

Internal =30

(Mid term 15, Assignment-15)

#### Unit-I

Four passages for explanation with reference to the context from the texts.  
prescribed in Units III and IV.

#### Unit-II

Objective-type Questions

Short-answer Questions

#### Unit-III (For detailed study)

Poems from The Poet's Pen ed P.E. And Homai P. Dustoor (OUP.)

Edmund Spenser : Ice And Fire

William Shakespeare : Like As The Waves, When To The Sessions

John Donne : Death, Be Not Proud, Goe And Catch A Falling Star

Henry Vaughan : The Retreat

Andrew Marvel : Thoughts In A Garden.

John Milton : When The Assault Was Intended, Lucifer In Hell

John Dryden : Shadwell, Alexander's Feast

Alexander Pope : From "An Essay On Man".

#### Unit-IV

William Shakespeare : Twelfth Night

#### Unit-V

Literary History : Elizabethan Period, Neo-Classical Period.

Literary Terms : Sonnet, Ode, Conceit, Lyric, Simile, Metaphor, Alliteration,  
Blank Verse, Rhythm, Heroic Couplet, Hyperbole, Pun,  
Renaissance, Restoration, Satire, Comedy.

#### Recommended Books :

1. M.H. Abrams : A Glossary of Literary Terms (Macmillan)
2. W.H. Hudson : An Outline History of English Literature.

## Paper II : PROSE AND FICTION

PAPER CODE:01 ABA107.2

Maximum marks=100

External =70

Internal =30

(Mid term 15, Assignment-15)

#### Unit I

Four passages for explanation with reference to the context from texts prescribed in Units III and IV.

#### Unit II

Objective-type Questions

Short-answer Questions

#### Unit-III (For detailed study)

Francis Bacon : Of Studies , Of Travel

J. Addison : Meditations In Westminster Abbey .

R. Steele : Recollections Of Childhood

D. Goldsmith : Beau Tibbs

C. Lamb : Dream Children

R.I. Stevenson : The Ideal House

William Hazlitt : On The Feeling Of Immortality In Youth

#### Unit-IV (For detailed study)

Anonymous : The Three Dancing Goats

Karel Capek : The Fortune-Teller

Anton Chekhov : Grief

Katherine Mansfield : The Doll's House

Leo Tolstoy : How Much Land Does A Man Need ?

Arthur Conan Doyle : The Adventure Of The Blue Carbuncle

#### Unit-V

R.k. Narayan : The English Teacher

**HISTORY****PAPER I : FOUNDATION OF INDIAN CULTURE**

PAPER CODE : 01 ABA108.1

Maximum marks=100

External =70

Internal =30

(Mid term 15, Assignment-15)

**Unit I**

Main features of Indian culture, Indus religion; Vedic religion; Jainism and Buddhism,

**UNIT II**

Main features of Puranic religion. Varna System; Ashram System; Upanayana and Vivaha Sanskars; Purusharthas, Main centres of Ancient Indian education.

**UNIT III**

Ramayana, Mahabharata, Cultural importance of the Puranas, Development of Science during the Gupta period, Kalidas and Tulsidas.

**UNIT IV**

Salient features of the Indus and Mauryan Art, Mathura Art, Gupta Temples, Mughal architecture, Schools of Rajput paintings.

**UNIT V**

Bhakti Movement and Sufism and their impact on Indian culture, socioreligious contribution of Brahma Samaj, Arya Samaj and Ram Krishan Mission. Social and cultural significance of the ideas of Ravindranath Tagore.

**HISTORY****PAPER II : HISTORY OF INDIA UPTO A.D. 1200 A.D.**

PAPER CODE:01 ABA108.2

Maximum marks=100

External =70

Internal =30

**Unit I**

Survey of the sources

Indian Prehistory - Paleolithic and Mesolithic cultures, rock art: concept of Neolithic culture. Indus civilization - Origin, extent, city planning, economic organisation.

**UNIT II**

Art and Architecture. Culture reflected in the Vedic Literature - Polity, religion, economy and Main features of Gupta sculpture. Iron age culture known from Megaliths of North and Deccan. Rise of territorial states

**UNIT III**

New religious movements in North India - Social impact of Buddhism and Jainism. The Mauryan Empire- State, Administration and Economy. Ashoka's Dhamma - its nature and propagation. Post-Mauryan Period - Sungas

**UNIT IV**

Western Kshatrapas, Satvahans and Kushanas; Kushana Art and Architecture (Mathura and Gandhara Schools of sculpture) trade and coinage. Culture as reflected in Sangam Literature.

**UNIT V**

History of Guptas up to Skandagupta, Administration, Economy, Society, Literature. Post Gupta Period - States of Pallavas, Chalukyas and Vardhana Dynasties: Short history of Gurjara Pratihars. Palas, Senas, Rastrakutas and Cholas: Art of South Indian Temples: Invasion of Arabs, Ghaznavids and Ghorids

## POLITICAL SCIENCE

### PAPER -I - Political Theory

PAPER CODE : 01ABA109.1  
 Maximum marks = 100  
 External = 70  
 Internal = 30  
 (Mid term15, Assignment-15)

#### UNIT I

##### Political Theory

Meaning, Nature and Significance, Types of Theory - Normative and Empirical, Behaviouralism and Post-Behaviouralism. Scientific Method and Theory Building. Decline and Revival of Political Theory.

#### Unit II

##### State and Government

Nature and functions with special reference to Idealist, liberal and Marxist Theories, Political System : Eastonian Model of Political System.

#### Unit III

**Forms** : Democracy and Dictatorship; Unitary and Federal; Presidential and Parliamentary Governments.

**Organs** : Theory of Separation of Powers; Organization and functions of Executive, Legislature and Judiciary.

#### Unit IV

##### Political Concepts and Democracy :

Concepts : Sovereignty, Rights, Liberty, Equality, Justice, Power (Laswell),

#### UNIT V

Authority (Max Weber) Political Development (Lucian Pye) Political Culture (Almond); E-Governance .

##### Democracy :

Theories : Classical, Individualistic, Elite, Pluralist and Marxist.

Models : Participatory and Representative.

Organization : Theories of Representations, Electoral System with special reference to Proportional Representation.

#### Selected Readings :

1. A. Appadorai: Substance of Politics
2. A. Ashirvadani: Principles of Political Science
3. C. B. Macpherson : Democratic Theory : Essays in Retrieval, Oxford, The Clarendon Press, 1977.
4. D. Germino : Beyond Ideology : The Revival of Political Theory, New York, Harper and Row, 1967.
5. Robert Dahl : Models of Democracy, Cambridge, Polity Press, 1987.
6. Robert Dahl: Political Theory and the Modern State, Cambridge, Polity Press, 1989.
7. D. Held: Political Theory Today, Cambridge, Polity Press, 1991.
8. D. Miller: Social Justice, Oxford, The Clarendon Press, 1976.
9. David Marsh & Gerry Stoker: Theory and Methods in Political Science, Macmillan's Publishing, U.K. ,2001
10. G. Catlin : A Study of the Principle of Politics, London and New York, Oxford University Press, 1930.
11. H. J. Laski : Grammar of Politics
12. J. C. Johari :Principles of Political Science
13. J. S. Bakes & R. B. Jain: Political Science in Transition
14. J. W. Garner: Political Science and Government
15. L. S. Rathore : In Defense of Political Theory
16. M. Carnoy : The State and Political Theory, Princeton NJ. Princeton University Press, 1984
17. M. K. Baharwal : Indian Political Thinker, Himanshu Publication Udaipur
18. N. P. Barry: Introduction to Modern Political Theory, London, Macmillan, 1995.
19. R. C. Vermani: Political Theory
20. R. Dhal: Modern Political Analysis, Englewood Cliffs NJ, Prentice Hall, 1963.
21. R. G. Gettle: Introduction to Political Science
22. Sir, E. Barker : Principles of Social and Political Theory, Calcutta, Oxford University Press, 1976
23. Tripti Jain : Fundamentals of Political Science
24. M. K. Baharwal : Indian Political Thinker, Himanshu Publication Udaipur
25. M. K. Baharwal : Indian Political Thinker, Himanshu Publication Udaipur

## PAPER II : REPRESENTATION POLITICAL THINKERS

PAPER CODE:01 ABA109.2  
Maximum marks=100  
External =70  
Internal =30  
(Mid term15,Assignment-15)

### Unit I

Manu, Kautilya, Shukra

### Unit II

Raja Ram Mohan Roy, Swami Dayanand Saraswati

### Unit III

Gopal Krishna Gokhale, Bal Gangadhar Tilak

### Unit IV

M.K. Gandhi, Jawahar Lal Nehru, B.R. Ambedkar

### Unit V

M.N. Roy, Jai Prakash Narayan.

### Selected Readings :

1. A. R.Appodorai : Indian Political Thinking
2. B.R. Purohit : Development of Political Thought, Rajasthan Hindi Granth Academy, Jaipur, 2000. ( in Hindi)
3. C. Bhraill : Social and Political Ideas of B.R. Ambedkar
4. D.Mathur : Gokahale : A Political Autobiography
5. K.P.Karunakaran : Continuity and Change in Indian Politics
6. L.P. Sinha : Left in Indian Politics
7. M.A. Buch : Rise and Growth of Indian Liberalism
8. Purshattam Nagar : Indian Modern Social and Political Thought, Rajasthan Hindi Granth Academy, Jaipur, 2000. ( in Hindi)
9. Subrata Mukherjee & Sushila Ramaswamy : A History of Political Thought- Plato to Marx
10. V.P. Verma : Political Theories
11. V.R. Mehta : Foundations of Indian Political Thought, Manohar Publishers and Distributors, New Delhi, 1999.
12. Verendera Grover : Bal Gangadhar Tilak
13. W.A. Dunning : History of Political theory (3 Volumes)

## ECONOMICS Paper-I MICRO-ECONOMICS

PAPER CODE : 01 ABA110.1  
Maximum marks = 100  
External = 70  
Internal = 30  
(Mid term15, Assignment-15)

### Unit I

#### *Introduction*

Nature and scope of economics; Methodology in economics; Choice as an economic problem; basic postulates; Role of price mechanism; Demand and supply; Basic framework-applications; Market equilibrium.

#### *Consumer's Behaviour*

Utility - Cardinal and ordinal approaches; Indifference curve; Consumer's equilibrium (Hicks and Slutsky); Giffin goods; Elasticity of demand-Price, income and cross; Consumer's surplus; Engle curve.

### Unit II

#### *Theory of Production and Costs*

Production decisions; Production function; Iso-quant, Factor substitution; law of variable proportions; returns to scale; economies of scale;

### Unit III

Different concepts of cost and their interrelation; Equilibrium of the firm; Expansion path.

#### *Market Structure*

Market forms - Perfect and imperfect markets; Price & Output determination in Perfect competition, monopoly, Monopolistic Competition, Duopoly, Oligopoly (Paul's M Sweezy Model). Price discrimination under monopoly, Measure of monopoly power. Regulation of Monopoly.

#### *Factor Pricing*

Marginal productivity theory of distribution; Modern Theory of Factor Price Determination . Theories of wage determination; Wages and collective bargaining; Wage differentials;

### Unit IV

Rent - Scarcity rent; Differential rent; Quasi rent; interest - Classical and Keynesian theories; Profits - Innovation, risk and uncertainty theories.

#### *Investment Analysis, Rent, Interest and Profit*

Payback period - average annual rate of return, Net present value, Internal rate of return criteria, price changes, risk and uncertainty, elements of social cost benefit analysis.



**Welfare Economics**

Problems in measuring welfare; Classical welfare economics; Pareto's criteria(Production, Consumption and Distribution); Concept of a social welfare function; Compensation principle - Kaldor, Hicks.

**BASIC READING LIST**

- Bach, G.L. (1977), Economics, Prentice Hall of India, New Delhi.
- Gauld, J.P. and Edward P.L. (1996), Microeconomic Theory, Richard Irwin, Homewood.
- Henderson J. and R.E. Quandt (1980), Microeconomic Theory : A mathematical Approach, McGraw Hill, New Delhi.
- Heathfield and Wibe (1987), An Introduction to Cost and Production Functions, Macmillan, London.
- Koutsoyiannis, A. (1990), Modern Microeconomics, macmillan.
- Lipsey, R.G. and K.A. Chrystal (1999), Principles of Economics (9th Edition), Oxford University Press, Oxford.
- Mansfield, E. (1997), Microeconomics (9th Edition), W.W. Norton and Company, New York.
- Ray, N.C. (1975), An Introduction to Microeconomics, Macmillan Company of India Ltd., Delhi.
- Ryan, W.J.L. (1962), Price Theory, Macmillan and CO. Limited, London.
- Samuelson, P.A. and W.D. Nordhaus (1996), Economics, Tata McGraw Hill, New Delhi.
- Stonier, A.W. and D.C. Hague (1972), A Textbook of Economic Theory, ELBS & Longman Group, London.
- Varian, H.R. (2000), Intermediate Microeconomics : A Modern Approach (5th Edition), East-West Press, New Delhi.

**Paper-II INDIAN ECONOMIC THOUGHT**

PAPER CODE : 01 ABA110.2

Maximum marks = 100

External = 70

Internal = 30

(Mid term 15, Assignment-15)

Equal Marks

**Unit I**

Prominent ancient Indian economic thinkers and major source books (Only names and brief knowledge). Definition & scope of economics according to Kautilya and Shukra. Basic assumptions - integral man, integrated rationality, dharma based economic structure and four purusharthas.

**Unit II**

Human wants - nature origin and kinds.

The concept of restrained consumption & co-consumption. Meaning and importance of wealth & code of conduct for earning and spending.

**Unit III**

Economic ideas of Manu, Shukra and Kautilya in the field of consumption, production, exchange, distribution and public finance.

**Unit IV**

Economic thoughts of Swami Dayanand Saraswati, Dada Bhai Narauji, Mahadev Govind Ranade, Gopal Krishna Gokhle, R.C. Dutta.

**Unit V**

Economic ideas of M.N. Roy, and M.K. Gandhi and Vinoba Bhave. Major Economic thoughts of Dr. B.R. Ambedkar, J.L. Nehru. Ram Manohar Lohiya, Deen Dayal Upadhyaya, J.K. Mehta and Amratya Sen.

**Book Recommended :**

- Gupta, B.L. (1942) : Value and Distribution System in Ancient India, Gian Publishing House, New Delhi.
- Ganguli B.N. (1977) : Indian Economic Thought a 19th Century Perspective, Tata McGraw Hill New Delhi.
- Kautilya (1951) : Arthshastra translated by R. Sharma shastry.
- Kulkarni S.A. (1987) : Ekatma Arthniti Suruchi Prakashan, New Delhi.
- M.G. Bokare : Hindu Economics, Janki Prakashan New Delhi.
- Ramesh Dutt : Economic History of India. Vol. I & II.
- D.R. Gadgil : The Industrial Evolution of India in Recent Times 1860-1030 (1971)
- M.C. Vaish : Aarthik Vicharo Ka Itihas

## GEOGRAPHY

### PAPER - I : PHYSICAL BASIS OF GEOGRAPHY

PAPER CODE	:	01 ABA111.1
Maximum marks	=	100
External	=	70
Internal	=	30

#### Unit - I

Universe: Galaxies and Solar System; Origin of the earth – Kant, Chamberlin and James Jeans; Shape and size of the Earth; Motions of the Earth and its Satellite.

#### Unit - II

Physical and chemical state of the interior of the earth; Structure and Zones of the interior of the earth and Geological time scale. Wegener's theory of continental drift; Plate tectonics; Isostasy.

#### Unit - III

Theories of mountain building - Joly, Kober and Holmes; Earth movements; Diastrophic forces - Faults and folds; Sudden endogenetic forces; Earthquakes and Volcano.

#### Unit IV

Rocks: Their types and characteristics; Weathering and soil formation; Concept of Cycle of Erosion - Davis and Penck; Landforms associated with Fluvial, Karst, Glacier, Aeolian and Coastal landscapes.

#### Unit - V

Composition and layers of atmosphere; Insolation and heat budget of the Earth; Temperature and Pressure; Atmospheric circulations - Planetary and local winds; Monsoon and Jet stream; Air masses and fronts; Temperate and tropical cyclones; Types and distribution of Precipitation; Koppen's and Thornthwaite's classification of world climate; Hydrological cycles.

Relief features of Atlantic, Indian and Pacific Oceans; Distribution of temperature and salinity in oceans; Ocean currents and tides; Marine deposits; Coral reefs and Atolls - Types and their origin according to Darwin, Murray and Daly; Marine resources - biotic, mineral and energy resources and their utilization.

#### Suggested Books:

1. Strahler, A.H. : Elements of Physical Geography.
2. Wooldridge, S.W.: The Physical Basis of Geography, Logman's Green & Co. London 1959.
3. Mathur, I.R. : Climatology, Mc. Graw Hill, New York.
4. Banerjee, H.C. & D.S. : Mosam Vigyan, Rajasthan Hindi Granth Academy, Jaipur
5. Gerald, S. : General Oceanography- An Introduction, John Willey & Sons, New york.
6. Finch & Trewartha: Elements of Physical Geography.
7. Negi : Physical Geography.
8. Sharma, R.C. : Oceanography for Geographers, Chaitainya Publishers, Allahabad.

### PAPER - II : GEOGRAPHY OF RAJASTHAN

PAPER CODE	:	01 ABA111.2
Maximum marks	=	100
External	=	70
Internal	=	30

#### Unit - I

Rajasthan : Location; Physiographic Regions; Geological structure; Climate and Climatic regions; Drainage system and lakes; Soil types and regions, erosion and conservation; Vegetation - types and distribution.

#### Unit - II

Land utilization in Rajasthan: Agriculture - types and characteristics, production and distribution of food and commercial crops; Cropping pattern and Agroclimatic zones; Importance and sources of irrigation; Major irrigation projects - Chambal, Mahi and Indira Gandhi Canal Project (I.G.C.P.); Live Stock products and Dairy development programmes; Biodiversity and Wildlife; Wasteland and desert development programmes.

#### Unit - III

Distribution and production of minerals - Metallic and Non-metallic; Power Resources - Coal, Petroleum and Natural Gas; Power Resources as electricity - Hydro based and non-conventional; Industrial Development: Classification of industries; Development, distribution, production and locational analysis of cotton textile, cement and stone industries; Cultural heritage and Tourism industry.

#### Unit-IV

Population : Distribution and density; Population structure - age and sex ratio, urban and rural, literacy and occupational population; Population growth since independence, causes, problems and solutions. Social and Cultural status of major tribes - Bhil, Garassia, Meena, Saharia.

#### Unit-V

Concept of Human Development - Major indicators, H.D.I. (Human Development Index) of Rajasthan in reference to other states of India.

Status of Women in Rajasthan - changing aspects of demographic, social economic, health and nutrition.

## GEOGRAPHY PRACTICAL

PAPER CODE	: 01 ABA111.3
Maximum marks	= 100
External	= 50
Internal	= 50

### Unit - I

The nature and scope of cartography. Scales - Plain, diagonal, comparative and Time Scale.

### Unit - II

Enlargement, reduction and combination of maps - Square, Similar Triangle and Pantograph. Measurement of distance and computation of Area on maps.

### Unit - III

Methods of representation of relief - Hachures, Hill Shading, Layer tint, Contours etc. Relief features, types of slopes, valleys, waterfall, Gorge, meanders, plateaux, conical hill, Ridge, Saddle and Pass to be drawn, with the help of contours shown in topographical sheets of different physiographic regions, profile Drawing.

### Unit-IV

Study of Topographical sheets - Scheme of Indian toposheets. Interpretation of a hilly and a plain area of India in respect of relief, drainage, Human settlement, Transport and Communication Pattern.

### Unit-V

Chain and Tape survey – Importance, Appliances, Methods and Plotting.

### Books Recommended :

1. Singh R.L. : Elements of Practical Geography, Kalyani Publishers, New Delhi.
2. Monk House, F.J. and Wilkinson, H.R. : Map and Diagrams, Methuen, London 1994.
3. Robinson, A.H. : Elements of Cartography, John Willey & Sons, New York.
4. Mishra, R.P. : Fundamental of Cartography, Macmillan, New Delhi. 73 74
5. Kellaway, George : Map Projections, Mathuen & Co., London.
6. Steers, J.K. : Map Projections, University of London Press, London.
7. त्रिभुवन केन्द्र, दिल्ली : मानचित्रों की प्रकृति, एन.ए.पी.ए. दिल्ली
8. , ए. ए. ए. - त्रिभुवन केन्द्र, दिल्ली : मानचित्रों की प्रकृति, एन.ए.पी.ए. दिल्ली

## HOME SCIENCE

Scheme

I & II Papers Min.Pass Marks : 72	Practical(III)-Pass marks 40
Paper-I Duration 3 hours Max.Marks : 100	(70External+30 Internal)
Paper-II Duration 3 hours Max.Marks : 100	(70External+30 Internal)
Paper-III- Practical 100	(50External&50 Internal)
(For each batch of 20 students)	
Total Marks= 200+100 = 300, Student will have to pass separately in theory and practical	

### Paper I : Human Physiology

PAPER CODE	: 01 ABA112.1
Maximum marks	= 100
External	= 70
Internal	= 30
(Mid term 15, Assignment-15)	

### UNIT - I

1. Structure and functions of a cell. Tissues of the body- General characteristics and functions.
2. Blood : Composition and function. Clotting of blood : Blood groups.
3. Heart : Structure and functions. Blood pressure and Pulse rate.
4. Skeletal system : Structure of Bone. Functions of bone, Joints - Classification of joints, structure of synovial joints.

### UNIT – II

5. Respiratory system : Structure and functions of all Respiratory organs. Mechanism of breathing - External and Tissue Respirations.
6. Digestive system : Structure and functions of all digestive organs. Mechanism of digestion and absorption of proteins, fate and carbohydrates.
7. Excretory system; structure and functions of all excretory organs. composition of urine. skin structure and functions.
8. Nervous System: The central nervous system-brain & Spinal cord. Peripheral nervous system; Type of nerves Autonomic nervous system-Sympathetic and Para-sympathetic nervous system. Reflex arc.

### UNIT – III

9. The Endocrine system : Name of ductless glands of the body. Hormones and their role. Effect of over and under activity of hormones.

### UNIT-IV

10. Reproductive System ; Structure and function of male and female organs spermatogenesis, oogenesis & fertilization.

### UNIT-V

11. Sense organs ; Eye – Structure and function , Ear-Structure and functions, Tongue-(With digestive system), Nose –(With respiratory system), Skin – (With excretory system).

### References:

1. Pearce, Evelyn- Anatomy and Physiology for Nurse- Oxford University Press, new Delhi.
2. Sears, Gorden –Anatomy and Physiology for Nurses- Orient Longman Ltd., New Delhi.
3. Taylor- The living Body, Asia Publishing House.
4. Ross & Smith-Anatomy & Physiology for nurses.

**PAPER II-Textile and Laundry.**

PAPER CODE	: 01ABA112.2
Maximum marks	= 100
External	= 70
Internal	= 30

**UNIT 1****1. Textile Fibres:**

- Classification of Textile Fibres.
- General properties of Textile Fibres.

**2. Natural Fibers** – Origin, manufacture, properties their importance to consumer and storage of Cotton, Linen, Silk Wool.

**3. Man-made fibres:** Properties, their importance to consumer and storage of Rayon, Nylon, Polyester, Orlon.

**Construction of Yarn and Fabric :**

**4. Meaning of** – Weaving, Knitting, Felting, Warp, Weft selvedge, and count of cloth

**5. Yarn construction –**

- Different methods of spinning
- Different types of yarns.

**6. Weaving –**

- Loom and its parts.
- Different types of weaving – plain, Twill, Satin and Satten, Pile and Jacquard.

**UNIT-II****7. Finishing – Meaning**

- Objective of Finishing
- Different methods of finishing : Bleaching, sizing, tentering, mercerising, sizig, tentering, mercerising, calendering, embossing, napping, shrinkagecontrol, water proofing, fire resistant, moth proofing and permanent press.

**8. Dyeing**

- Different types of dyes
- Different types of dyeing proces
- Method of dyeing

**9. Printing :** Different methods of printing : Block, Screen Roller, Resist Discharge and Stencil Elementary Knowledge Oftraditional weaving

**UNIT-III**

**10.** Selection of fabric for various uses in the Home, Garments (for children, women and men), Household linen, furnishing : bed sheets, curtains ,carpets, towels etc. by keeping in view the following factors : Climate, Comfort, utility, occasion, personality, budget, fibre weave, finish, colour and design activity, age & sex.

**11. Embroideries of India** – Brocades, Kashmiri Emdroidries, Phulkari of Punjab. Kantha of bengal, Patola of Gujarat, Chickankari of U.P. Ikat of Orrisa and Pochampalli.

**12. Laundry-**

- Laundry principles and methods
- Laundry equipment – Washing drying
- Water – soft an hard water, methods of making water soft for Laundry purpose
- (a) Soap – manufacturing process of soap qualities of good soap
  - Detergents- Importance and use
  - Other agents used for washing.
- Stiffening agent – Types and uses
 

Bleaches – types and uses Grease solvents and absorbents, Softeners
- Stain removal – Meaning, classification and methods of removal

**References :**

- Dantiyagi, Sushila : fundamentals of textiles and their care Orient Longmans, Bomday.
- Daulkar, Durga :A guide to household textile and laundry work. Atma Ram & Sons, New Delhi.
- Isadel B. Wingtage : Textile fidres and their selection Prentice Hall Inc. Englewood, Chiff, N. jersy
- Hess, kathetrine : Textile fides and their uses – Oxford & IBH Pudlishing house, New Deihi.
- Mathews, Mary : Practical clothing Construction – Part I cosmic Press,

### Practical Textile and Laundry

PAPER CODE	: 01ABA112.3
Maximum marks	= 100
External	= 50
Internal	= 50

#### Section A – Textiles and Laundry

- Identifying the following Fibres- Cotton, silk, Wool, polyester
- Collecting samples of various types of weaves.
- Dyeing and Printing (only Samples)
  - Tie & Dye
  - Block Printing

#### Section B – Needle craft and Construction

- Equipment used for stitching and measurement.
  - Taking of body Measurements
  - Importance of drafting and making paper pattern
  - Calculation of material
  - Preparation of fabric before cutting
- Drafting, Cutting and stitching of
  - Children – basic bodice block – Saree Blouse and adoption to Romper, party frock, A Line frock
  - Ladies - Basic bodice block – Saree Blouse and Petticoat/Shalwar and Kameez (any one combination)
  - Men's – Plain Payjama and Simple Kurta
- Making Samples of – traditional Embroidery – Kantha, Phulkari, Chicken Bari, Kashidery (any two)
- Making samples of embroidery stitches at least eight.
- Knitting patterns only samples (6) Marks Distribution for External practical

**Time 4 hrs** **Max Marks 50** **Min. Marks 18**

Sessional and File 5+5

#### Section A

Fibre Identification(1) 5  
Sample of tie & Dye/Batik/Block 5

#### Section B

Drafting and Cutting of fabric 5  
Stitching of garment 10  
(Only half side dy showing all the processes)  
Embroidery Simple 10  
(Traditional/decorator)  
Viva and Exhibition 5

### SOCIOLOGY

#### Paper – I : PRINCIPLES OF SOCIOLOGY

PAPER CODE	: 01ABA113.1
Maximum marks	= 100
External	= 70
Internal	= 30

#### Unit -I

The Nature of Sociology: The meaning of Sociology – The Sociological perspective, The Scientific and Humanistic orientations in sociological study. The uses of Sociology, Introduction to Applied Sociology.

#### Unit -II

Basic concepts: Culture, Society, Community, Institution, Association, Social Structure, Group, Status and role. Socialization - Meaning and Theory

#### Unit -III

Relation between individual and society. Social Stratification and mobility : meaning and forms

#### Unit-IV

Social Control : Norms/Values, Types and agency. Social Change : meaning and type : Factors of Social change. Theories of Ogburn

#### Unit-V

Sorokin and Karl Marx. Social Problem-Sociology & Social Change.

#### Essential Readings :

Berger, Peter. L, 1963. Invitation to Sociology : A Humanistic perspective Penguin Harmondsworth.

Choudhary Mattaray 2003, The practice of Sociology, Orient Longman, New Delhi.

Dubey, S.C. 1977. Understanding Society : Sociology : The disciplines and its significances, Part I, NCERT, New Delhi.

Jairam N., 1987 : Introductory Sociology, MacMilan India Limited, Delhi.

Bottomre, T.B. 1972. Sociology: A guide to problems and literature Bombay: George Allen and Unwin (India)

Harlambos, M. 1998. Sociology: Themes and perspective. New Delhi: Oxford University Press.

Johnson, H.M.: Sociology – A Systematic Introduction. New Delhi: Allied Publication.

Davis, Kingsley: Human Society. (Hindi Edition)

Maclver and Page: Society (Hindi Edition)

Schaefer, Richard T. and Robert P. Lamm. 1999. Sociology, New Delhi: Tata-McGraw Hill.

Singhi & Goswami : Samaj Shashtra Vivechan, Rajasthan Hindi Granth Adademy.

## Paper – II Indian Society

PAPER CODE	:	01ABA113.2
Maximum marks	=	100
External	=	70
Internal	=	30

### Unit -I

Concepts of Varna, Ashram, Dharma, Karma and Pursharth. Cultural and ethnic diversity : Historically embedded diversities in respect of Language and Religious beliefs.

### Unit -II

The structure and compositions of Indian Society : Rural, Urban, Tribe.

### Unit -III

Rural-Urban Linkages, weaker section, dalits women and minorities. Basic Institutions of Indian Society: Kinship, Family, Marriage, Religion.

### Unit-IV

Caste and Class; meaning, features and Changing dimensions

### Unit-V

Processes of social change : Sanskritization, Westernization and Globalization .Planned Change and transformation in India.

### Essential Readings :

- Giddens, Anthony 2001 : Sociology 4th edition, Pality Press, Cambrige.  
 Desh Pandey, Satish 2003 : Contemporary India : A Sociological View, Wiking Publication, New Delhi.  
 Bose, N.K. 1967: culture and Society in India, Bombay : Asia Publishing House  
 Bose, N.K. 1975: Structure of Hindu Society, New Delhi  
 Dube, S.C. 1990: Society in India (New Delhi : National Book Trust)  
 Dube, S.C. 1995: Indian Village (London : Routledge and Kegan Paul)  
 Dube, S.C. 1958: India Changing Villages (London : Routledge and Kegan Paul)  
 Karve, Irawati, 1961 : Hindu Society: An Interpretation. Poona: Deccan Collage.  
 Mandelbaum, D.G. 1971 : Society in India. Bombay: Popular Prakashan.  
 Srinivas, M.N. 1980: India: Social Structure. New Delhi: Hindustan Publishing Corporation.  
 Srinivas, M.N. 1963: Social Change in Modern India. California, Berkeley: University of California Press.  
 Singh, Yogendra, 1973: Modernization of Indian Tradition. Delhi: Thomson Press  
 Uberoi, Patricas, 1993. Family, Kinship and Marriage in India. New Delhi: Oxford University Press.  
 Gupta, M.L. : Samajik Sansthayen, Rajasthan Hindi Granth Academy.

## B. A. PART - I (MATHEMATICS)

### Paper I – Algebra And Matrices

PAPER CODE	:	01ABA114.1
Maximum marks	=	100
External	=	70
Internal	=	30

### UNIT-I

Hermitian and skew Hermitian matrices. Elementary Operations on matrices. Inverse of a matrix. Linear independence of row and column matrices. Row rank, column rank and rank of a matrix. Equivalence of column and row ranks.

### UNIT – II

Eigen values, Eigen vectors and the characteristic equation of a matrix. Cayley- Hamilton theorem and its use in finding inverse of a matrix. Applications of matrices to solve a system of linear (both homogeneous and non homogeneous) equations. Theorems on consistency of a system of linear equations.

### UNIT – III

Relation between the roots and coefficients of general polynomial equation in one variable, Transformation of equations. Descarte's rule of signs. Solution of Cubic equations (Cardon method), Bi-quadratic equations.

### UNIT -IV

Definition of a group with examples. Order of a finite group. General properties of groups. Integral powers of an element of a group. Order of an element of a group. Subgroups. Generation of groups. Cyclic groups, Coset Decomposition, Lagrange's theorem and its consequences, Fermats and Euler's theorems.

### UNIT-V

Normal subgroups and Quotient groups. Permutation, Permutation groups, Cyclic permutations, Even and odd permutations. The alternating group  $A_n$ , Cayley's theorem. Morphism of Groups, Homomorphism and Isomorphism, The fundamental theorem of homomorphism.



**Paper II – Calculus**

PAPER CODE	:	01ABA114.2
Maximum marks	=	100
External	=	70
Internal	=	30

**UNIT - I**

Derivative of the length of an arc, Curvature, various formulae, Centre of curvature, Chord of curvature and related problems, Asymptotes. Concavity and convexity. Singular point, Double point. Curve tracing (in cartesian and polar co-ordinates.)

**UNIT – II**

Quadrature, Rectification, Intrinsic equation, Volume and Surfaces of solids of revolution.

**UNIT - III**

Concept and formation of a Differential Equation, Order and Degree of a Differential equation, Equations of first order and first degree, Equation in which the variables are separable, Linear differential equations, Bernoulli's equation

**UNIT - IV**

Homogeneous equations, Linear equations and Equations reducible to the linear form. Exact differential equations, Differential equations of first order and higher degree

**UNIT - V**

Linear differential equations with constant coefficients, Ordinary homogeneous linear differential equations.

**Paper -III Vector Calculus And Geometry**

PAPER CODE	:	01ABA114.3
Maximum marks	=	100
External	=	70
Internal	=	30

**UNIT -I (Vector Calculus)**

Vector differentiation, Gradient, Divergence and Curl. Identities involving these operators and related problems. Vector Integration, Line and surface integral, Theorems of Gauss, Green's and Stoke's (Statements and verification only) and problems based on these theorems.

**UNIT -II (Geometry)**

General equation of second degree. Tracing of conics, Centre of a conic, Co-ordinates of the centre. Equation of the conic referred to centre as origin, Asymptotes of a conic. Lengths and position of axes of a standard conic. Eccentricity, Foci, Directrices, Axis, Latus rectum of a conic, Vertex and focus of the parabola, Tracing of Ellipse and Hyperbola. The polar equation of a conic: Polar co-ordinates, Polar equation of a straight line, circle and conic. Focal chord.

**UNIT -III**

Sphere, Plane section of a sphere, Tangent plane, Pole and Polar Plane, Orthogonal spheres, Radical plane, Radical Centre.

**UNIT -IV**

Cone, Reciprocal cone, Right circular cone, Enveloping cone, Cylinder Right circular cylinder, Enveloping cylinder. Central conicoids: Ellipsoid, Tangent plane, Polar, Polar lines, Enveloping cone, Enveloping cylinder, Section with a given centre, Normals, Conjugate diameters and Diametral planes and their properties.

**UNIT-V**

General equation of second degree in three dimensions. Intersection of a line and a conicoid. Tangent lines and tangent plane. Condition of tangency. Plane section with a given centre. Diametral plane. Principal planes and Principal directions. Paraboloids, Plane sections of central conicoids, Umbilics.



## PUBLIC ADMINISTRATION

### Paper - I : Elements Of Public Administration

PAPER CODE	: 01 ABA115.1
Maximum marks	= 100
External	= 70
Internal	= 30

#### Unit –I

Meaning, Nature and Scope of Public Administration, Importance of Public Administration in Modern Society, Public and Private Administration. Evolution of the study of Public Administration.

#### Unit II

Public Administration as a Social Science, Its relationship with other Social Sciences : Political Science, Economics, Sociology, Law, Psychology and Management. Approaches to the study of Public Administration : Classical and Humanistic.

#### UNIT III

Principles of Organisation : Hierarchy, Unity of Command, Span of Control, Coordination, Centralisation, Decentralisation, Authority and Responsibility.

#### UNIT IV

Structure of Organisation : Formal and Informal Organisation, Chief Executive, Line and Staff, Supervision, Delegation, Leadership, Communication, Decision- Making, Morale and Motivation.

#### UNIT V

Personnel Administration : Meaning and Nature of Bureaucracy. Civil Services and their role in a developing society. Classification, Recruitment, Training, Promotion, Disciplinary Action.

#### Books Recommended :

1. L. D. White : Introduction to the Study of Public Administration
2. John Pfiffner and : Public Administration. Robert Presthus
3. Dimock & Dimock : Public Administration
4. Terry : Principles of Management
5. Fred Luthans : Organisational Behaviour
6. E. N. Gladden : Essentials of Public Administration
7. M. P. Sharma : Principles & Practices of Public Administration
8. D. R. Sachdeva & : Public Administration : Meena Sogani Concepts and Application
9. A. Awasthi & S. R. : Public Administration Maheshwari
10. C. P. Bhambhari : Public Administration
11. A. R. Tyagi : Public Administration
12. Vishnoo Bhagwan : Lok Prashashan ( in Hindi) & Vidya Bhushan
13. Avasthi & Maheshwari : Lok Prashashan (in Hindi)

14. C. P. Bhambhari : Lok Prashashan (in Hindi)
15. B. L. Fadia : Lok Prashashan (in Hindi)
16. Harishchandra Sharma : Lok Prashashan ke Adhar (in Hindi)
17. Surendra Kataria : Lok Prashashan Ke Tatva (Hindi)
18. Ravindra Sharma : Lok Prashashan Ke Tatva (Hindi)
19. P. D. Sharma : Lok Prashashan : Siddhant evam Vyavhar (Hindi)
20. S. C. Shinal : Elements of Public Administration (Hindi/English)
21. Awasthi & Awasthi : Administrative Theory (Hindi/English)
22. R. K. Dubey : Adhunik Lok Prashashan (Hindi)
23. Runki Basu : Public Administration concept & Theories (Hindi/English)

## Paper - II Public Administration In India

PAPER CODE	: 01 ABA115.2
Maximum marks	= 100
External	= 70
Internal	= 30

### UNIT-I

Historical background of Indian Administration : Ancient, Medieval and Government of India Act 1909, 1919 and 1935; Legacies of British Administration, Salient features of Indian Administration since Independence.

### UNIT-II

The Union Executive: President, Prime Minister and Council of Ministers. The Organisation and working of the Central Secretariat, Cabinet Secretariat, Prime Minister's office, Ministry of Home, Finance and Ministry of Personnel, Pension and Public Grievances.

### UNIT-III

Major Forms of Public Enterprises in India: Department, Corporation, Companies. Parliamentary Committee on Public Undertakings, Control Over Administration : Legislative, Executive and Judicial. Financial Administration : Budget Formulation, Budget Approval in Parliament and Budget Execution, Comptroller and Auditor General, Parliamentary Committees, Public Accounts and Estimates Committee.

### UNIT IV

Personnel Administration - Features of Indian Civil Service, Classification, Recruitment and Training of All India Services.

### UNIT V

Problems of Indian Administration. Corruption and Removal of Public Grievances, Administrative Reforms in India, ARC Report on Central Administration and State Administration.

### Books Recommended :

1. S. R. Maheshwari : Indian Administration
2. C. P. Bhambhari : Public Administration in India
3. P. D. Sharma : Public Administration in India
4. D. D. Basu : An Introduction to the Constitution of India
5. K. V. Rao : Parliamentary Democracy in India
6. Laxmi Narain : Principles and Practice of Public Enterprises Management
7. B. B. Mishra : Administrative History of India
8. Ramesh Arora & Rajni Goyal : Indian Public Administration
9. Surendra Kataria : Personnel Administration (Hindi)
10. P. D. Sharma & B. M. Shrama : Bhartiya Prashashan (in Hindi)
11. Saroj Chopra : Bharat Main Lok Prashashan (Hindi)
12. R. S. Darda : Bharat Main Lok Prashashan (Hindi)
13. B. L. Fadia : Bharat Main Lok Prashashan (Hindi)
14. Ravindra Sharma : Bharat Main Lok Prashashan (Hindi)
15. Awasthi & Awasthi : Bhartiya Prashashan (in Hindi)
16. Suranadra Kataria : Bharat Main Lok Prashashan (Hindi)

## PSYCHOLOGY

### PAPER – I Basic Psychological Processes

PAPER CODE	: 01 ABA116.1
Maximum marks	= 100
External	= 70
Internal	= 30

### Unit –I

Definition, Nature and Scope of Psychology, Approaches of psychology Biological, Psychological, Psychodynamic, Behavioural, Cognitive, Humanistic and Evolutionary approach, Social cultural and Multi cultural perspective, Application and fields of psychology, Methods of psychology – Experimental, Observation, Interview, Questionnaire, Case Study, Survey, Meta analysis.

Human evolution, Genes and behaviour, Nervous System – Central, Peripheral, Autonomic, Somatic and Limbic nervous system, Bio feedback, Endocrine glands and Hormones and their effects on behaviour. Sensory – Perceptual processes. Eye and Ear, their structure and functions, Theories of hearing and vision, colour blindness.

### Unit- II

Attention and Perception – Selectivity of attention, Resource allocation and atomicity, Determinates of attention and perception, Organizing Principles of perception, Form and Depth perception. Concept formation, Problem solving, Creativity, Inductive and Deductive Reasoning.

### Unit – III

Basic processes of classical and operant conditioning, Acquisition, Extinction, Spontaneous recovery, generalization and discrimination. Trial and error method of learning, Laws and Curves of learning, Transfer of training, Cognitive learning, Observational learning, Motivation and learning. Verbal learning and memory - Encoding, Storage and Retrieval processes Short term and Long term Memory, Mnemonic Methods of retention, Causes of forgetting – Decay, Interference, Retrieval failure, Motivated forgetting and Amnesia.

### Unit-IV

Indicators of motivated behaviour, Nature and classification of motives – biogenic and psycho-socio genic motives, Internsic and Extrinsic motivation, Conflict and Frustration.

Techniques of assessment of motivation, Maslow's need hierarchy and other theories of motivation. Emotion – Nature and Development of emotion, Expression and Control of emotions. Theories of emotion, Culture and emotion, Polygraphic technique.

### Unit-V

Intelligence – Nature, Measurement and theories of intelligence Genetic/Biological and environmental influences, Cross-cultural issues in intelligence.

Personality – Meaning and Nature, Trait and Type theories and psycho-analytical theory by Freud, Biological and Socio-cultural determinants and Assessment of personality.

### Readings :

Baron, R.A. (1995). Psychology: The essential science. New York: Allyn & Bacon

Zimbardo, P.G., & Weber, A.L. (1997). Psychology. New York: Harper Collins College Publishers.

Lefton, L.A. (1985). Psychology. Boston: Allyn & Baron

## PAPER – II SOCIAL PSYCHOLOGY

PAPER CODE : 01ABA116.2

Maximum marks = 100

External = 70

Internal = 30

### Unit –I

Nature, Goals, Scope of social psychology; social psychology and its relation with other sciences, Methods of social psychology – Experimental, Non-experimental methods, Correlational approach & Cross cultural researches Perceiving ourselves - Self concept, Self esteem, Self presentation, and Self expression. Perceiving others – Forming impressions, Verbal and Non-verbal cues, Prejudices-nature and components, acquisition and reduction of prejudices.

Stereotypes, and Central traits, Models of information integration, Primacy & Recency effects, Attribution of causality – Theories and Biases, Interpersonal attractions and its determinants.

### Unit – II

Group structure and Functions, Task performance, Social facilitation and Loafing, De-individuation and Conformity, Obedience and Social modelling. Norms and Decision making. Leadership – Definition, Types and Functions. Trait, Situational and Inter-actional approaches to leadership, Leadership effectiveness.

Communication – Model, Types (network & channels), language and social interaction, and Barriers of communication.

### Unit III

Nature and Functions of attitude, Measurement of attitudes, Attitude and behaviour, Theories of reasoned and planned behaviour, Formation and Change of attitude (Balance and cognitive dissonance theories). Pro-social behaviour – Theoretical explanation, Co-operation and Helping behaviour, Personal Situational and Socio-cultural determinants bystander effects.

### Unit IV

Aggression – Theoretical perspective, Trait, Situational and Social learning approaches, Personal and social determinants of aggression, Control and Prevention of aggression.

### Unit V

Psychological factors in population, Factors in birth control, Health behaviours – Illness prevention and Treatment, Health promotion, Meeting the challenges of health of women and children. Environmental issues – Atmospheric conditions, Noise and Pollution, Personal space and Territoriality. Density and Crowding, Influence of environmental conditions on behaviour, Intervention for environment management.

### Readings :

Alcock, J.E., Carment, D.W. Sadava, S.W., Collins, J.E., & Green, J.M. (1997). A textbook of social psychology.

Scarborough, Ontario: Prentice Hall/Allyn & Bacon.

Baron, R.A., & Byrne, D. (1998). Social psychology. New Delhi: Prentice Hall

Feldman, R.S. (1985). Social psychology: Theories, research and application. New York: McGraw Hill.

Myers, David, G. (1994). Exploring social psychology. New York: McGraw Hill

Semin, G.R., & Fiedler, K. (Eds.) (1996). Applied social psychology. London: Sage.

**PSYCHOLOGY -PRACTICALS**

PAPER CODE	:	01 ABA116.3
Maximum marks	=	100
External	=	50
Internal	=	50

**Practicals**

- 1. Replication of various psychological phenomena**
  - a. Learning curve
  - b. Curve of forgetting
  - c. Chunking
  - d. Serial position effect
  - e. Level of aspiration (individual differences)
- 2. Development of Observation skills**
  - a. Observing TV programme for some themes (eg image of child/woman)
  - b. Observing behaviour of people in different settings (family relationships, religious belief, coping with stressors like death, accident etc.)
- 3. Facilitating understanding of self and others**
  - a. Maintenance of diary
  - b. Describing personal experiences
  - c. Use of psychological tools to learn about themselves (eg-Johari window, SWOT Analysis, Psychological tests).
  - d. Yoga, Meditation & other techniques of stress management.
- 4. Familiarization with and use of psychological instruments (Administration and interpretation of any two tests.)**
  - a. Psychometric tests
  - b. Projective tests
  - c. Verbal tests
  - d. Performance tests
- 5. Workshops on communication skills.**
  - a. Oral / Written communication.
  - b. Presentation and Listening.
  - c. Use of audio-visual aids.
  - d. Feedback to the students

**BA (Environmental Sc.)**

Scheme		
Two Papers	Min. Pass Marks	: 72
	Max. Marks	: 200
Paper-I	Duration 3 hours	Max. Marks : 100 (70 External + 30 Internal)
Paper-II	Duration 3 hours	Max. Marks : 100 (70 External + 30 Internal)

**Paper-I Introduction To Environmental Sciences**

PAPER CODE	:	01 ABA117.1
Maximum marks	=	100
External	=	70
Internal	=	30

**Unit-I**

Introduction to the Environment. Acquisition, transformation and utilization of energy: the geochemical, biogeochemical and hydrological cycles. Concept of ecosystem.

Atmosphere: structure and composition. Air pollutants and their emission sources. Aerosols and Smogs. Air quality standards. Tropospheric ozone. Air pollution in Indian cities.

**Unit-II**

Water: quantity and quality. Parameters and standards; Demands. Rain water chemistry. Surface and subsurface waters in India. Environmental hotspots related to water in India.

Soil and Land use: climate and soil profile, petrography and mineral matters in soil. Soil classification. Soil distribution in India. Land use in India. Impact of soil loss and land cover on biogeochemical cycle.

**Unit-III**

Biodiversity. Problems and issues in biodiversity and forestry. Conservation and utilization of biodiversity.

**Unit-IV**

Global warming and climate change. Recent records of climate change. Impact of climate change on Indian environment. Measures to cope with climate change.

**Unit-V**

Mineral and energy resources. Impact of mining and other human activities on the environment.

Environmental impact assessment and environmental audit: an introduction. Environmental policy matters and law.

**Suggested readings:**

- Anjaneyulu, Y, 2004, Introduction to Environmental Science. B. S. Publications.  
 D. Daniel Chiras, 2001, Environmental Science, 6th Ed., Jones and Bartlett Publishers.  
 Mukherji Shormila, 2004, Fragile environment, Manak Publication Pvt. Ltd.

### Paper-II Social Perspectives On Environment

PAPER CODE : 01ABA117.2

Maximum marks = 100

External = 70

Internal = 30

#### Unit-I

Introduction to environmental thought. Traditions of thinking about environment from deep ecology to modernization, reflections on industrial societies and risk. Indian and global thinkers are discussed.

#### Unit-II

Early issues in Indian environmentalism: land, forest and water. Looks at historical developments in key areas such as land management, forestry and water management in colonial India, both from the perspective of the state and of communities. Differences across various regions in India are explored.

#### Unit-III

Environmental politics in contemporary India. Introduces a range of policy initiatives and popular struggles around contemporary environmental issues such as, forests, wildlife, water, traditional knowledge and environmental resources and pollution.

#### Unit-IV

Issues in global environmentalism. Explores significant global environmental issues such as acid rain, climate change etc., examining both the nature of the issues and instruments of international environmental negotiations. Urbanization and environment.

The process of urbanization is explored with respect of consumption of resources; environmental consequences of urban transformation, waste disposal and pollution.

#### Unit-V

Environment, technology and society. Examines the interface between specific technologies, including electrification, transport technologies, energy generation etc. and rural/urban environments.

Population and resources. Explores the historically evolving relationship between population pressures, resource consumption and sustainability. Tragedy of commons Indian and global debates are introduced. Risk and ecological modernization. The nature of environmental risk that emerges in the wake of modernity and the responses to the same in select national contexts are introduced. Regulations and environment. Deals with law and policies to regulate environmental harm in select national contexts.

Communicating environment. Introduces the media and educational dimensions of environmental awareness in contemporary societies.

#### Suggested readings:

Grove Richard, 1997, Ecology, climate and empire. Colonialism and Global Environmental History, 1400-1900. Cambridge, White House.

Guha Ramchandra, 1989, Ecological change and peasant resistance in the Himalaya. Unquiet Woods. Oxford University Press, Delhi.

Harrison Mark, 1999, Climates and Constitutions. Health, Race, Environment and British imperialism in India, 1600-1850. O.U.P., Delhi.

K.B. Chokkan, Pandya, H and Raghunathan, H (Eds), 2004, Understanding Environment. Sagar publication India Pvt. Ltd., New Delhi, London

### BA (Geology)

#### Paper-I Introduction Of Earth System Science

PAPER CODE : 01ABA118.1

Maximum marks = 100

External = 70

Internal = 30

#### UNIT – I

Meteorology and Oceanography. Introduction to various branches of Earth Sciences. General characteristics and origin of the Universe, Solar System and its planets. The terrestrial and Jovian planets. Meteorites and Asteroids. Earth in the Solar system, origin, size, shape, mass, density, rotational and revolution parameters and its age.

#### UNIT – II

Earth's magnetic field, formation of core, mantle, crust, hydrosphere, atmosphere and biosphere. Convection in Earth's core and production of its magnetic field. Mechanical layering of the Earth.

#### UNIT – III

Concept of plate tectonics; sea-floor spreading and continental drift. Geodynamic elements of Earth: Mid Oceanic Ridges, trenches, transform faults and island arcs. Origin of oceans, continents, mountains and rift valleys. Earthquake and earthquake belts. Volcanoes: types products and distribution.

#### UNIT – IV

Oceanic current system and effect of coriolis forces. Concepts of eustasy, land - air-sea interaction; wave erosion and beach processes. Atmospheric circulation; weather and climatic changes. Earth's heat budget.

Weathering, erosion, transportation and deposition by wind, rivers, glaciers and oceanic currents and evolution of related landforms. Soils: processes of formation, soil profile and soil types.

#### UNIT – V

Nature of stratigraphic records, Standard stratigraphic time scale and introduction to the concept of time in geological studies. Introduction to geochronological methods in their application in geological studies. History of development in concepts of uniformitarianism, catastrophism and neptunism. Law of superposition and faunal succession. Introduction to the geology and geomorphology of Indian subcontinent.

Distribution of elements in the solar system and in the Earth. Chemical differentiation and composition of the Earth. General concepts about geochemical cycles and mass balance. Properties of elements.

Geochemical behaviour of major elements. Mass conservation of elements and isotopic fractionation.

#### Suggested Readings

1992. Holme's Principles of Physical Geology. Chapman & Hall.

Emiliani, C, 1992. Planet Earth, Cosmology, Geology and the Evolution of Life and Environment. Cambridge University Press.

**Paper-II Crystallography And Mineralogy**

PAPER CODE : 01 ABA118.2

Maximum marks = 100

External = 70

Internal = 30

**UNIT – I**

Elementary ideas about crystal morphology in relation to internal structures.

**UNIT – II**

Crystal parameters and indices. Crystal symmetry and classification of crystals into six systems and 32 point groups.

**UNIT – III**

Stereographic projections of symmetry elements and forms. Introduction to XRD, DTA, SEM techniques.

**UNIT – IV**

Chemical bonding and introduction to solid state chemistry as applicable to structures of minerals. Minerals: definition and classification, physical properties and chemical composition of common rock-forming minerals.

**UNIT – V**

Principles of optical mineralogy. Introduction to the petrological microscope.

Study of important optical properties such as refractive index, twinkling, birefringence, pleochroism, interference colour, extinction angle, and twinning of common rock forming minerals.

**BA (EDUCATION)****Paper-I Principles Of Education**

PAPER CODE : 01 ABA119.1

Maximum marks = 100

External = 70

Internal = 30

**Unit I – Concept and Scope of Education**

- Education as acquisition of knowledge.
- Education as growth and development.
- Education as adjustment and self-activity.
- Conservation, Enrichment and Transmission of Socio-cultural heritage.
- Social change and social progress.

**Unit II – Philosophy of Education**

- Meaning and nature of Philosophy.
- Meaning of Education.
- Relation between Philosophy and Education.
- Philosophy in relation to aims of education, curriculum, teaching learning methods, role of teacher and personality development.

**Unit III – Educational Thinkers**

- M.K Gandhi – Educational thoughts and work.
- Swami Vivekanandha – Educational thoughts and work.
- Rajarshi Chatrapati Shabu – Educational thoughts and work.
- Madam Montessori's Educational thoughts and work.
- John Dewy, Educational thoughts and work.

**Unit IV – Bases of Education**

- Psychological, Philosophical and Sociological bases.
- Development of educational thought and ideas in relation to aims, curriculum, method of instruction, discipline and the role of teacher with References to the main schools of Philosophy.
- Idealism, Naturalism and Pragmatism as well as great educators – Rousseau, Froeble, Montessori, Dewey, Rabindranath and Gandhiji.

**Unit V – Challenges of Education**

- Multicultural Society.



- Diversity with respect to – Caste, Religion, Language and habitat.
- Poverty, corruption, drug, alcohol addiction.
- Population explosion, gender disparity LPG.

### References

1. Saiyidain, K. G. (1970) 'Facts of Indian Education', New Delhi: NCERT.
2. Ross, James (1962), Groundwork of Educational Theory, London: George Harreand Sons.
3. Nun, T. P. (1968), Education, its Data and First Principles, London: EdwardArnold.
4. Mohanti, J. (1987), Democracy and Education in India, New Delhi: Deep andDeep Publishers.
5. Tyagi, P. N. (1991), Education for All: A graphic Presentation, New Delhi: NIEPA.
6. Govt. of India (1993), Education for All: The Indian Scene, Widentry Horizons, New Delhi: MHRD.
7. Nayar, P. R., Dave, P.N., and Arora, K. (1982), Teacher and Education in Emerging Indian Society, New Delhi.
8. Ram Murti Acharya (1990), Towards an Enlightened and Humane Society – A Committee Report, New Delhi MHRD.
9. Ruhela, S. P. (1969), Social Determinants of Educability in India, New Delhi: Jain Publishers.

### Paper-II Educational Psychology

PAPER CODE	:	01 ABA119.2
Maximum marks	=	100
External	=	70
Internal	=	30

#### Unit I – Educational Psychology

- Psychology – Meaning, Nature and Scope.
- Relation & Distinction between Education and Psychology.
- Educational Psychology – Definition, Meaning and Scope.
- Applications of Educational Psychology in teaching learning process.

#### Unit II – Human Development

- Stages of human development: Infancy to adolescence.
- Areas of development – Social, Emotional and Intellectual.
- Psychological characteristics and problems of adolescents.
- Fundamentals of Piagetian developmental psychology.
- Role of Educational Psychology in understanding the individual.

#### Unit III – Learning

- Learning and maturation.
- Types of learning: Conditioning, Trial & error and Problem solving.
- Laws of learning.
- Learning and Motivation.
- Factors affecting learning.

#### Unit IV – Individual Differences

- Intelligence: Definition, Nature and Determinants & measurements of Intelligence
- Creativity: Nature, Meaning, Relationship between Creativity and Intelligence, Measurement of creativity.
- Personality: Concept, Development and Structure and Assessment.
- Meaning and Measurement of Interest, Attitude and Values.
- Causes and significance of individual differences and its educational implications.

#### Unit V – Mental Health and Adjustment

- Concept, mechanism of adjustment.
- Introduction to common forms of neuroses, psychosis and somatic disorders.
- Principles of mental hygiene – preventive, constructive, curative measures.
- Implications for education.



## References

1. Bhatia, H. R. (1977), Textbook of Educational Psychology, The McMillan Company of India Ltd., New Delhi.
2. Aggarwal, J. C. (1995), Essential Educational Psychology, Vikas Publishing House Pvt. Ltd., New Delhi.
3. Chauhan, S. S. (1988), Advanced Educational Psychology, Vikas Publication, New Delhi.
4. Sharma, K. N. (1990), Systems, Theories and Modern Trends in Psychology, HPB, Agra.
5. Dececco, J. P. (1977), The Psychology of Learning and Instruction, Prentice Hall of India Pvt. Ltd., New Delhi.
6. Kale, S. V. (1983), Child Psychology and Child Guidance, Himalaya Publishing House, Girgaon, Bombay.
7. Kakkar, S. B. (1989), Educational Psychology & Guidance, The Indian Publication, Hill Road, Ambala, Cantt.

B.A. II<sup>nd</sup> Year Examination (Under 10+2+3 Pattern)

Code No.	Subject	DISTRIBUTION OF MAXIMUM MARKS						
		University Exam			Practical Exam			
		INT.	EXT.	TOTAL	INT.	EXT.	TOTAL	
<b>OPTIONAL SUBJECTS</b>								
02ABA101.1	Paper-I	English	30	70	100	-	-	-
02ABA101.2	Paper-II	English	30	70	100	-	-	-
02ABA102.1	Paper-I	English Poetry And Drama	30	70	100	-	-	-
02ABA102.2	Paper-II	Prose And Fiction	30	70	100	-	-	-
02ABA103.1	Paper-I	History of Medieval India (1206-1740 A.d.)	30	70	100	-	-	-
02ABA103.2	Paper-II	Survey of Rajasthan History from the Earliest Times to 1949 A.d.	30	70	100	-	-	-
02ABA104.1	Paper-I	Comparative Government and Politics	30	70	100	-	-	-
02ABA104.2	Paper-II	Indian Political System	30	70	100	-	-	-
02ABA105.1	Paper-I	Macro Economics	30	70	100	-	-	-
02ABA105.2	Paper-II	Indian Economy OR	30	70	100	-	-	-
02ABA105.3		Application of Mathematics to Economics						
02ABA106.1	Paper-I	Human Geography	30	70	100	-	-	-
02ABA106.2	Paper-II	Geography of Rajasthan Geographical Thoughts and Methodology	30	70	100	-	-	-
02ABA106.3	Practical	Geography Practical	-	-	-	50	50	100
02ABA107.1	Paper-I	Foods And Nutrition	30	70	100	-	-	-
02ABA107.2	Paper-II	Human Development And Family	30	70	100	-	-	-
02ABA107.3	Practical	Home Science Practical	-	-	-	50	50	100
02ABA108.1	Paper-I	Social Research Methods	30	70	100	-	-	-
02ABA108.2	Paper-II	Indian Society: Issues And Problems	30	70	100	-	-	-
02ABA109.1	Paper-I	Advanced Calculus	30	70	100	-	-	-
02ABA109.2	Paper-II	Differential Equations	30	70	100	-	-	-
02ABA109.3	Paper-III	MECHANICS	30	70	100	-	-	-
02ABA110.1	Paper-I	Administrative Institutions In India	30	70	100	-	-	-
02ABA110.2	Paper-II	State Administration In India	30	70	100	-	-	-
02ABA111.1	Paper-I	Statistics In Psychology	30	70	100	-	-	-
02ABA111.2	Paper-II	Psychological Assessment and Research	30	70	100	-	-	-
02ABA111.3	Practical	Psychology - Practicals	-	-	-	50	50	100
02ABA112.1	Paper-I	Environment, Development and Sustainability	30	70	100	-	-	-
02ABA112.2	Paper-II	Methodologies for Environmental Studies	30	70	100	-	-	-
02ABA113.1	Paper-I	Structural Geology And Tectonics	30	70	100	-	-	-
02ABA113.2	Paper-II	Principles of Stratigraphy and Sedimentation	30	70	100	-	-	-
02ABA114.1	Paper-I	Sociology of Education	30	70	100	-	-	-
02ABA114.2	Paper-II	Fundamentals of Teaching	30	70	100	-	-	-

fgUnh I kfgR;

i Fke i t u i = jhfrdkfyu dk0;

i kB; I kexh %fuEukidr 8 dfo; kaosp; fur vak

- 1- dsko
- 2- fcgkjh
- 3- /kukum
- 4- no
- 5- I uki fr
- 6- Hkk.k
- 7- efrjke
- 8- oln

1- dskonkl

orEku ikB; i t rd jhfr jI rjix.kh ea fuEukidr vfrfjDr dk0; ka k Oe I s I fefyr djus g&

1- I jLorh & olnuk

1/2 kepflaedk egkd0; & I a ykyk Oxokunhu1/2

ckuh txjkuh -----ef[k rnfI ubz ubZA

2- jke & olnuk

ij.k ij.k.k -----uke nfg efr dKAA

3- v; k'; k ujsk

fok ds l eku g&foeludr jktgd -----xakk dS ks ty g&A

4- v#. kkn;

I krgqnhI u ds vouhi fr -----i q; ijkuAA

5- /kuqkax

otzrsdBlj g&sdSyk'k rsfo'kky dk; -----jke dS sY; eobA

CFke Vdkj -----dks 'kcn x; ks ca kM dKAA

6- ij'kjke I okn

VWsvWugkj r# -----frudk gSVWA

cd o g& ; jkt dks ekd -----j?kpd dks I ku&I qkk u fi ; ks jAA

7- i poVh o.ku

I c tkfr QVh -----/kj tVh ou ipoVhAA

8- gupeku yadk & xeu

gfj dS ks okgu -----gupeku pY; ks yad dKAA

9- I hrk n'ku

/kjs , d cuh -----nrkoyh eac [kkukAA

10- I hrk gupeku I okn

dj tkj -----yPNu celmAA

11- gupeku & jko.k I okn

jsdfi dks -----I kor ikyd yf[kkAA

12- gupeku jke ppkz

Hk&fu T; k& -----ejr xgfr g&A

13- jke&jko.k ; q)

binz Jh j?kukFk dks -----yPN/kk Nruk djAA

14- jko.k o/k

tfg I j e/kqen -----dB nl ka [k&M r djKAA

15- jkejKT;

HkkoS tgl; foflkpkjh oS] jeS ijukjh -----jktuhr jktSj?kphj dhAA

yWcS ds ukrs i ki i eus rks yWV; r -----gkfjcs ds ukrs veu tle gfj; r g&A

16- r".kk

Wokku xhrk izk'ku & Jh o&Vsoj] i d cEcb1/2

fufI ckl j oLrqfcpkjfg dS -----cu gh ?kj gS?kj gh cy g&A

17- I qkn thou

if.Mr iur I iur I qkh -----efDr ; gSpgacn fcpljAA

2- fcgkjh

Wcgkjh jRukdj I Eiknu&tXukFknkl jRukdj I sp; fur nkg&

orEku ikB; i t rd jhfr jI rjix.kh ea fuEukidr vfrfjDr nkgS I fefyr djus g&

1- tkx tqfr fl [kk, -----I or c&AA

2- >hus iV ea >yeyh -----y [kfr I iYyoMkjAA

3- vtkarj; k&uk -----epqruqds I xAA

uk ftr <fid; A

10- ihj ifj ng] Nhuh jktr I ug Hkhu -----fojg vpkfju exkfj fg; gljh I hA

11- ful & |k& [kj mj&ekj vjh -----td yfx; seksf djkgfu dka

uk& %orEku ikB; i t rd jhfr jI rjix.kh ea I oS k Oekad 5 vks 7 dh i wjkofoK gpbz g& vr% , d I oS k gVk; k tkrk g&

3- no dk0; I qkk

Wno x&kkoyh I Eiknd gfj ekgu ekyoh; 1/2

orEku ikB; i t rd jhfr jI rjix.kh ea fuEukidr vfrfjDr dk0; ka k I fefyr djus g&

1- Hk&x HkykbZ I at&x MgykbZ -----I c I r HkjA

2- #i dks jfl dqj I y&V ij jI yk&kh -----iur T; ka diur yfjdkbz dka

3- ek jgs efdsfQj vkb, -----I k/ku nr I jk/k ejs dka

4- g&mi tsjt chu gh rs -----vikou ikou Fk&MA

5- Hkx dh Hk&e I k&lx dks Hk& .k -----ykbZ cl kbZ ys i k&Nfr v&I A

6- QfVd fl ykbZ g& I qkkj; ks -----I; kjh jk/kcdk dks c&rfcEc I ks ykxr plnA

7- tkdsu dke u O&sk fojksk -----dforkfg jpsdfo rkfg I jkghA

8- I ka uqgh I ks I ehj x; ks -----gfj fg; ks tqfy; ks gfj twgfjA

9- /k/ ea /k/; /k/ h fu/ /k/-----v/[k; k; e/kq dh e/[k; k; HkbZ ej hA

10- vkp vk/kqfn/kqL; kgh-----L; ke jax gSdfj l ekL; ksL; ke jax eA

4- l sukifr

1/2for jRukdj & l sukifr l aia jek'kaj 'kpy] fgluh ifj"kn cdk'ku] c; kx fo|ky; c; kx1/2  
orZku ikB; iqr d jhfr j l rjix.kh ea fuEukidr vfrjDr dk0; kak l fefyr djusg&

jke dFkk

1- nhj?k cp.M egkohj Hkqn.M tq-----fnxikyu dks ifr gA

\_\_r p. ku

2- cju cju r# Qmysmiou ou-----fjr qjktqdfg; r qgA

3- l hr dks cy l sukifr dksi p<; ksn y-----i kmd fNikbZ dA

yi o. ku

4- n[ksfNfr vEcj tySgSpkfj vkj-----xh'e fo"ke cjl k l e dj; ks gA

5- jk[kfr u nks-----dforkdh dforkbZ fcy l fr gA

fglunh l kfgR;

f}fr; iz'u i = fucak , oa ukVd

N% , dkdh 1/4 ph l ayXu g%

1- l kfgR; fucak 1/2mDr l a[; k 1 dh l ph1/2

l kfgR; tul eg dcan; dk fodkl gS & ckyN".k 0[ ] cfrfufek fucak l ag

l a, e-, y- x"; y] bfM; k cpl gkm l ] t; i j

dfo drD;

& egkohj c l kn f}onh] pruk dk l dckj] l a knd MKW fo"oukFk c l kn] MKWl nku n xfr & ok.kh cdk"ku] uA fnYyh

ny l h dcl kekftd eW;

& MKW jkefokl "kelz vkekud fucak l a MKW fo"oukFk] N".kpln] Kku Okjrh

Okj r , d gS

& jkekjh fl g fnudj] mn; kpy cdk"ku] i Vuk

dfo rjk 0'j vk x; k gS

& d[; ukFk jk; ] yfyr fucak d'nh; l dFku] vkxjk

jk"V"dk Lo: i

& okl no "kj .k vxok & i Fkoh i e- l dyu l s

ekul dh ekeZOfie

& jkepln" kpy fprke.kh & Okx 1 bfM; u i l bykgckn

i kFkZ ekeZ

& fo|kfuokl feJ vkuu dk i nh v[ cutkjk eu] ok.kh i zck"ku uA fnYyh

jk tLFkkuh l kfgR; eajk"V"Okouk

& dl gS kyky l gy ifrfufek fucak l ag] t; i j Dykl dy fclVl ] t; i j

ukVd jDr eot

& MNjkt'nhze"gu 0Vukxj

, dkdh l ag

& mi'bnukFk v" d fuyk0 i zck"ku] bykgckn

u; k& i jkuk

& jkt d[; oekZcjd , dkdh] egsk cpl Mhi ] t; i j

nhi nku

& mn; "kaj 0[ ] l jLorh fclVx c l ] e"t i j] fnYyh

chekj dk bykt

& txnh" kpln] ekFk] l kr , dkdh l a knd MKW Jherh Kkus'ojh t"kh] i zck"kd Ofedk] i jkuh eMh] vtej

0'j dk rkjk

& l B x'folnkl ] x'folnkl x'Fkoyh] Okx&3] , l- pkn , .M dEi uh] fnYyh

An v[ g'yh

& Oxorh pj .k oek] ej sukVd] jkt dey cdk"ku] fnYyh

l cl scMk vkneh

Hindi Missing

Hindi Missing

## ENGLISH LITERATURE

### PAPER-I : ENGLISH POETRY AND DRAMA

02ABA102.1

#### Unit-I

Four passages for explanation with reference to the context from the texts.

Prescribed in Units III and IV.

<b>Unit-II</b> Objective-type Questions	10
Short-answer Questions	10

**Unit-III** (For detailed study) From Strings of Gold (Part-II) ed. Dr. Jasbir Jain (Macmillan).

James Thomson	: Winter, Autumn
Thomas Gray	: An Elegy Written in a Country Churchyard
William Collins	: On Receipt of My Mother's Picture, Light Shining Out of Darkness
William Blake	: To Summer, London
William Wordsworth	: The Word is too Much With Us, Lines Composed Upon Westminster Bridge, Three Years She Grew, The Solitary Reaper
S.T. Coleridge	: Frost at Midnight.
P.B. Shelley	: England 1819, Ode to a Skylark.
John Keats	: On First Looking into Chapman's Homer, Ode to Autumn.

**Unit-IV** (For detailed Study) 20

William Shakespeare : Othello

**Unit-V** 20

Literary History	: Pre-Romantic Period., Romantic Period
Literary Terms	: Tragedy, Irony, Soliloquy, Blank Verse, Comic Relief, Elegy, Meter, Plot, Catharsis.

#### Recommended Books :

M.H. Abrams	: A Glossary of Literary Terms (Macmillan)
W.H. Hudson	: An Outline History of English Literature.

## Paper II : PROSE AND FICTION

02ABA102.2

**Essay and short stories prescribed are from the following books :**

- Sushant K Sinha : English Essayists.
- Forms of English prose

#### Unit I

Four passages for explanation with reference to the context from texts prescribed in Units III and IV.

#### Unit II

Objective-type Questions

Short-answer Questions

**Unit-III** (For detailed study)

Lucas	: Third Thoughts
Chesterton	: On The Pleasures Of No Longer Being Very Young
Gardener	: On Superstitions
Bellock	: In Praise of Ignorance
Lynd	: On Good Resolutions
Forster	: My Wood
Huxley	: Selected Snobberies
Priestly	: First Snow

**Unit-IV** (For detailed study)

Guy. De Maupassant	: The Umbrella
W. Somerset Maugham	: The Luncheon
William Faulkner	: A Rose for Emily
Mulk Raj Anand	: The Barber's Trade Union
R.K. Narayan	: The Axe

#### Unit-V

Charles Dickens : A Tale of Two Cities.

## HISTORY

### PAPER I : HISTORY OF MEDIEVAL INDIA (1206-1740 A.D.)

02ABA103.1

#### UNIT – I

Sources of Medieval Indian History. Foundation and consolidation of Delhi Sultanate - Qutubuddin Aibak, Iltutmish, Razia and Balban; the Mongols and the Sultanate, Khalijis - Conquests, administrative and economic reforms. Innovations of Muhammad - bin Tughlaq and religious polity and public works of Firoz Shah Tughlaq.

#### UNIT – II

Rise of provincial kingdoms - Malwa, Gujrat, Bengal, Jaunpur and Mewar. Establishment of Vijaynagar and Bahamani Kingdom in the peninsular India Political achievements, society, economy, religion and development of art and architecture.

#### UNIT – III

Advent of Mughals - Babur, Humayun and the Second Afghan Empire Sher Shah Suri, State and Society: Muslim political, administrative and economic institutions. Agriculture and industry, trade and commerce and establishment of urban centres.

#### UNIT – IV

Foundation and expansion of the Mughal empire - Akbar, Jahangir, Shah Jahan and Aurangzeb. Religious policies of Akbar and Aurangzeb; Mughal relations with Rajputs, Sikhs, Deccan Kingdoms, Marathas and Central Asia. Main features of Mughal paintings.

#### UNIT – V

Mughal administrative institutions, land revenue system, Mansabdari and Jagirdari systems. Medieval society and social classes - ulema, nobility, zamindars, peasantry, artisans, agricultural labour and slaves. Decline and Disintegration of the Mughal Empire.

#### Books Recommended:

1. J.N.Sarkar: Mughal Administration
2. S.R. Sharma: Religious policy of the Mughal Emperors
3. R.P. Tripathi: Rise and Fall of the Mughal Empire
4. U.N.Dey: Administrative system of Delhi Sultanate (1206-1413), Kitab Mahal, Allahabad, 1959.
5. Sushmita Pande: Medieval Bhakti Movement, Kusumanjali Prakashan (Meerut), 1989.

### PAPER II: SURVEY OF RAJASTHAN HISTORY FROM THE EARLIEST TIMES TO 1949 A.D.

02ABA103.2

#### UNIT – I

Sources of Rajasthan History. Evidence of Paleolithic and Mesolithic Cultures in Rajasthan their salient features. Extension of pre-Indus and Indus Civilisation into Rajasthan - Kalibangan, Significance of Ahar, Matsya and Malwa Janapadas. Evidence of Mauryan and Gupta rule in Rajasthan. Rise of Gurjar-Pratiharas; Chahamanas of Ranthambhor and Jalore. Impact of Delhi

#### UNIT – II

Sultanate. Rise of Mewar - Early History of the Ghuhils; Kumbha and Sanga, Pratap's resistance to the Mughals, Rise of Marwar-Early history of the Rathods; Jodha, Maldeo and Jaswant Singh.

#### UNIT – III

Rai Singh of Bikaner and his relations with the Mughals. Kacchawas of Amer-Mansingh and Mirza Raja Jaisingh and their relations with the Mughals. Ideals and life patterns of the Rajputs. Rajput Administration – Evolution of feudal society. Influx of Islamic and Mughal influences. Main features of fort architecture with reference to Chittoragarh, Kumbhalgarh and Ranthambhor, Salient features of the Haveli architecture. Main features of Rajasthani Temple Architecture. Folk religions of Rajasthan - Meerabai and Dadu Panthies. Causes and Consequences of Maratha incursions into Rajasthan.

#### UNIT – IV

Rajput states and the British East India Company. Circumstances leading to the Treaties of subordinate alliance of 1818.

#### UNIT – V

Evolution of British paramountcy. Nature and salient Features of the British economic policies Land Revenue Settlements, British monopoly of the salt and opium trade; British efforts of social change - social and Religious reforms. Causes of political awakening in Rajasthan. Peasant and Tribal movements. Contribution of Prajamandals in freedom movement. Outline of the process of formation of the State of Rajasthan in 1948.

#### Suggested Books :

1. D.C. Shukla : Early History of Rajasthan
2. Dashrath Sharma : Rajasthan Through the Ages. Vol. I, Rajasthan State Archives, Bikaner
3. S.S. Saxena and : Bijolia Kissan Andolan Ka Itihas Padamaja Sharma Rajasthan Archives Bikaner, 1972.
4. V.P. Menon: Integration of the Indian States.
5. Indira Vyas : Freedom Movement in Rajasthan

## POLITICAL SCIENCE

### Paper I : Comparative Government and Politics

02ABA104.1

#### Unit I

Comparative Theory : Meaning, Nature, Scope and Significance. Evolution of Comparative Politics : Major Land marks, Comparative Method; Types of Comparison - Vertical and Horizontal Types of Constitution and Socio-Economic bases. Salient features of all five constitutions with the emphasis on, Parliamentary and Unitary government in U.K., Presidential and Federal government in USA, Direct (Participatory) Democracy in Switzerland, Parlia-Presidential government in France and People's Democracy in China.

#### Unit II

Structures of Government

Executive (Organization and functions)

King, Council of Ministers and Prime Minister (UK) President (USA, France & China), Federal Council (Switzerland)

#### UNIT – III

Legislature (Organization and Functions)

Parliament (UK & France); Congress (USA), Federal Assembly (Switzerland), National People's Assembly (China)

#### UNIT – IV

Judiciary (Organization and Functions)

Judicial System (UK), Federal Judiciary (USA), Administrative Law and Administrative Courts (France), Federal Tribunal (Switzerland)

#### Unit - V

Political Dynamics

Party system in UK, USA, France, Switzerland and China, Pressure groups in UK & USA.

#### Selected Readings :

1. A. H. Brich : British System of Government, 4th edn., London, George Allen and Unwin, 1980.
2. A. Lijphart (ed.) : Parliamentary Versus Presidential Government, Oxford and New York, Oxford University Press, 1992.
3. Bombwal and Bhandari : Major Contemporary Constitutional Systems
4. Charles A. Beard : American Government and Politics
5. Dorothy Pickles : The Fifth French Republic
6. G. Almond et. : Comparative Politics Today : A World View, 7th Edn. New York, London, Harper/Collins, 2000.

7. H. C. Huiton : An Introduction to Chinese Politics, London, David and Charles, 1973.
8. H. Finer : Theory and Practice of Modern Government, London, Methuen, 1969.
9. H. G. Nicolas : The Nature of American Politics, 2nd edn., Oxford, The Clarendon Press, 1996.
10. H. J. Laski : American Democracy : A Commentary and An Interpretation, London, Uinwin, 1984.
11. J. Blondel : An Introduction to Comparative Government, London, Weidenfeld and Nicolson, 1969.
12. J.C.Johari : Comparative Governments
13. K.C.Wheare : Federal Constitution
14. Kamrava Mehran : Understanding Comparative Politics, Prentice Hall of India Pvt. Ltd , New Delhi, 2000.
15. R.C.Agarwal : World Constitutions
16. Ramsay Muir : How Britain is Governed
17. Ray Samirendra N. : Modern Comparative Politics: Approaches, Methods and Issues, Prentice Hall of India Pvt. Ltd , New Delhi, 2000.
18. Rod Hague & Martin Harrop : Comparative Government and Politics – An Introduction 5th ed. , Palgrave, 2002
19. Russel Duncan L Contemporary America , Palgrave, 2002
20. S. E. Finer : Comparative Government, Harmondsworth, Penguin, 1974.
21. S.Banerjee : The Chinese Government and Politics
22. S.R. Maheshwari : Comparative Government and Politics 7th ed. , Narain's Publications , 2000.
23. Tony Saich : Governance and Politics of China , Palgrave, 2002
24. V. Bhagwan: World Constitutions
25. V. Wright : Government and Politics of France, 3rd edn., London, Unwin Hyman, 1989.
26. Vidya Bhusan, Comparative Politics, Atlantic Publishers New Delhi, 2008.
27. W. Zhang : Transforming China : Economic Reforms and its Political Implications, New York, St. Martin's Press, 2000.



## Paper II : Indian Political System

02ABA104.2

### Unit-I

Historical Background and the Constitution

Politics : Main Currents of the National Movement-Moderates, Extremists, Gandhian , Revolutionary

Constitutional : Govt. of India Act, 1909; Govt. Of India 1919- with special reference to Diarchy, Govt. of India Act, 1935 with special reference to Provincial Autonomy The Constituent Assembly - Origin, Organisation and functioning; The Main Characteristics of the Indian Constitution; The Constitution Amendment Process, The ideological elements-Preamble, Fundamental Rights, Directive Principles of State Policy, Fundamental Duties and Secularism

### Unit-II

The Union and State Government

President - Election, Position, Powers and Functions, Council of Ministers and Prime Minister - Position and role.

Parliament - Organisation Power and working of Lok Sabha and Rajya Sabha, Modes of Relationship between the two houses. The Supreme Court - Organisation and jurisdiction, Judicial Review, Judicial Activism, Conflict of supremacy between the parliament and supreme court.

### UNIT -III

The State Government

Governor - Position and role, the Council of Ministers and Chief Minister, the State legislature.

The Federal System - The need and nature of the federal system, Centre-State relations, Areas of Tension and demand for autonomy.

### Unit - IV

Dynamics

The Party System, Political Parties - National and Regional, The Election Commission, Electoral Reforms and Voting Behaviour.

### UNIT-V

Determinants of Political System :

- (a) Economic - Class and Poverty
- (b) Sociological : Caste, Religion, Region, Language, Gender and terrorism
- (c) Political - Political parties and pressure groups.

### Selected Readings:

1. A .Ray: Tension Areas in Indian Federal System
2. A. Kohli (ed.) : The Success of India's Democracy, Cambridge, Cambridge University Press, 2001.
3. A. Kohli : Democracy and Discontent : India's Growing Crisis of Governabl 34. S.N. Dubey, Indian Government and Politics, Narain's Publications, Agra 1998.
4. Payl Flather, Recasting Indian Politics-Essays on a Working Democracy, Palgrave, 2002
5. Niraja Gopal Jayal, Democratic Governance in India : Challenges of Poverty, Development and Identity , Sage Publication, New Delhi, 2001

## ECONOMICS

### Paper – I MACRO ECONOMICS

02ABA105.1

#### Unit-I

##### National Income and Social Accounts

Nature and importance of Macro Economics. Fallacy of composition. Concept and measurement of national income; National income identities with government and international trade; incorporation of environmental concerns in national accounts - green accounting.

#### UNIT-II

##### Output and Employment

Say's law of markets and the classical theory of employment; Keynes' objection to the classical theory; Keynesian theory of output and employment- Aggregate demand and aggregate supply functions; The principle of effective demand.

**Consumption function** - Average and marginal propensity to consume; Factors influencing consumption spending;

#### UNIT-III

##### Investment

The investment multiplier and its effectiveness in LDCs'. Theory of investment - Autonomous and induced investment; Marginal efficiency of capital; Savings and investment - ex post and ex ante, Equality and equilibrium.

Rate of Interest Classical, Neo-classical and Keynesian and modern theories of interest.

#### UNIT-IV

##### Trade Cycles

Nature and characteristics; Hawtrey's monetary theory; Hayek's over-investment theory; Keynes' view of trade cycle; The concept of accelerator; Samuelson and Hicks multiplier-accelerator interaction model; Control of trade cycles.

#### UNIT-V

##### Economic Growth

Sources of growth; Classical theories of growth - Adam Smith, Ricardo, balanced growth, unbalanced growth, Lewis (unlimited supply of labour).

#### BASIC READINGS LIST

- Ackley, G. (1976) Macroeconomics ; Theory and Policy, Macmillan Publishing Company, New York.
- Day, A.C.L. (1960), Outline of Monetary Economics, Oxford University Press, Oxford.
- Gupta, S.B. (1994), Monetary Economics, S. Chand and Co., Delhi.
- Hejdra, B.J. and F.V. Ploeg (2001), Foundations of Modern Macroeconomics, Oxford University Press, Oxford.
- Lewis, M.K. and P.D. Mizan (2000), Monetary Economics, Oxford University Press, New Delhi.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
- Vaish, M.C. Macro Economics.

## Paper II INDIAN ECONOMY

02ABA105.2

#### Unit I

##### Economic Consequences of the British Rule

General overall impact; Structure and organisation of villages, towns, industries and handicrafts. Colonial exploitation - forms and consequences; Case for protection of Indian industries; The theory of economic drain - its pros and cons.

#### UNIT – II

##### Structure of the Indian Economy

Basic features; Natural resources - Land, water and forest resources; Broad demographic features - Population size and growth rates, sex composition, rural-urban migration, occupational distribution; Religious composition of population (2001 Census) ; Population policy, Infrastructure development; National Income. Human Development Index

#### UNIT – III

##### Agriculture

Nature and importance; Trends in agricultural production and productivity; Factors determining productivity; Land Reforms; New agricultural strategy and green revolution; Rural credit, Agricultural marketing Agriculture and W.T.O. India's Food Policy.

#### Unit IV

##### Industry

Industrial development during the planning period; Industrial policy and Industrial Regulation in India ; Growth and problems of small scale industries; Role of public sector enterprises in India's industrialization- recent policy towards public sector. Labour Sector Reforms. Achievements of industrial sector reforms. Planning in India Objectives; Strategy; Broad achievements and failures; Current Five Year Plan

- Objectives, allocation and targets; Financing of Plans; New economic reforms

- Liberalization, privatization and globalization; Rationale behind economic reforms; Progress of privatization and globalization. Problems of subsidy in India.

##### External Sector

Role of foreign trade; Trends in exports and imports; Composition and direction of India's foreign trade; Balance of payments crisis and the New economic reforms - Export promotion measures and the new trade policies. Foreign capital - FDI, Multinational corporations (MNCs) and their impact on Indian Economy. The relevance of SWADESHI.

#### Unit V

##### Important Areas of Concern

Poverty and inequality; Unemployment, Rising prices; Trade unions in India and labour welfare.

##### Economy of Rajasthan

Position of Rajasthan in Indian Economy: Population, Area, Agriculture, Industry and Infrastructure. Poverty alleviation programmes of Govt. of Rajasthan. Importance of livestock and dairy development programme. Tourism development in Rajasthan. Special area programmes of Govt. of Rajasthan. Constraints of economic development in Rajasthan.

**BASIC READING LIST**

- Datt, R. and K.P.M. Sundharam, Indian Economy, S. Chand & Company Ltd., New Delhi.
- Kedia, Kusum & Sinha, Root of Under development- a peep into Indian Colonial Post, Tara Printing works, Varanasi.
- Dhingra, I.C., The Indian Economy : Environment and Policy, Sultan Chand & Sons, New Delhi.
- Dutt, R.C. (1950), The Economic History of India Under Early British Rule, Low Price Publication. Delhi.
- Kumar, D. (Ed.) (1982), The Cambridge Economic History of India, Volume II, 1757-1970, Orient Longman Ltd, Hyderabad.
- Misra, S.K. and V.K. Puri, Indian Economy - Its Development Experience, Himalaya Publishing House, Mumbai.
- Directorate of Economics and Statistics, Government of Rajasthan, State Income of Rajasthan.
- Government of Rajasthan : Five Year Plan Documents.
- Government of Rajasthan : Budget Studies.
- Government of Rajasthan : Statistical Abstracts of Rajasthan.
- Government of Rajasthan : Report of Desert development Commission.

**Application of Mathematics to Economics**

02ABA105.3

**Unit I**

Application of Calculus- Theory of Consumer Behaviour - Maximization of Utility, Slutsky Equation Derivation of demand curve, consumer's surplus, elasticity of demand.

**UNIT – II**

Theory of Firm- A well behaved production Function. Cobb Douglas and CES Production Function- Linear Homogenous Production function.

**Unit II**

Elasticity of substitution, Producer's surplus. Application of difference and differential equation, Cob-web Model, Concept of multiplier and accelerator.

**UNIT – IV**

Trade cycle Models of Hicks and Samuelson. Linear Programming- Graphical solution, Simplex Method- Primal and dual, Game theory- The zero sum Two persons Game, Maximin and Minimax, Saddlepoint.

**Unit V**

Input output analysis- Open and closed Leontief Model, Components of Final Demand and Value added. Determination of capacity output level and investment requirements.

**BASIC READING LIST**

- R.G.D. Allen- Mathematical Analysis for Economics
- Henderson & Quand, Micro Economic Theory, Mathematical approach, Latest Edition, Mcgrew Hill Tokyo
- Chiang- Alpha C: Fundamental methods of mathematical Economics.
- W.J. Baumal Economic Theory and operations Analysis.
- G.C. Archiblad & R.G.K. Lipsey An introduction to a Mathematical treatment of Economics.

## GEOGRAPHY

### PAPER - I : HUMAN GEOGRAPHY

02ABA106.1

**Unit - I**

Definition, nature, scope, development and history of human geography; Principles of Human Geography; Approaches of Human Geography; Elements of Human Geography - according to Vidal de-la-Blache, Brunhes, Huntington;

**UNIT – II**

Branches of human geography; Concepts of man-environment relationship; Concept of dualism in geography. Division of races of mankind: spatial distribution, physical and social profile of racial groups, ethnic groups, tribal groups in the world and in India.

**Unit - III**

Early economic activities of mankind: food gathering, hunting, fishing and shifting cultivation.

Human adaptation to environment

- (i) Cold Region - Eskimo;
- (ii) Hot. Region - Bushman, Pigmy, Badawins
- (iii) Plateau - Khirghiz, Masai, Gonds
- (iv) Mountain- Gujjars, Naga and Khasi
- (v) Plain-Bhil and Santhal, their Social and Economic activities and adaptation in modern society.

**UNIT – IV**

Distribution of population; world distribution pattern - physical, economic and social factors influencing spatial distribution; concepts of over population, under population and optimum population. Zero population growth; Demographic transition theory.

**Unit - V**

Migration-internal and international, general laws of migration; Concept of Human Development. Population regions of India; dynamic, prospective, depressed; Problem of overpopulation in India and its remedial measures. Population control programmes and population policy of India.

Settlement: Origin and types of settlements; Rural Settlement - Pattern of Rural settlements; House types and Building materials; Rural settlement in India.

Urban settlement - Origin of towns; patterns of cities; functional classification of cities; zoning of cities; Christaller's theory; Umland; Urbanization and problems; Slums; Town planning - concepts and principles

**Suggested readings :**

1. Bergwan, Edward E : Human Geography; Culture, Connection and Land Scape, Prentice-Hall, New Jersey. 1995.
2. Carr, M : Patterns, Process and change in Human Geography, Me Millan Education London, 1987.
3. Fellman, J.L.: Human Geography - Landscapes of Human Activities. Brown and Benchmart Pub., U.S.A., 1997.
4. De Blij H.J. : Human Geography, Culture, Society and Space, John Wiley, New York, 1996.

## PAPER - II - GEOGRAPHICAL THOUGHTS AND METHODOLOGY

02ABA106.2

### Unit - I

The nature of geography : meaning & definitions, philosophy and recent trends in geography; Objectives and relevance of geography; Place of geography in the classification of sciences - natural and social sciences and relations with other social sciences; Elements of geography: location on the surface of the earth, physical conditions, forms of life and human responses; Development of modern geography in India. Geography of Vedic age and Geography of Purana - Dwipa and Ocean. River and Mountain systems.

### Unit -II

Ancient classical Geography - Contribution of Greek and Roman; Early Medieval Geography and contribution of Arab Geographers. Late medieval Geography - age of travels, exploration and discoveries.

### UNIT – III

German School of Geography - Contribution of Humboldt, Ritter and Ratzel; School of French Geography - contribution of Blache and Brunches; British and American School of Geography - contribution of Mackinder, Herbertson, Miss Semple, Huntington and Davis. Man-environment relationships - Determinism, possibilism and neo-determinism.

### Unit - IV

Dualism in Geography - Physical and human, systematic and regional; Quantitative revolution in geography; Major Concepts in Geography - terrestrial unity and interconnections, region and types of regions, culture and acculturation, Spatial distribution, interaction and organization; Areal differentiation.

### UNIT – V

Behavioural geography; Humanistic and Welfare geography. Methodology: Meaning & definition, Objectives and recent development; Data: Types, sources, collection and tabulation; Cartographic and Quantitative methods: Map making and mapping techniques; Models and analogues; Hypothesis - meaning, need, origin and importance; regional delimitation and quantitative analysis. Remote sensing and GIS: Use and importance of air photos; GIS- meaning, definition, importance.

### Suggested Readings:

1. Abler, Ronald F. et. all, : Geography's Inner Worlds : Pervasive themes in contemporary American Geography, Routledge, New Jersey, 1992.
2. Dikshit R.D. : Geographical Thought - A Contextual History of Ideas, PrenticeHall of India Pvt. Ltd. 2000.
3. Dikshit R.D. : The Art and Science of Geography: Integrated Readings, Prentice Hall of India Pvt. Ltd. 1994

4. Dohrs, F.E. and Sommers, L. W, (eds.) : Introduction to Geography, ThomasY. Crowell Col., New York, 1967.
5. Hartshorne, Richard, Pe'rpective on the Nature of Geography, and McNally and Co., Chicago, 1959.
6. Harvey, David, : Explanation in Geography, Edward Arnold, London, 1972.
7. Holt-Jensen, A., : Geography: Its History and Concepts, Longmans, 1980.
8. Husain, Majid, : Evolution of Geographical Thought, Rawat Publications, Jaipur, 1984.
9. James, P.E., : All Possible Worlds: A History of Geographical Ideas, SachinPublication, Jaipur, 1980.
10. Johnston, R.J. and Claval, R (eds.), : Geography Since.the Second World War, Croom Heim, London/Bernes and Noble, N.J., 1984.
11. Jones, P.A. : Field Work in Geography, Longmans, 1968.
12. Lownsbury, J.F. and Aldrich. F.T., : Introduction to Geographical Methods and Techniques, Charles Marrill, Columbus, 1979.
13. Minshull, R. : The Changing Nature of Geography, Hutchinson University Library, London, 1970.
14. Wooldridge, S.W. : The Geographer As Scientist, Thomas Nelson and Sons. Ltd., London, 1956.

## GEOGRAPHY PRACTICAL

02ABA106.3

1. Types and uses of cartographic symbols - point, line and area symbols; Classification of distribution maps.
2. Representation of population data - distribution (dot), density (choropleth); growth (ring), age and sex-composition (Pyramid - simple, superimposed and compound), urban & rural population (dot & circle, dot & sphere).
3. Agriculture data - land use (divided circle), production (square and rectangle), irrigated area as percent to total cropped area (choropleth), distribution (dot and symbols).
4. Industrial data – Production and trade (Polyline graph, Bandgraph, Block pile, bar – simple, compound and multiple), Transport data - traffic flow diagram.
5. Climatic maps and diagrams - Isopleth Maps (Isobar, Isotherms and Isohyts maps), Simple and Compound Wind rose, climograph, hythergraph and climatograph. Study & interpretation of weather maps of January & July months.
6. Plane table survey - Radiation, intersection, traversing, resection (two and three point problems), Mechanical Method, Llano's, Bassel's and Trial and error.
7. Indian clinometer - Its parts, methods and determination the height of distant points.

### Suggested Books :

1. Monk house E.J. : Maps and diagrams, Methuen Co. London.
2. Robinson, A.H; : Elements of Cartography, John Willey & Sons, New York.
3. Mishra, R.P. : Fundamental of Cartography, Macmillan, New Delhi.
4. tsi h 'kek% i k; kfxd Hkksy] jLrksx i d'ku] ejBA
5. , e-, l -t% i z kskRed Hkksy] l kfgR; Hkou] vlxj kA
6. Bergwan, Edward E : Human Geography; Culture, Connection and LandScape, Prentice-Hall, New Jersey. 1995.
7. Carr, M : Patterns, Process and change in Human Geography, Me Millan Education London, 1987.
8. Fellman, J.L.: Human Geography - Landscapes of Human Activities. Brownand Benchmart Pyb., U.S.A., 1997.
9. De Blij H.J. : Human Geography, Culture, Society and Space, John Wiley, New York, 1996.

## HOME SCIENCE PAPER I:FOODS AND NUTRITION

02ABA107.1

### UNIT-I

1. Definition of terms – Foods, Nutrition, Nutrition and dietetics. Functions of food and classification based on functions, nutrients and perishability, Different methods of food preparation with their advantages and basic food groups as a guide to meal planning.
2. Limitation, methods of food preparation with their advantages and limitation, methods used to conserve and enhance the nutritive value of food.
3. Food Preservation, factors contributing to food spoilage and principles and technique used in various methods of preservation used at home level.
4. Food adulteration: Definition, common adulterants present in foods and methods of detection at home level.

### UNIT-II

5. Protiens, Carbohydrates and fat : elementary knowledge of their composition, classification, functions, daily allowances, sources and effect of deficiency.
6. Energy Metabolism : Basal metabolic Rate, Factors affecting energy requirement, for different categories according to work, physiological state etc.
7. Water Balance.
8. Minerals – functions, daily allowances, effect of deficiency and excess and food sources of Calcium, Phosphorus, Iron, Iodine, Flourine and Sodium.
9. Vitamins- Functions, daily allowances, food sources, effect of deficiency and excess of fat soluble vitamin A D E K and water soluble vitamin B1,B2 niacin, folic acid and vitamin C.

### UNIT – III

10. Meal planning:
  - (i) Recommended dietary allowances of nutrients for various age groups.
  - (ii) Advantages of meal planning and factors to be considered while planning meals.
  - (iii) Meal planning for different age groups and vulnerable groups.
11. Therapeutic Nutrition :
  - (i) purpose of diet therapy.
  - (ii) Causes, symptoms and better modification in
    - a. Constipation and diarrhoea.
    - b. Overweight and underweight
    - c. Acute fevers
    - d. Peptic ulcer
    - e. Diabetes
    - f. Hypertension
    - g. Hepatitis

**Reference :**

1. M. Swaminathan :Principles of nutrition and dietetics
2. I. C. M.R. :Nutritive value of Indian Foods.
3. I. C. M.R. :Nutritive requirements for Indians
4. C.H.Robinson :Normal and Therapeutic nutrition Hindi:
5. Narayan Sudha : Aahar Vigyan Research Publication jaipur2

**PAPER II- HUMAN DEVELOPMENT AND FAMILY**

02ABA107.2

**UNIT-I**

1. Introduction: Meaning, definition, scope and importance of human development.
2. Meaning and principles of growth and development: Factors affecting development, heredity, environment, nutrition, diseases, endocrine glands, intelligence, sex, Prenatal and Post natal factors.
  - a. Prenatal development, stages & influencing factors.
3. Physical Development : Birth to puberty.
4. Motor Development : Reflex of new born, sequence of motor development, Motor skills, handedness.

**UNIT- II**

5. Speech development: Speech and Language, pre speech forms of communication, stages in speech development, bilinguals, speech disorders and speech defects.
6. Cognitive development: Cognition, Cognitive abilities in childhood.
7. Play: Meaning, value, Characteristics and kinds of play.
8. Creativity : Meaning and Development Creative activities of children.
9. Personality development: Meaning definition, types of personality and its determinants.
10. Moral Development: Meaning, development of morality.
11. Discipline: Meaning and Essentials Parental disciplinary techniques.

**UNIT- III**

12. Emotional development: Characteristics of children's emotions, different type of emotions and their development.
13. Social Development : Meaning and Process of social Development and Socialization, agents of socialization, social adjustment, social acceptance.
14. Early childhood education – objective, needs and importance.
15. Exceptional Children:(Only Elementary Knowledge is required) Physically handicapped, Mentally handicapped, Visually handicapped, Deaf and Dumb, emotionally handicapped, Juvenile delinquent, Gifted children etc.
16. Behavioural Problems in children: Thumb sucking, nail biting, enuresis, temper tantrum, telling lies, shyness, aggressiveness.
17. Adolescence: Characteristics, changes, conflicts, interests, adjustments.
18. Adulthood: Characteristics, Changes, mate selection, marital adjustment, responsibilities of parenthood.
19. Old age: Characteristics, attitudes, problems and adjustment.



## HOME SCIENCE PRACTICAL

02ABA107.3

### PART-I- BASIC FOOD PREPARATION

1. Introduction – Foods Lab. Basic cooking terms, Weights and measures, equipments, Rules and regulation of Lab Working.
2. Preparation of Beverages –Stimulating, Refreshing and Nourishing
3. Soups – Stimulating and nourishing.
4. Desserts – Pudding
5. Snacks – Sweets and savouries (5 each)
6. Salads – Decorative and nutritious.
7. Egg preparations (optional).
8. Bakery items – Cake, Biscuits and pastries.
9. Basic preparations from cereals, pulses and vegetables (3 each).

Note : Stress to be laid on decoration and serving of dishes, time plan, cost, number & size of serving.

### PART – II – MEAL MANAGEMENT

1. Planning. Preparation and serving of meals: Breakfast, Lunch Tea and Dinner for sedentary, moderate and heavy worker.
2. Planning, preparation and serving of all the meals for pregnant and lactating mother.
3. Planning, preparation and serving of all the meals for preschool child, adolescent and old age person.
4. Planning, preparation and serving of meals at low cost, moderate cost and liberal cost.
5. Planning, preparation and serving of meals for special occasion –
  - (a) Birthday party
  - (b) Diarrhoea
  - (c) Journey
  - (d) Tea, Lunch and dinner parties of other Occasions.
6. Planning, preparation and serving of meals requiring Special diets in:
  - (a) Fever
  - (b) Constipation
  - (c) Diarrhoea
  - (d) Peptic Ulcer
  - (e) Obesity.

### Part-III-planning activities fostering developments for preschoolers.

#### Distribution of Marks

- |  |    |
|--|----|
| 1. Sessional and file.   | 10 |
| 2. Menu planning(1Hour)  | 10 |
| 3. Two dishes out of the planned menu+ Special Dish  | 12 |
| 4. Table management, service & cleaning  | 8  |
| 5. Planning two(2) activities (fostering various 10 developments) for pre-school children. |    |

## SOCIOLOGY

### Paper – I : SOCIAL RESEARCH METHODS

02ABA108.1

#### Unit - I

Scientific understanding of Social Phenomena: The Scientific Method, Objectivity and Subjectivity in Social Science. Positivism and Empiricism in Sociology.

#### UNIT – II

Hypothesis- Meaning, Types and Sources.

#### Unit -III

Meaning, Scope and Significance of Social Survey and Social Research Types of Research: Basic and Applied. Historical and empirical. Descriptive. Exploratory. Sources of Data - Primary and Secondary

#### Unit - IV

Methods of Data Collection - Observation, Interview, Sampling and Case Study Method. Techniques of Data Collection : Questionnaire and Schedule

#### UNIT – V

Classification and presentation of Data: Tabular and Diagrammatic presentation of data. Measures of central tendency: Mean, Mode, Median.

#### Essential Readings :

- Gaultong, John 1967 : Theory and methods of social research, Allen and UnwinLtd., London
- Bourges, Robert G. 1988 : Field Research : A Source Book of field manual, Allen and Unwin Ltd., London
- Bajaj and Gupta. 1972: Elements of Statistics. New Delhi: S. Chand and Co.
- Beteille, A and T.N. Madan, 1975. Encounter and Experience: Personal Accounts of field work, New Delhi : Vikas Publishing House.
- Bryman, Alan, 1988: Quality and Quantity in Social Research. London: Unwin Hyman
- Garrett, Henry 1981: Statistics in Psychology and Education: David McKay: Indian Publication-Mrs S.F. Sheikh for Vakils, Bombay, Tenth Reprint.
- Jayaram, N. 1989: Sociology: Methods and Theory, Madras: MacMillan.
- Kothari, C.R. 1989: Research Methodology: Methods and Techniques, Bangalore, wiley Eastern.
- Punch Keith, 1966: Introduction to Social Research, London: Sage.
- Shipman, Martin 1988: The Limitations of Social Research, London : Sage.
- Srinivas, M.N. and A.M. Shah. 1979: Fieldwork and the field, Delhi: Oxford University Press.
- Young, P.V., 1988: Scientific Social Surveys and Research, New Delhi: Prentice Hall question carries equal mark.

**Paper – II : Indian Society: Issues and Problems**

02ABA108.2

**Unit - I**

Perspectives on issues and problems of Indian Society. Structural: Inequality of caste and gender Disharmony-religious, ethnic, regional.

**UNIT – II**

Population problem and programmes of control Illiteracy, Poverty and Unemployment

**Unit - III**

Familial: Dowry, Domestic violence, Divorce. Problems of elderly.

Developmental: Regional disparities

**UNIT – IV**

Development and Induced displacement.

Socio-cultural aspects of Nation Building, Corruption

**Unit - V**

Disorganizational: Crime, Juvenile delinquency, White-collar crime.

Drug abuse, AIDS

Environmental pollution, Consumerism.

**Essential Readings :**

Santhanam Committee Report on "Prevention of Corruption" Govt. of India, 1964.

Wright Ronald and Simpkins 1963 "Corruption in Developing Countries", London.

Beteille, Andre. 1974: Social Inequality, New Delhi: OUP

Beteille, Andre. 1992: Backward Classes in Contemporary India, New Delhi: OUP

Berremman, G.D. 1979: Caste and other inequalities; Essays in inequality, Meerut: Folklore Institute.

Dube, Leela. 1997: Women and Kinship, Comparative Perspective on Gender in South and South East Asia, New Delhi : Sage Publication.

Gadgil, Madhav and Gupta, Ramchandra 1996: Ecology and Equity: The Use and Abuse of Nature in Contemporary India: New Delhi: OUP

Gill, S.S. 1998: The Pathology of Corruption, New Delhi: Harper Collin Publishers

Guha, Ranjit, 1991: Subaltern Studies, New York: OUP

Indn, Ronald. 1990: Imaging India, Oxford: Brazil Black Ward.

Kothari, Rajni (Ed.) 1973: Caste in Indian Politics.

Lewis Oscar. 1966: "Culture of Poverty" Scientific American Vol. II & V No. 4 pp 19-25.

Madan, T.N. 1991: Religion in India, New Delhi: OUP

Satya Murty, T.V. 1996: Region, Religion, Caste, Gender and Culture in Contemporary India, New Delhi: (UP)

Sharma S.L. 1997: "Towards sustainable Development in India" in S.R. Mehta (Ed.)

Population, Poverty and sustainable Development, Jaipur: Rawat Publications.

Sharma, Ursula, 1983: Women, Work and Property in Northwest India, London: Tavistock.

**MATHEMATICS****Paper I - Advanced Calculus**

02ABA109.1

**UNIT - I (Advanced Differential Calculus )**

Definition of the limit of a function, Basic properties of limits, Continuous functions and classification of discontinuities, Sequential Continuity, properties of continuous functions defined on closed intervals, Limit and Continuity of functions of two variables, Partial Differentiation, Change of variables, Euler's theorem on homogeneous functions, Jacobians.

**UNIT – II**

Differentiability, Chain rule of differentiability. Mean Value Theorems and their geometrical interpretation, Darboux's intermediate value theorem for derivatives, Taylor's theorem for functions of two variables, Envelopes, Evolutes, Maxima, minima and saddle points of functions of two variables, Lagrange's multiplier method.

**UNIT - III (Advanced Integral Calculus )**

Beta and Gamma functions, Double and Triple integrals, Dirichlet's integrals, Change of order of integration in double integrals. Riemann integral, Integrability of continuous and monotonic functions. Darboux theorem, Fundamental theorem of integral calculus, Mean value theorems of integral calculus.

**UNIT - IV**

Definition of a sequence, Theorems on limits of sequences, Bounded and monotonic sequences, Cauchy's convergence criterion, Infinite series of non-negative terms, its convergence, Different tests of convergence of infinite series i.e. comparison tests, Cauchy's integral tests, Ratio tests, Raabe's.

**UNIT – V**

Logarithmic, Morgan and Bertrand's tests (without proof), Alternating series, test Leibnitz's theorem, Absolute and conditional convergence. Fourier series, Fourier expansion of piecewise monotonic functions, Uniform convergence of series of functions, Weierstrass M-test, Abel's test and Dirichlet's test.

**Paper II - Differential Equations**

02ABA109.2

**UNIT - I** (Ordinary Differential Equations)

Linear differential equations of second order, Normal Form, Transformation of the equations by changing the dependent / independent variable. Method of variation of parameters, Ordinary Simultaneous differential equations. Total differential equations, Exact differential equations of  $n$ th order.

**UNIT - II**

Series solution of differential equations, Power series method, Bessel,

**UNIT - III**

Legendre and Hypergeometric equations, Bessel, Legendre and Hypergeometric functions and their properties. Laplace transformation, Properties and Laplace transformation of some standard functions. Laplace transform of the derivative, Inverse Laplace transformation and its applications in solving differential equations.

**UNIT - IV** (Partial Differential Equations)

Partial differential equations of the first order, Lagrange's solution, Some special type of equations which can be solved easily by methods other than the general method, Charpit's general method of solutions.

**UNIT - V**

Partial differential equations of second and higher orders, Classification of linear Partial differential equations of second order, Homogeneous and Nonhomogeneous equations with constant coefficients.

**Paper III – Mechanics**

02ABA109.3

**UNIT - I** (Statics)

Analytical conditions of equilibrium of coplanar forces, Friction, Virtual work.

Common Catenary, Forces in three dimensions, Poinso't's central axis,

Stable and unstable equilibrium.

**UNIT - II** (Dynamics)

Velocities and Accelerations along radial and transverse directions, and along tangential and normal directions, Simple Harmonic Motion, Rectilinear motion under variable laws.

**UNIT - III**

Hook's law, related problems on horizontal and vertical elastic string, Motion in resisting medium.

**UNIT - IV**

Constrained motion on smooth plane curves (Circular and Cycloidal Motion).

**UNIT - V**

Impact (Direct and Oblique). Central orbits,  $p - r$  equation, Apses, Time in an orbit, Kepler's laws of planetary motion.

## PUBLIC ADMINISTRATION

### PAPER - I : ADMINISTRATIVE INSTITUTIONS IN INDIA

02ABA110.1

#### Unit I

Administrative Institutions in a Democratic and Socialist Society. The concepts of Laissez-Faire State, Welfare State and Administrative State.

#### UNIT – II

Organisation of Government : Legislature - its role and decline in modern times, Executive-Types and relationship with Legislature. Judiciary - Functions and Role with special reference to the power of Judicial Review.

#### Unit III

Democracy and Administration, Features of Democratic Administration. Role of Bureaucracy in a Democratic country, Political Parties and Pressure Groups and their interaction with each other.

#### UNIT – IV

Organisation and Administrative working of Finance Commission, Planning Commission of India and the National Development Council, University Grants Commission, Union Public Service Commission.

#### UNIT V

Election Commission and the Administration of Election in India. Organisation & Working of :

- (i) Central Social Welfare Board
- (ii) Railway Board
- (iii) Reserve Bank of India.

#### Books Recommended :

1. Waldo : Administrative State
2. Field : Government in Modern Society
3. Paranjape : Planning Commission
4. I.I.P.A. : Organisation of the Government of India
5. Report of Finance Commission of India
6. M. G. Gupta : Modern Government
7. Ashok Sharma : Prashashnik Sanshtayen ( in Hindi)
8. B. L. Fadia : Prashashnik Sanshtayen (in Hindi)
9. J. C. Johari : Indian Government and Politics ( I & II ) (in Hindi)

## PAPER - II : STATE ADMINISTRATION IN INDIA

02ABA110.2

#### UNIT I

State Administration in India - its growing importance, General background of State Administration in India with special reference to the State of Rajasthan. The Office of the Governor - Power, Function and Role in State Administration.

#### UNIT – II

Relationship with Council of Ministers.

The office of the Chief Minister - Powers, Functions, Role and Importance of the office, Relationship with Council of Ministers, Organisation and Role of the State Secretariat, Chief Secretary : Role and Significance in the State Administration.

#### UNIT III

Administrative Organisation of Department- Organisation and working of the Department of Home, Finance and Agriculture in Rajasthan. Organisation and working of the following Boards and Directorates in the State of Rajasthan :

- (a) Revenue Board
- (b) R.V.V.N.L.
- (c) Directorate of Agriculture and
- (d) Commissioner Office of College Education.

#### UNIT IV

Personnel Administration : Role of the State Civil Services in Rajasthan.

Organisation and working of the Rajasthan Public Service Commission.

Recruitment, Training and Promotion of State Civil Services.

#### UNIT – V

Organisation and Functions of State Training Institutes in Rajasthan. Institution of Lokayukta.

District Administration : Organisation of District Administration- Collector : Functions and Position. Powers and Position of Divisional Commissioner, Revenue Administration at the District level, S.D.O., Tehsildar and Patwaris.

#### Books Recommended :

1. S.R. Maheshwari : State Government in India
2. S. S. Khara : District Administration in India
3. M. V. Pylee : Indian Constitution (Hindi Ed.)
4. A. R. C. : Report on State Administration
5. A. Zabier & Gupta : Organisation of Govt. of Uttar Pradesh

**Reference Books :**

1. D. P. Singh : Readings in Indian Administration
2. S. L. Verma : Revenue Board in Rajasthan
3. I. I. P. A. : Revenue Board
4. Rajasthan Government : Secretariat Manual
5. Rajasthan Government : Report of Administrative reforms Committee (Mathur Committee Report -1993)
6. Rajasthan Government : Report of the Committee on Training, 1963
7. H. C. M. RIPA Management of Higher Personnel of Public Administration
8. I. I. P. A. : Indian Journal of Public Administration (State Administration Special Number- July-Sept. 1976)
9. J. P. Shukla : State and District Administration in India
10. B. Mehta : Dynamics of State Administration (Chugh Publications)

**PSYCHOLOGY****PAPER – I (STATISTICS IN PSYCHOLOGY)**

02ABA11.1

**Unit – I**

Nature of psychological data and Psychological measurement, Levels of Measurement, Categorical and Continuous. Application and Importance of statistics in psychology Univariate and Bivariate frequency distribution, Graphical representation of data.

Measurement of Central tendency and Variability, Significance and Types of central tendency – Mean, Median and Mode. Significance and Types of Variability, Range, Semi inter quartile range Average deviation, Standard deviation, Variance and Coefficient of variation.

**Unit – II**

Normal distribution, Concept and Laws of probability, Characteristics of normal probability curve and Deviations – Skewness and Kurtosis, Normalization of skewed distribution, Application of Normal probability curve, Binomial distribution. Hypothesis testing and Making inferences.

**UNIT – III**

Population and Sampling – Methods of sampling, Standard Error of Mean, Standard deviation, Correlation, Degree of Freedom, Nature and Assumption of 't' distribution, Computation of 't' value for Dependent and Independent, Large and Small samples, Interpretation of 't' values, Levels of significance, Type I and Type II errors in making inferences.

**Unit-IV**

Correlations – Concept, Linear and Non-linear correlation, Pearson's Product Moment Correlation and Spearman's Rank Order Correlation, Familiarity with other correlation methods – Biserial and Point biserial correlation, Tetrachoric correlation and Lambda Prediction using correlation.

**UNIT – V**

Anova – Purpose and Assumptions, One way and Two way analysis of variance (Only theory). Non-parametric tests – Nature and Assumptions, Distribution free statistics, Chi-square, Contingency co-efficient, Median test, Sign test and Friedman test. Preparation of data for computer analysis – Familiarisation with software packages and their application.

**Readings :**

- Broota, K.D. (1992). Experimental design in behavioural research. New Delhi: Wiley Eastern.
- Minimum, E.W., King, B.M., & Bear, G. (1993). Statistical reasoning in psychology and education. New York: John Wiley.
- Siegel, S. (1994). Non parametric statistics. New York: McGraw Hill.
- Garrett, H and Woodworth, R.S (1981) Statistics in psychology and Educationm Vakils Publication

**PAPER – II (Psychological assessment and Research)**

02ABA111.2

**Unit – I**

Parameters of Human assessment, Nature and scope of Psychological scaling, Methods of Scaling. Assumption of Science, Characteristics of scientific method, Theory and fact, Nature of psychological researches – Correlational and experimental.

**UNIT – II**

Nature and Types of psychological tests and Techniques – Verbal, Performance, Individual group, Personality, Achievement, Ability and Aptitude tests, Inventory, Rating scales, Checklists, Questionnaire, Objective and Projective techniques, Uses and Limitations of psychological tests, Precautions and problems in test administration, Controlling the use of psychological tests.

**Unit – III**

Principles of psychological test construction – Item analysis – Item difficulty and Item Discrimination. Reliability and Validity – Meaning, Types and Comparison.

Norms – meaning, Types and Comparison.

**UNIT – IV**

Assessment of general ability, Special ability and assessment of personality.

Assessment in Educational Setup. Occupational tests and Assessment in occupational setup. Socio-cultural factors in psychological assessment.

**Unit – V**

Experimental designs – Pre test, Post test design, Factorial design and randomized block design. Sampling – Probability and Non-probability samples, Sample size and Sample errors. Hypothesis, Variables and Controls in experiments, Analysis of data and report writing.

**Readings :**

- Anastasi, A. (1997). Psychological testing. New York: MacMillan Co.
- Ciminero, A.R. (Eds.) (1986). Handbook of behavioural assessment. New York: John Wiley.
- Kerlinger, F.N. (1983), Foundations of behavioural research. New York: Surjeet Publications.
- Freeman, F.S. (1972). Theory and practice of psychological testing. New Delhi: Oxford & IBH.
- Broota, K.D. (1992). Experimental design in behavioural research. New Delhi: Wiley Eastern.

**PSYCHOLOGY PRACTICALS**

02ABA111.3

**1. Test construction**

Development of a test of at least 30 items in a suitable area

- a. Item selection
- b. Population selection
- c. Sampling techniques to administer the test (sample of minimum 50)
- d. Item analysis and Finalization of the test
- e. Determining Reliability and Validity
- f. Writing a report on the test construction

**2. Critical analysis of published research and Planning a study**

- a. Review of an article from a journal for methodology
- b. Propose plan of research by taking into consideration
  - i. The variable to be studied
  - ii. Sampling procedures
  - iii. Instruments to be used / constructed
  - iv. Statistical analysis to be conducted.

**3. Analysis of psychologically relevant literary text**

- a. Read literary / creative writing – Novel / Story / Book / Poem
- b. Identify and Analyse psychological substance in it (mood, emotion, anxiety, conflicts, stresses.)
- c. Film or News paper analysis for a specific theme.

**4. Report writing**

- a. Go through published articles, Books, Pertaining to a theme of choice and prepare a trend report.
- b. Present the prepared trend report.

## ENVIRONMENT, DEVELOPMENT AND SUSTAINABILITY

Course/Paper : 02ABA112.1

What is sustainability? Concept of sustainability science, sustainable development and its different constituents. Drivers of ecological changes and its implication for society.

Principles of ecological economics – scope and usefulness. Prey-Predator and supply-demand cycles.

Valuation of ecosystem services and impact of intervention (malign and benign).

Sustainability of society, resources and framework.

Natural resources accounting – concepts, methods and empirical evidences. Environment and trade.

Cost of environment, pollution, life cycle assessment. Impact of development on biodiversity. Development indicators and human health.

### Suggested readings:

- Baumol and Oates, 1988, Theory of Environmental Policies, Cambridge University Press, Cambridge, UK.
- Freeman A.M., 2001, Measures of value and Resources: Resources for the future, Washington DC.
- Freeman. A.M., 2003, Millennium Ecosystem Assessment: Conceptual framework. Island Press.
- Kumar Pushpam, 2005, Economics of Environment and Development. Arc Books New Delhi.
- Shogren, White and Hanley, 2001, Introduction to Environmental Economics, Oxford University Press, New York.
- Tietenberg. T, 2003, Environmental and Natural Resource Economics. Pearson Education, New York.

## METHODOLOGIES FOR ENVIRONMENTAL STUDIES

Course/Paper : 02ABA112.2

Data collection, survey and processing including social and cultural parameters. Statistics: Normal and binomial distribution. Hypothesis testing, t and chi square tests. Correlation and regression. Introductory analysis of variance. Multi-criteria analysis.

Modeling: Types of models: Mechanistic, economic, simulation etc. Fundamentals of building a model. Treatment of 2 or 3 environmental related models: Eutrophication model, global climate change model, wildlife habitat suitability model, air pollution model, ground water pollution model.

Remote Sensing: definition, principles, satellites and sensors. Aerial photography to Satellite Remote Sensing. Digital Image processing and image interpretation. GPS principles and applications. Geographic Information System: concepts, database generation and analysis.

Applications of Remote Sensing-GIS for environmental studies. Case studies, such as,

- a. Land use / land cover change, Forest degradation, Urban sprawling.
- b. Mining Hazards / Impacts.
- c. Forest Fire / Coal Fire Monitoring.

### Suggested readings:

- Demers, Michael N., 2005, M.N. Fundamentals of Geographic Information Systems. Wiley & sons, 2nd Ed.
- Freund. R.J., Wilson W.J., 2003, Statistical Methods, Academic Press.
- Lillesand. T.M. and Kiefer. R.W., 1999, Remote sensing and image interpretation. 4th Ed. Wiley & sons.
- Wainwright. J. & Mulligan. M., 2004, Environmental Modeling. John Wiley & Sons Ltd.



## STRUCTURAL GEOLOGY AND TECTONICS

Course/Paper : 02ABA113.1

### UNIT – I

Identification of bedding and other primary structures. Effects of topography on structural features. Importance of top-bottom criteria in structural geology, scale of map. Concept of rock deformation. Methods of analysis of simple tectonic structures. Stress and Strain in rocks, concept of strain ellipse.

### UNIT – II

Fold morphology. Geometric and genetic classification of folds. Mechanics and causes of folding. Structures resulting from extensional and shear deformation. Geometric and genetic classification of fractures, faults and thrusts. Effects of faulting on the outcrops.

### UNIT – III

Geometric and genetic classification of joints. Introduction to shear zones. Stereographic projections and their use in structural analysis..

### UNIT – IV

Geological significance and recognition of unconformities. Description and origin of foliation and its relationship with major tectonic structures. Description and origin of lineation and relationship with the major structures. Outlier, inlier and extrusive and intrusive igneous bodies. Klippe and Tectonic windows.

### UNIT – V

Concept of Orogeny. Important Orogenic belts of the world. Neotectonics and its importance. Indian examples.

### Practical

1. Solving at least 5 geometrical problems on folds and faults.
2. Drawing and the interpretation of profile section across at least 15 geological maps of different complexities (representing conformable and unconformable series, folds, faults and intrusive/extrusive igneous rocks).
3. Interpretation of topographic and geological maps - simple to complex.
4. At least 5 exercises of stereographic projections of mesoscopic structural data (planar, linear, folded).
5. Two exercises in Plane Table survey and section drawing using Theodolite and Microptic alidade.

### Suggested Readings

- Davis, GR. 1984. Structural Geology of Rocks and Region. John Wiley
- Weijermars, R. 1997. Structural Geology and Map Interpretation, Alboran Science Publishing.
- Billings, M.P. 1987. Structural Geology, 4th edition, Prentice-Hall.

- Hatcher, Jr., R.D. 1995. Structural Geology - Principles, Concepts and Problems, Merrill Publishing Company.

- Mathur, S.M. 2001. Guide to Field Geology. Prentice Hall.

Field Work: 10 days introductory geological field work, including

- Introduction to different types of compasses and their use.
- Study of topographic maps and location, map orientation and bearing etc.
- Study of geomorphic features and landforms.
- Observations on outcrops.
- Measurement of planar and linear geologic features.
- Simple geologic contact tracing.
- Plotting of data with different symbols on maps.

## PRINCIPLES OF STRATIGRAPHY AND SEDIMENTATION

Course/Paper : 02ABA113.2

### UNIT – I

Principles of stratigraphy, geological time scale, lithostratigraphic, chronostratigraphic and biostratigraphic units, stratigraphic classification and correlation.

### UNIT – II

Methods of collecting stratigraphic data, identification of stratigraphic contacts and unconformities. Facies concept in stratigraphy.

Basic principles of magnetostratigraphy and sequence stratigraphy.

International and Indian code for stratigraphic classification.

### UNIT – III

Chemistry of weathering processes. Sediments: origin, transportation, deposition, consolidation and diagenesis. Sedimentary fabric, textures and classification of sedimentary rocks. Diagenesis of terrigenous and chemical sediments. Dynamics of aeolian, glacial, fluvial, near-shore and deep-sea environments. Concept of sedimentary facies, paleoenvironment and paleoclimate analyses.

### UNIT – IV

Changes in the environment on the Earth surface through geological time, Archaeozoic and origin of life. Proterozoic events: glacial deposits, changes in atmospheric composition and organization of life. Concept of Proterozoic

### UNIT – V

Super continents—Columbia and Rodinia. Gondwanaland, Pangea and their breakup and amalgamation through time. Stratigraphic boundaries: Precambrian-Cambrian, Permian-Triassic and Cretaceous-Tertiary. Rise and fall of Mesozoic life forms. Cretaceous events: anoxia, rise of angiosperms, extinction of fauna Global tectonics and biological events during Paleogene, Neogene and Quaternary. Rise of genus Homo.

## SOCIOLOGY OF EDUCATION

Course/Paper:02ABA114.1

### Unit I – Sociology and Education

- Concept, Nature and Scope of educational sociology.
- Need for sociological approach in education.
- Social Organization: Concept and factors of influence.
- Dynamic characteristics of social organization and its Educational Implications.

### Unit II – Education and Social Change

- Education as Social heritage, instrument of social change, factor of social change.
- Agencies of Social change.
- School as a social sub-system.
- Mass media as social means.

### Unit III – Social Problems of Education

- Social problems relating to education.
- Equalization of educational opportunities.
- Illiteracy, education for backward classes, education in urban & rural areas.
- Role of community in solving social problems in education.

### Unit IV – Education and Culture

- Culture: Meaning and nature, Role of education in cultural context.
- Education and cultural change.
- Cultural determinants of education.
- Social interaction & Social stratification: Educational implications.

### Unit V – Education and Society

- Education as a process in the Social System.
- Education as a process of socialization & social progress.
- Education in relation to democracy, freedom, nationalism.
- Education and national integration & international understanding.

### References

1. Mohanti, J. (1987), Democracy and Education in India, New Delhi: Deep and Deep Publishers.
2. Tyagi, P. N. (1991), Education for All: A graphic Presentation, New Delhi: NIEPA.
3. Govt. of India (1993), Education for All: The Indian Scene, Widentry Horizons, New Delhi: MHRD.
4. Ruhela, S. P. (1969), Social Determinants of Educability in India, New Delhi: Jain Publishers.
5. Bhattacharya and Srinivas (1977), Society and Education, Calcutta: Academic Publishers.
6. Durkhiem, Emile (1956), Education and Sociology, New York: Free Press.
7. Dewey, John (1973), The School and Society, Chicago, University Press.
8. Govt. of India (1986), National Policy on Education, New Delhi (MHRD).
9. Govt. of India (1966), Report of the Education Commission, Ministry of Education.
10. Mathur, D.S.A. (1966), Sociological approach to Indian Education, Agra: Vinod Pustak Mandir.

## FUNDAMENTALS OF TEACHING

Course/Paper : 02ABA114.2

### Unit I – Teaching: Techniques, methods and models

- Micro teaching: Concept, Classification and acquisition of teaching skills.
- Techniques: Concept of observation and interview techniques.
- Methods of teaching: Individualized, Small and Large group.
- Models: Classification of models by Bruce–Joycee.

### Unit II – Teaching Technology

- Concept of Teaching.
- Interdependence between teaching and learning.
- Perception, Planning and Performance of teaching.
- Media in Teaching.

### Unit III – Learning Environment

- Concept of learning environment.
- Resource based learning and Resource based instruction.
- Self learning.
- Role of teacher in designing learning environment.

### Unit IV – All Round Development of Learner

- Growth and Development.
- Dimensions of development.
- Development of Communication skills, Life skills, Social skills, Creativity.
- Development of Personality, Integrated Personality.

### Unit V – Tools and Techniques of Evaluation

- Concept of Measurement and Evaluation, Types of evaluation.
- Bloom's Taxonomy.
- Tools and Techniques for evaluation, Teacher made and Standardized tests.
- Standard scores Z & T.

### References

1. Canon L. & Monin L. (1974) A Guide to Teaching Practices London: Methner & Co Ltd.
2. Gagen N.L. (Ed) (1963) Analyzing Teaching Behaviour. Chicago Rand McNally College Publishing Co.
3. Flanders N.A. (1970) Analysing Teaching Behaviours, Massachusetts. Addison weslesly Publishing Co Reading
4. Joyce B. Well M.(1985) Models of Teaching. New Delhi Prentice hall of India.
5. Teacher Education Curriculum –A Framework NCTE (1978) New Delhi, NCERT

## B.A. III<sup>rd</sup> Year Syllabus

Code No.	Subject	DISTRIBUTION OF MAXIMUM MARKS						
		University Exam			Practical Exam			
		INT.	EXT.	TOTAL	INT.	EXT.	TOTAL	
<b>OPTIONAL SUBJECTS</b>								
03ABA101.1	Paper-I	ifke i=% vkekud dk0;	30	70	100	-	-	-
03ABA101.2	Paper-II	f)rh; i=% dFK l fgr; imi U; kl ,oa dgluh%	30	70	100	-	-	-
03ABA102.1	Paper-I	English Poetry and Drama	30	70	100	-	-	-
03ABA102.2	Paper-II	Prose And Fiction	30	70	100	-	-	-
03ABA103.1	Paper-I	Modern Indian History (1740-1956 A.D.)	30	70	100	-	-	-
03ABA103.2	Paper-II	Modern World (15th To 20th Century)	30	70	100	-	-	-
03ABA103.3		History of Military Science						
03ABA104.1	Paper-I	Representative Western Political Thinkers	30	70	100	-	-	-
03ABA104.2	Paper-II	International Relations	30	70	100	-	-	-
03ABA105.1	Paper-I	Money, Banking and Public Finance	30	70	100	-	-	-
03ABA105.2	Paper-II	Quantitative Techniques	30	70	100	-	-	-
03ABA105.3		Economy Of Rajasthan						
03ABA106.1	Paper-I	Regional Geography of Continents	30	70	100	-	-	-
03ABA106.2	Paper-II	Geography of India	30	70	100	-	-	-
03ABA106.3	Practical	Geography Practical	-	-	-	50	50	100
03ABA107.1	Paper-I	Home Science Extension Education	30	70	100	-	-	-
03ABA107.2	Paper-II	Family Resources Management and Interior Designing	30	70	100	-	-	-
03ABA107.3	Practical	Home Science Practical	-	-	-	50	50	100
03ABA108.1	Paper-I	Foundation of Sociological Thought	30	70	100	-	-	-
03ABA108.2	Paper-II	Social Anthropology	30	70	100	-	-	-
03ABA109.1	Paper-I	Abstract Algebra	30	70	100	-	-	-
03ABA109.2	Paper-II	Analysis	30	70	100	-	-	-
03ABA109.3	Paper-III	Discrete Mathematics	30	70	100	-	-	-
03ABA109.4		Optimization Techniques & Statistics						
03ABA109.5		Numerical Analysis and Programming in C Theory						
03ABA110.1	Paper-I	Comparative Administrative Systems	30	70	100	-	-	-
03ABA110.2		Administrative Thinkers						
03ABA110.3	Paper-II	Local Administration in India	30	70	100	-	-	-
03ABA111.1	Paper-I	PSYCHOPATHOLOGY	30	70	100	-	-	-
03ABA111.2	Paper-II	ORGANIZATIONAL BEHAVIOUR	30	70	100	-	-	-
03ABA111.2	Practical	PSYCHOLOGY – PRACTICALS	-	-	-	50	50	100
03ABA112.1	Paper-I	Environmental Risk and Impact Assessment	30	70	100	-	-	-
03ABA112.2	Paper-II	Environmental Pollution and Health	30	70	100	-	-	-
03ABA113.1	Paper-I	PALAEONTOLOGY	30	70	100	-	-	-
03ABA113.2	Paper-II	Igneous and Metamorphic Petrology	30	70	100	-	-	-
03ABA114.1	Paper-I	TEACHING LEARNING PROCESS	30	70	100	-	-	-
03ABA114.2	Paper-II	GUIDANCE AND COUNSELING	30	70	100	-	-	-

i Fke i =%vkek(fud dk0;

i kB; i f rdc%

- 1- v; "ë; kfl g mi kè; k; ^gfv@k\*\*
  - 1- blnzdk xoğj .k] fç; çokl ] I kfgR; d\hj] okjk.kl h
  - 2- ^, d cm] 'frudk^dfork, j pör&pçensvç p [kspç nsdk0; I æg I } I kfgR; d\hj] okjk.kl h
- 2- ešFky@kj .k xlr
  - 1- I [kh oseç I sdgdj tkrš¼ "k'ekj k I kfgR; I nu] fpj xkp] >kl h
  - 2- I kdt ¼uoel xz
- 3- t; "kødj çl kn
  - 1- J) k I xz¼dkek; kuh¼ Økj rh Øou] bykgkckn
- 4- I w ðWlr f=i kBh 'fujkyk^
  - 1- tkx" , d clj] fujkyk j pukoyh] jkt dey çdk"ku] fnYyh
  - 2- cknj jkx&1] fujkyk j pukoyh] jkt dey çdk"ku] fnYyh
- 5- I fe=kullnu i r
  - 1- uçdk fogkj] j f"ecllek dk0; I æg] jkt dey çdk"ku] fnYyh
  - 2- i f jorZ] j f"ecllek dk0; I æg] jkt dey çdk"ku] fnYyh
- 6- jkeekjh fl g fnudj
  - 1- dq {k= ¼NBk I xz¼ jkt i ky , .M I UI fnYyh
- 7- xtkulln ekèko efiç"èk
  - 1- ydMh dk cuk j ko .k ¼pkp dk eç Vçk gš dk0; I æg I } I Økj rh; Kku i hB çdk"ku] uÅ fnYyh
  - 2- Øw&xyrh] ¼pkp dk eç Vçk gš dk0; I æg I } I Økj rh; Kku i hB çdk"ku] uÅ fnYyh
- 8- èkebhj Økj rh
  - 1- dufiç; k ¼çkj feØd rhu xhr¼ Økj rh; Kku i hB çdk"ku] uÅ fnYyh
- 9- I fPpnkulln ghjkulln okRL; kou ^vKš ^
  - 1- gfj Åkl ij {k.k Øj ¼br; ye-dk0; I æg I } I fprk dk0; I æg] I i kn d cky Ñ" .kjko] jat uk çdk"ku] vlxjk
  - 2- ckojk vgg h ¼ckojk vgg h dk0; I æg I } jat uk çdk"ku vlxjk
- 10- egknsh oekz
  - 1- nhi f" k [kk I ççkj feØd rhu xhr] y'dØkj rh çdk"ku] bykgkckn
- 11- ujšk egrk
  - 1- I w "h; % , d I Økouk ¼t gk&t gk f{kfr t gš I økn çdk"ku] eç B
  - 2- oš.ko ; k=k ¼t gk&t gk f{kfr t gš I økn çdk"ku] eç B dk0; "kkL= j I & i f j Øk"kk] mnØo çdkj] vo; o , oaj I fu" i fr

f}rh; i =%dFkk I kfgR; ¼mi U; kl , oadgkuh¼

i kB; i f rdc%

- 1- T; "ægnh d" j æ ¼mi U; kl ¼ enyk fl Ugk] çØkr çdkl u] uÅ fnYyh
- 2- dgkuh I æg
  - 1- ml usdçk Fkk & plnèkj "kekZxnygh] I eky'pd i =] t; ij
  - 2- ijLdkj & t; "kødj çl kn] Økj rh Øou] bykgkckn
  - 3- i\ dh jkr & çepln] çepln dh I ei w kZ dgkfu; k] y'dØkj rh; çdk"ku] bykgkckn
  - 4- rkÅ & fo"oEØj ukFk "kekZdç"kd i p"kny çdk"ku] t; ij
  - 5- u"kk & elluqØ.Mkjhl Rri .kk] I Ei kn d I j'skpln] Yšd , .M cni ] fnYyh
  - 6- , d xç & tšWnz dèkj] dFkk I çØ ¼ adyu¼ MKW fot; i ky fl g] çxfçdk"ku] vteç
  - 7- Jækj & Tokyk çl kn 'foi çy^ I kfgR; uxj] t; ij
  - 8- ejk Åj dgk & ukf I jk "kekZ [knp dh oki I h ¼dgkuh I æg] ¼ok.kh çdk"ku] fnYyh
  - 9- [k'Å gÅ fn"kk, j & dEys'oj dh çrfufek dgkfu; k] jkt i ky , .M I UI ] fnYyh

## ENGLISH

### PAPER-I : ENGLISH POETRY AND DRAMA

03ABA102.1

#### Unit-I

Four passages for explanation with reference to the context from the texts.

Prescribed in Units III and IV.

<b>Unit-II</b> Objective-type Questions	10
Short-answer Questions	10

#### Unit-III (For detailed study)

From String Of Gold (Part-III) ed. Dr. Jasbir Jain (Macmillan).

Alfred, Lord Tennyson	: Ulysses.
Robert Browning	: My Last Duchess, The Last Ride Together.
Mathew Arnold	: Rugby Chapel.
G.M. Hopkins	: The Sea and the Skylark.
W.B. Yeats	: The Wild Swans at Coole.
Robert Frost	: Birches.
Rupert Brooke	: The Soldier.
T.S. Eliot	: Preludes.
W.H. Auden	: In Memory of W.B. Yeats:
Dylan Thomas	: Fern Hill.

#### Unit-IV (For detailed Study)

Galsworthy	: Strife
G.B. Shaw	: Candida.

#### Unit-V 20

Literary History	: The Victorian Period. The Present Age.
Literary Terms	: Dramatic Monologue, Paradox, Antithesis, Symbol, Problem Play, Essay, Novel, Free Verse, Short Story.

#### Recommended Books :

1. W.H. Hudson : An Outline History of English Literature.
2. M.H. Abrams : A Glossary of Literary Terms (Macmillan)

## Paper II : PROSE AND FICTION

03ABA102.2

2. Essays and short stories prescribed are from the following books :

- (i) W.E. Williams : "A Book of English Essays" (Penguin Books)
- (ii) Shiv K. Kumar (ed.) : Short Stories of Yesterday and Today (OUP).

#### Unit I

Four passages for explanation with reference to the context from texts.

Prescribed in Units III and IV.

#### Unit II

Objective-type Questions

Short-answer Questions

#### Unit-III (For detailed study)

Goldsmith	: The Man in Black
Leigh Hunt	: Getting up on cold mornings
J.B. Priestly	: On Doing Nothing
A.A. Milne	: A Village Celebration
Harold Nicholson	: Men's Clothes
Ivor Brown	: A Sentimental Journey

#### Unit-IV (For detailed study)

Joyce Cary	: Growing Up
Nathaniel Hawthorne	: Dr. Heidegger's Experiment
O'Henry	: The Gift of the Magi
Katherine Masefield	: A Cup of Tea
Manohar Malgaonkar	: Upper Division Love.
Khushwant Singh	: Karma.

#### Unit-V (For Non-detailed study)

Ernest Hemmingway	: Old Man and the Sea.
Anita Desai	: Diamond Dust. (The first four stories)

## HISTORY

### PAPER - I: MODERN INDIAN HISTORY (1740-1956 A.D.)

03ABA103.1

#### UNIT – I

Third Battle of Panipat and its consequences. Marathas under Mahadji Sindhia and Nana Phadnavis, Maratha Struggle with the British. Causes of the failure of the Marathas.

#### UNIT – II

Establishment of British rule in Bengal and consequent administrative changes during (1772-1773) Emergence of regional powers. Mysore, Punjab and Awadh, their struggle with British and their absorption in the British Empire.

#### UNIT – III

Uprising of 1857, causes, nature and consequences. Growth of British paramountcy in the Princely States, (1858-1947). Main features of Permanent, Roytwari and Mahalwari land revenue settlements and their impact on peasantry.

#### UNIT – IV

Drain of wealth and its consequences. Economic impact of British rule, causes of the Emergence of Indian Nationalism. Role of Moderates and extremists. Salient features of Government of India Act of 1919 and 1935.

#### UNIT – V

- (i) Struggle for freedom movement from 1920 to 1947.
- (ii) Growth of Communal politics.
- (iii) Factors leading to independence and partition of India.
- (iv) Main features of the Indian constitution of 1950.
- (v) Problems and process of the integration of princely states into Indian Dominion (1947-49) and their reorganisation in 1956.

#### Books Recommended :

1. Bisheswar Prasad: Bondage and Freedom.
2. G.S.Sardesai: New History of the Marathas, Vol. III (also in Hindi)
3. Sumit Sarkar: Modern Indian 1885 to 1947.
4. B.N.Pande (ed.) : Centenary History of the Indian National Congress (1885-1985) Vikas Publishing House, New Delhi 1985.
5. Tara Chand: History of Freedom Movement in India in 4 vols. Publication Division, New Delhi.

## PAPER II (A) : MODERN WORLD (15TH TO 20TH CENTURY)

03ABA103.2

#### UNIT – I

Renaissance

Reformation with special reference to Martin Luther.

American war of Independence.

#### UNIT – II

Industrial Revolution

French Revolution

Rise of Napoleon Bonaparte

Viena Settlement with special reference to Metternich

#### UNIT – III

Unifications of Italy and Germany with special reference to Kavour and Bismarck.

Foreign Policy of Napoleon III.

#### UNIT – IV

Eastern question - Crimean war, Treaty of Berlin and Balkan wars

Greater Germany - Kaiser William II

Chartist Movement in Britain

Colonial expansion of Great Britain with special reference to Asian Countries.

#### UNIT – V

Feudalism, Slavery and Feminism in Europe.

Art, Architecture and Literature in Europe

First World War (Causes and Results)

Rise of Fascism and Nazism.

Spanish Civil war and origins of World War II

Emergence of Modern Turkey,

#### Books Recommended:

1. Bennis, F.L.: European History Since 1870
2. Davis H.A.: An outline History of the World
3. Fisher H.A.L.: A History of Europe
4. Hazen C.D. : Modern European History
5. Knapton, Ernest John: Europe (1450-1815)
6. Lucas, Henry S.: The Renaissance and the Reformation
7. Marriott, J.A.R.: The Evolution of Modern Europe (1753-1939)

## OR

**PAPER II (B) : HISTORY OF MILITARY SCIENCE**

03ABA103.3

**UNIT – I**

Military Geography of India

- i) Geo-strategic location of India
- ii) Frontiers and Boundries of India
- iii) Main Sources of Military History

**UNIT – II**

Military System in Ancient India:- Vedic Period; Epic &amp; Puranic period;

Mauryan, Gupta and Vardhan Period; Early Rajput Period (8th Century to 12th Century)

**UNIT – III**

- A. Military System in Sultanate & Mughal Period with Special References to - Battle of Tarain, Ranthambore, Chittor, Jalore, Panipat - I, Kanwaha and Haldighati.

**UNIT – IV**

- B. Military System in British Period with special reference to - Battle of Plassey, Buxar, 3rd Battle of Panipat, Anglo-Marathas and Anglo Sikhs wars.

**UNIT – V****Warfare in Western World**

- i) Roman Warfare
- ii) Alexander and his campaigns (356 - 323 BC)
- iii) American war of Independence.
- iv) Contribution of Napoleon Bonaparte to the art of warfare.
- v) Warfare [s;ovordd of Bismarc.

**Warfare between the two world war**

- i) Foundation of First world war (1914-1918 AD), Causes and effects.
- ii) War strategies during second world war, causes and effects.

**Books Recommended:**

- 1- Fauja Singh; Military System of Sikhs.
- 2- B.K.Mazumdar; Military System in ancient India.
- 3- Major Qalfread dayld; Indian art of war.
- 4- Col. Gautam Sharma; Indian army through the age.
- 5- Col. Maleson; Decisive battles of Indian History.
- 6- Prof. V.D.Mahajan; Ancient India.
- 7- Winston Churchill; Second World War

**POLITICAL SCIENCE****PAPER -I : REPRESENTATIVE WESTERN POLITICAL THINKERS**

03ABA104.1

**Unit I**

Greek, Medieval and Early Modern Political Thinkers- Plato : Ideal State, Justice, Philosopher King, Education, Communism. Aristotle : State, Citizenship, Property, Slavery.

**UNIT – II**

Revolution. St Augustine : Theory of Two cities. St Thomas Aquinas : State, Law, Christianization of Aristotle. Nicolo Machiavelli : Nation-State, State Craft, Religion and Morality.

**Unit III**

Contractual and Utilitarian Political Thinkers : Thomas Hobbes : Contractual Theory, Sovereignty. John Locke : Contractual Theory &amp; Private Property.

J.J. Rousseau : Contractual Theory &amp; General Will. Jeremy Bentham : Theory of Utility, Law &amp; reforms.

John Stuart Mill : Revision of Bethamite theory of utility; Liberty and Representative Government.

**Unit IV**

Idealist and Scientific Socialist Political Thinkers : Georg Wilhelm Hegel : Dialectical Idealism, Theory of State

**UNIT – V**

T.N. Green : Theory &amp; Functions of State and liberty. Karl Marx : Dialectical &amp; Historical Materialism, Surplus Value, Class Struggle, Revolution.

**Selected Readings :**

1. Ashcraft : Locke's Two Treaties of Government , London :Unwin and Hyman ,1987
2. Hacker : Political Theory
3. Wayper : Political Thought
4. Chandha : Pramukh Rajnitik Vicharak (Adarsh Prakashan)
5. Foster : Masters of Political Thought Vol. I
6. G.H. Sabine : History of Political Theory
7. J. Bowle : Western Political Thought : A Historical Introduction from the Origins to Rousseau, London : Jonathan Cape ,1947
8. J.P.Suda : History of Pol. Thought Vol. I &II
9. J.W. Allen : A History of Political Thought in the Sixteenth Century ,London : Methuen, 1967
10. Jones : Master of Political Thought Vol. II
11. Lancaster : Master of Political Thought , Vol. III
12. P.D.Sharma : Pratinidhi Rajnitik Vicharak
13. Pukh Raj Jain : Pramukh Rajnitik Vicharak



**PAPER -II - INTERNATIONAL RELATIONS**

03ABA104.2

**Unit I****International Relations :**

- Approaches Meaning, nature & scope : Idealistic, Realistic, System (Kaplan) & Marxist.
- Actors : State and other Players.

**UNIT – II****National Power - Meaning, Elements and limitations.**

Balance of Powers : Meaning Characteristics, Devices of maintaining Balance Power, Relevance in contemporary world.

**Unit III**

Cold War - Causes, Phases and impact End of cold war and its impact on the world Politics.

Non-Alignment Movement (NAM)

- Features, Achievements and Challenges.  
Syllabus/B.A. Part -III/ 61 62/ Sylla
- Indian and NAM
- NAM relevance in post cold war era.

**UNIT – IV****International Political Economy :**

- New International Economic Order.
- North-South Dialogue.
- South-South Cooperation.
- World Trade Organization (WTO)

**Unit V****Foreign Policy :**

- Meaning Elements and determinants.
- Basic features of Foreign Policy of U.S.A., China and India.
- India and its relations with neighbouring Countries and USA.

**International Organization :**

- United Nations (UN) : Structure and Reforms.
- Role and Significance in Contemporary era.

**Regional Organizations :**

- SAARC, ASEAN, European Union (EU).
- Major contemporary Trends and Issues in the World.
- Human Rights, Globalization, Global Terrorism, Environmentalism, Disarmament.

**Selected Readings :**

1. Anam Jaitely : International Politics : Trends and Issues
2. C. Brown : International Relations Theory , London : Harvester Wheatsheat, 1975
3. F.I. Greenstein and : Theory of International Relations , Reading N.W. Poisby Massachusetts : Addison Wesley, 1979
4. F.S. Northedge : The International Political System , London : Faber and Faber , 1976
5. Friedman : Introduction to World Politics
6. K.N. Waltz : The emerging structure of International Politics , International Security , 18, 1993
7. K.N. Waltz : Theory of International Politics , Reading Massachusetts, : Addison-Wesley, 1979
8. L.Claude : Power and International Relations, New York : Randon House, 1962
9. Mahendra Kumar: International Politics
10. W.D. Coplin : Introduction to International Politics , Chicago : Markham, 1971

## ECONOMICS

### Paper-I MONEY, BANKING AND PUBLIC FINANCE

03ABA105.1

#### Unit I

##### Basic Concepts

Money - meaning, functions and classification; Gresham's law; Role of money in capitalist, socialist and mixed economies; Monetary standards - Metallic and paper systems of note issue.

#### UNIT – II

##### Value of Money and Inflation

Meaning, uses and limitations of index numbers ; quantity theory of money - Cash transaction and cash balance approaches; The Keynesian approach; Inflation, deflation and reflation - definition, types, causes and effects of inflation on different sectors of the economy; Demand-pull and cost-push inflation; Measures to control inflation; Trade-off between inflation and unemployment, Philips curve.

#### UNIT – III

##### Commercial Banking

Meaning and types; Functions of commercial banks; The process of credit creation - Purpose and limitations; Liabilities and assets of banks; Evolution of commercial banking in India after Independence; A critical appraisal, of the progress of commercial banking after nationalization; Recent reform in banking sector in India.

#### Unit IV

Determinants of Money Supply- High powered Money and Money Multiplier.

##### Central Banking

Functions of a central bank, Quantitative and qualitative methods of credit control - bank rate policy, open market operations, variable reserve ratio and selective methods; Role and functions of the Reserve Bank of India; Objectives and limitations of monetary policy with special reference to India.

##### Nature and Scope of Public Finance

Meaning and scope of public finance; Distinction between private and public finance; Public goods vs. private goods; The Principle of maximum social advantage; Market failure; Role of the Government.

##### Public Expenditure

Meaning, classification and principle of public expenditure; Canons and effects of public expenditure; Trends in public expenditure and causes of growth in public expenditure in India.

#### Unit V

##### Taxation

Sources of public revenue; Taxation - meaning, canons and classification of taxes; Division of tax burden - The benefit and ability-to-pay approaches; Impact, incidence and shifting of taxes; Taxable capacity; Effects of taxation; Characteristics of a good tax system; major trends in tax revenue of the central and state government of Rajasthan.

##### Public Debt and Financial Administration

Sources of public borrowing; Effects of public debt; methods of debt redemption; Growth of India's public debt; The public budget - Kinds of budget; Economic and functional classification of the budget. Preparation and passing of budget in India. Various concepts of budget deficits. Recent budget of Centre and State Govt.

#### BASIC READING LIST

- Bhargava, R.N. (1971), The Theory and Working of Union Finance in India, Chaitanya Publishing House, Allahabad.
- Gupta, S.B. (1994), Monetary Economics, S. Chand & Company, New Delhi.
- Houghton, E.W. (Ed.) (1988), Public Finance, Penguin, Baltimore.
- Jha, R. (1998), Modern Public Economics, Routledge, London.
- Mithani, D.M. (1981), Macroeconomic Analysis and Policy, Oxford & IBH, New Delhi.
- Mithani, D.M. (1998), Modern Public Finance, Himalaya Publishing House, Mumbai.
- Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.

#### ADDITIONAL READING LIST

- Day, A.C.L. (1960), Outline of Monetary Economics, Oxford University Press, Oxford.
- De Kock, M.H. (1960), Central Banking, Staples Press, London.
- Due, J.F. (1963), Government Finance, Irwin, Homewood.

## Paper-II QUANTITATIVE TECHNIQUES

03ABA105.2

### Unit I

#### Basic Concepts

Variables, Sets, Functions, Equations, Identities, Systems of equations. Application of straight-line system, Slope of the line, Homogeneous function.

#### Calculus

Differentiation of a Function; Integration of a function. Arithmetic and Geometrical progressions, Logarithm.

#### Matrix and Determinants

Various types of matrices, Determinants, Inverse of a matrix, Cramer's rule.

### Unit II

#### Introduction to Statistics

Basic concepts; Population, Sample, Parameter, Frequency Distribution, Cumulative frequency; Graphic and diagrammatic representation of data, Techniques of data collection; Sampling vs. Population, primary and secondary data.

### UNIT – III

#### Central Tendency and Dispersion

Measures of central tendency; Mean, Median, Mode, Geometric mean and Harmonic mean. Measures of dispersion, Range, Mean Deviation, Standard deviation, Coefficient of variation, Quartile deviation, Skewness. Concept of rate of growth.

#### Correlation

Correlation; Simple, Coefficient of Correlation - Karl Pearson and Rank Correlation, Partial and Multiple correlation Analysis.

### Unit IV

Regression analysis - Estimation of regression line in a bivariate distribution - Least squares method, interpretation of regression coefficients. Interpolation (Newton's and Binomial Method)

### UNIT – V

#### Time Series and Index Numbers

Time series analysis - Concept and components - Determination of regular, trend and seasonal indices; Index numbers - Concept, price relative, quantity relative, value relative; Laspeyres', Paasche's and Fisher, Family budget method; Problems in the construction and limitations of index numbers, Tests for ideal index number.

#### Indian Statistics

Current population census 2001. Statistical system in India. Agriculture, Industrial and Trade Statistics in India.

## BASIC READING LIST

- Allen, R.G.C. (1974), Mathematical Analysis for Economists, Macmillan Press, London.
- Black, J. and J.F. Bradley (1973), Essential Mathematics for Economists, John Wiley and Sons.
- Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics (3rd Edition), McGraw Hill, New Delhi.
- Croxton, F.E., D.J. Cowden and S. Klein (1973), Applied General Statistics, Prentice Hall, New Delhi.
- Gupta, S.C. and V.K. Kapoor (1993), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.
- Speigel, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London.

OR

**Paper-II Economy of Rajasthan**

03ABA105.3

**Unit I****Position of Rajasthan in Indian Economy**

Population, Area, Agriculture, Industry and Infrastructure, Population : Size and growth, Districtwise Distribution of Rural and Urban Population, Occupational Structure and Human Resource Development (Literacy, Health and Nutrition indicators), Problems of Poverty and Unemployment.

**UNIT – II****Natural Resource Endowments :**

Land, Water, Livestock, Forests and Minerals. State Domestic Product and its trends. Environmental Pollution and Problems of sustainable development. Draught and Famine Problems in Rajasthan.

**Unit III****Agriculture**

Land Utilisation, Major crops and cropping pattern. Land Reforms: Rajasthan Tenancy Act, Ceiling on land and Distribution of land. Animal Husbandry: Importance of Livestock, Dairy Development Programme, Problems of Sheep and Goat Husbandry, Transhumance in Rajasthan. Irrigation and power infrastructure in the State. Planning in the State :Objectives and achievements, Constraints in the economic development of Rajasthan.

**Unit IV**

Industrial Development in the State during five year plans, Regional variation in Industrial development small scale industries and handicrafts, industrial policy, Role of RFC, RSMDC and RIICO in the industrial development of Rajasthan.

**UNIT – V**

Tourism Development in Rajasthan, Special Area Programmes, Self-employment and wage employment programmes in rural areas in particular, DDP, DPAP, TAD and other region specific programmes.

**BASIC READING LIST**

1. Economic Survey: Government of Rajasthan.
2. Budget Studies : Government of Rajasthan
3. Income Expenditure Analysis : Government of Rajasthan
4. Studies Published by Directorate of Economics and Statistics, Government of Rajasthan.
5. Five Year Plan Documents : Government of Rajasthan.
6. Statistical Abstract: Government of Rajasthan.

**GEOGRAPHY****PAPER-I : REGIONAL GEOGRAPHY OF CONTINENTS**

03ABA106.1

**Unit -I**

Asia in the context of the world. Terrain pattern, drainage, climate, natural vegetation, soils, minerals and industries, spatial distribution of population and economic development of continent. Europe : Terrain pattern, drainage, climate, natural vegetation, soils, minerals and industries, spatial distribution of population and economic development of continent.

**Unit - II**

North America Terrain pattern, drainage, climate, natural vegetation, soils, minerals and industries, spatial distribution of population and economic development of continent.

**UNIT – III**

South America Terrain pattern, drainage, climate, natural vegetation, soils, minerals and industries, spatial distribution of population and economic development of continent.

**Unit - IV**

Australia & New Zealand Terrain pattern, drainage, climate, natural vegetation, soils, minerals and industries, spatial distribution of population and economic development of continent. Contemporary issues in world geography:

**UNIT – V**

Globalisation, W.T.O. and world Summit, UN Environment programmes (UNEP), UN Development programmes, Environment and sustainable development; Disaster management- types (Natural and Man made), Concept of region and its relevance.

**Books Suggested :**

1. Cole, J. : A Geography of the World's Major Regios, Routledge, London, 1996.
2. Deblij, H.J. : Geography : Regions and concepts, John Willey, New York 1994.
3. Jackson, R.H. and hudman, L.E. : World Regional Geography: Issues for Today John Willey, New York, 1991.
4. Minshull, G.N. : Western Europe, Hoddard & Stoughton, New York, 1984.
5. Patterson, J.H. : Geography of Canada and the United States. Oxford University Press, 1985.
6. Shaw E.B. : Anglo American - A Regional Geography.
7. Minshull Roger: Regional Geography.
8. James P.E. Latin America Cas sed and Co. London.

**PAPER-II: GEOGRAPHY OF INDIA**

03ABA106.2

**Unit - I**

India in the context of the South-East and South Asia; India : A land of diversities; unity within diversities. Major terrain elements of India and their role in shaping physical landscape of India. Drainage systems.

**UNIT – II**

Regional and seasonal variation of climate - The monsoon, Western disturbance, Norwesters. Climatic regions of India. Soil types. - their distribution and characteristics, vegetation types and their distribution. Forest - The status of their use and need for conservation.

**Unit - III**

Agriculture, irrigation and multipurpose projects, Geographical conditions, distribution and production of wheat, rice, sugarcane, cotton, jute, coffee, tea; Live stock, Fisheries. Resources : minerals - iron-ore, copper, manganese and sources of power coal, petroleum, hydropower, atomic energy, Resource Regions of India; Industries - Iron and steel, textile, cement, paper and pulp; Industrial regions of india; Transportation - railways, road, air and water.

**Unit - IV**

Changing nature of Indian economy - Agricultural growth during the plan period; Green revolution vis-a-vis traditional farming; Agricultural regions and its relevance in agricultural development planning. Spatial distribution of population and density; Socio Economic implications of population explosion;

**UNIT – V**

urbanization; Gender discrimination. Basis of regional planning, planning divisions of India - macro and meso; Regional planning of rural and urban regions. .

**Suggested Reading/Books:**

1. Deshpande C.D. : India - A Regional Interpretation, Northern Book Centre, New Delhi, 1992.
2. Singh R.L. (ed.) : India - A Regional Geography, National Geographical Society, India, Varanasi, 1971.
3. Spate; O.H.K. and Leammonth, A.T.A. : India and Pakistan - Land People and Economy, Methuen & Co., London, 1967.
4. Wadia, D.N. : Geology of India, McMillan & Co., London 1967.
5. Dr. Khullar : India (A Comprehensive Geography) Kalyani Publication, New Delhi.
6. Negi: Geography of India.
7. Govt. of India : Five Year Plans of India.
8. Indian Year Book (Latest Edition) : Publication Division, Delhi.
9. Irrigation Atlas of India.
10. Chatterji, S.B. : Climatology of India (Calcutta University, Calcutta)
11. Gazetteers of India: Publication Division, New Delhi.

**GEOGRAPHY PRACTICAL**

03ABA106.3

**Contents :**

1. Projection - General principles, classification and choice of projections, construction, properties, merit and demerits, limitations and use of projections, Projections suitable for map of India.
2. Cylindrical: Simple, equal area, Gall's and Mercator's projection. Zenithal (Polar case) : Equidistant, Equal Area, Gnomonic, Orthographic, Stereographic. Conical: One standard parallel, two standard parallels, Bonne's and Poly conic. Conventional: Mollweide's, Sinusoidal projection
3. Statistical methods - Computation of data, Preparation of frequency tables, Graphical presentation of frequencies distribution, histogram, frequency polygon, frequency curve and ogive. Mean, Median and Mode; Quartile, Standard deviation, Lorenz curve. Calculation of coefficient of correlation (Spearman's and Carl Pearson's)
4. Diagram - Value-area cartogram, Triangular diagram, Ergograph - simple, Rainfall dispersion diagram.
5. Prismatic Compass Survey - Importance, Appliances, Methods: Radiation, Intersection, Traverse (closed and open traverse), correction of bearings and removal of closing error - Bowditch, graphical and mathematical method, Calculation of WCB, RB and calculation of included angles (CIA).

**Suggested Books :**

1. Kellaway, Georgep : Map Projection, Methuen & Coy, London.
2. Steers, J.K. : Map Projections, University of London press, London.
3. Singh, R.L. : Elements of Practical Geography, Kalyani Publishers, New Delhi.

## HOME SCIENCE

### PAPER I : HOME SCIENCE EXTENSION EDUCATION

03ABA107.1

#### UNIT-I

1. Home Science-i Meaning, Definition ii Objectives and Scope iii Areas of Home Science – Objectives and Scope of each area Education
2. Extension Education
  - i Meaning and Definition of Education, Extension and Extension Education
  - ii Philosophy of Extension Education.
  - iii Principles of Extension Education.
  - iv Basic Elements of Extension Education
3. Community Development
  - i Meaning and Definition of Community, Development and Community Development.
  - ii Objectives and Principles of Community Development.
  - iii Scope and organizational set up of Community Development.
  - iv Extension Programmes in India
  - v On going national, rural and urban development programmes for women and children – DWCRA, ICDS, WDP, KVK, NREP, SGSY, RCH etc.
  - vi Role of NGO's in developmental effort – CAPART, CHETNA, CARE, SEWA & Others.
  - vii Panchayati Raj in India – Concept, Objectives and Structural Organisation

#### UNIT – II

4. Communication –
  - i. Meaning and definition
  - ii. Types
  - iii. Methods, Barriers and Problems in communication.
  - iv. Importance and scope of communication in development.
5. Communication Process
  - i. Concept and Importance in Communication Process.
  - ii. Elements of Communication Process and their characteristics.
6. Media of Communication
  - i. Definition
  - ii. Role and Selection

- iii. Classification.
- iv. Types –
  - (a) Non – Projected communication aids
  - (b) Projected and Electronic Communication aids.
- v. Advantages and Limitations.

#### UNIT – III

7. Extension Approaches/Methods.- Individual / Group / Mass.
8. Community Development Programme Approach
  - Multi purpose - Growth centered - Minimum needs
  - Integrated - Target group - Area - Antyodaya
9. Approaches and methods of Socio-Economic Analysis
  - Rapid Rural Appraisal - Survey - Participatory Rural appraisal

#### References :

1. Singh, R., Text Book of Extension Education, Sahitya Kala Prakashan, Ludianai, 1987.
2. Supe, S.V., An Introduction to Extension Edu. Oxford, I.B.H. New Delhi, 1984.
3. Dhama, O.P. & Bhatnagar, O.P., Extension and communication for development, Oxford to IBH publishing Pvt. ltd. New Delhi, 1985.
4. Extension Education in Community Development Directorate of Extension, Ministry of Food and Agriculture, Government of India, New Delhi, 1961.
5. Devdas, R.P. Text Book of Home Science, NCERT, New Delhi, 1980.
6. Singh, K. Principle of Sociology, Prikashan Kendra Luckhnow, 1980. Almenyso, Social Change: Developments Sage Publication Pvt. Ltd. Madras, 1990.
7. Almentso, Social Change: Developments Sage Publication Pvt. Ltd. Madras, 1990.
8. Reddy, A., Extension Education, Sre Laxmi press Bapatla, 1987.
9. Desai, Va A Study of Rural Economics System Approach, Himalya Publishing House, New Delhi, 1990
10. Mann, Peter, H., Methods of Social investigation, Basic Blackwell, 1985.

## PAPER II : FAMILY RESOURCES MANAGEMENT AND INTERIOR DESIGNING

03ABA107.2

### UNIT – I

1. Household Economics.
  - a) Wants – Definition, classification, characteristics and factors influencing want.
  - b) Laws of consumption – meaning, Limitations and application of factors
    - i) Laws of Diminishing Marginal utility.
    - ii) Laws of equiarginal utility / substitution
  - c) Family income –
    - i) Types of income
    - ii) Budget Meaning and steps in making a family budget.
    - iii) Saving and investment: importance, factors determining saving, characteristics of investment, and various saving and investment schemes.
    - iv) Household accounts.
  - d) Markets : Definition, types of markets and their advantage Super Market, departmental stores, Retail units, consumer cooperative store.
  - e) Consumer problems and various programme for their protection.

### UNIT – II

2. Home Management
  - a) Definition of Home, Management and Home Management
  - b) Obstacles to the Improvement of Management
  - c) Factors Motivating management – Values, Goals and Standards – Definition/Meaning, Types, Characteristics & interrelationship.
  - d) Management Process : Planning, controlling, evaluation-meaning, types, steps / process & limitation.
    - i) Decision making : Importance and steps involved in decision making process, Limitations.
3. Resources characteristics – Types, Characteristics, Classification and factors affecting resources.
4. Time and energy Management
  - i. Time norms, Peak load, work curve, leisure time, rest period.
  - ii. Steps in making time plan.
  - iii. Body Mechanics
  - iv. Work simplification – and class of change.
  - v. Fatigue – Types and ways to overcome fatigue.
5. Functional designing of Kitchen – types, work places (Center-concept) and storage principles.

### UNIT – III

6. House Designing

- a) The modern family and its housing needs.
- b) Effects of housing on family life and activities.
- c) Division of space on basis of activities.
- d) Factors governing the house plans : Selection of site, orientation, income, socio-economic status, stage of family-life cycle, occupation and activities of the family members, room orientation, grouping of rooms, functionalism, circulation within and between the rooms, flexibility etc.

### 7. Interior Decoration

- (a) Design : Meaning and types.
- (b) Objectives of interior decoration.
- (c) Principles of arts and their application in interior decoration balance, proportion, harmony, rhythm, emphasis.
- (d) Elements of arts and their application in interior decoration. Lines, texture, form, pattern and colour.
- (e) Furniture – selection and principles of arrangements.
- (f) Furnishing, selection of curtains, carpets and other furnishing material.

### References:

1. Dewet, K.K. & Verma : Elementary Economic Theory, s.Chand & Co. Delhi.
2. Ahuja, H.L. : Principles of Micro – economics, S. Chand & Co. Delhi.
3. agarwal A.N. : elementary Economics.
4. Groos, Irma H. : Management for Modern Families Sterling & Cradall E.M. Publishers (P) Ltd. Delhi.
5. Nickel, Paulen & Dorsey M. : Management in Family Living Johan Willey & Sons, New York.
6. Rutt, Anna Hong : Home Furnishing – willey Eastorn P.Ltd.N. Delhi.
7. Poet Losies, J. and Packett Marys Household Equipments John Willey & Sons and Packett Mary S.
8. Agan, Tessie : The house – Its Plans and Use – Oxford & IBH Publishing Co. New Delhi.
9. Deshpande R.S. : Modern Ideal Homes for India United Book Corpn. Poona.
10. Sleidal R.E. & Bratton E.C. works in Home.



## HOME SCIENCE PRACTICALS

03ABA107.3

Duration of Exam -3 hrs. Max. Marks 50

Hrs/Wk – 2 hrs/batch Min. Marks 18

### A. 1. Table Setting, Formal and Informal, Traditional style.

2. Arrangements for various occasions – Diwali, Birthday, New Year, Holi, any other.
3. Making of house plan (2 Bedroom) on Graph Paper.
4. Placement of furniture and colour scheme various room.
5. Floor decoration – Rangoli/Alpana.

### B. 1. Planning, preparation and presentation of communication aids

- i. Poster, Chart, Flash Cards, Pamphlets / Leaflets.
- ii. Bulletin Board Display.
- iii. Demonstration. iv. Role play/Dramatization

### Assessing any two of the following –

T.V. Programme, News Stories/Magazine article, Social and Commercial Advertisement.

## SOCIOLOGY

### Paper – I : FOUNDATION OF SOCIOLOGICAL THOUGHT

03ABA108.1

#### Unit – I

The Emergence of Sociology

Transition from social philosophy to Sociology – The Intellectual context.

#### UNIT – II

Enlightenment – The Social, Economic and Political forces.

The Pioneers : A. Comte: Positivism, H. Spencer: Social Darwinism.

#### Unit – III

The classical Tradition:

Emile Durkheim: Social Solidarity, social fact and suicide.

Max Weber: Social action, Bureaucracy and Religion.

Karl Marx: Class struggle, Dialectical materialism and Alienation.

#### Unit – IV

The Indigenous Tradition

Development of Sociological thought in India.

#### UNIT – V

Radha Kamal Mukerjee: Social Values, Social ecology.

G.S. Ghurye: Caste, Class and occupation, Social tension.

#### Essential Readings :

Aron, Raymond. 1967 (1982 reprint): Main Currents in Sociological thought (2 Volumes) Harmondsworth, Middlesex: Penguin Books.

Barnes, H.E. 1959: Introduction to the History of Sociology, Chicago: The University of Chicago Press.

Coser, Lewis A. 1979: Masters of Sociological Thought, New York: Harcourt

Brace Jovanovich.

Fletcher, Ronald, 1994: The Making of Sociology (2 Volumes) Jaipur: Rawat Publication.

Morrisson, Ken, 1995: Marx, Durkheim, Weber: Formation of Modern Social Thought London Sage.

Ritzer, George, 1996. Sociological Theory, New Delhi: Tata-McGraw Hill.

Singh, Yogendra, 1986: Indian Sociology: Social conditioning and emerging trends, New Delhi, Vistaar.

Zeitlin, Irving, 1998 (Indian Edition): Rethinking Sociology: A Critique of

**Paper – II : SOCIAL ANTHROPOLOGY**

03ABA108.2

**Unit – I**

Social Anthropology: Definition, Nature and Scope, Concept of Tribe, Tribe and Caste.

Culture: It's meaning theories of culture-Growth

**Unit – II**

Social Structure: Marriage, Family and Kinship.

**UNIT – III**

Magic and Religion in Tribal Society

Primitive Economic and Political System.

**Unit – IV**

Problems of Tribal People: Poverty, Illiteracy, Indebtedness, Land alienation

Tribal Movements: Colonial and Post-independence Period.

**UNIT – V**

Tribal Communities of Rajasthan: Bhil, Meenas and Garasiyas.

**Essential Readings :**

- Bose, M.K. (1967): Culture and Society in India, New Delhi: Asia Publishing House
- Dube, S.C. (1977): Tribal Heritage of India, New Delhi: Vikas
- Rao, M.S.A. (1979): Social Movements in India, Delhi: Manohar Singh, K.S. (1982): Tribal Movements in India Vol. – I and II Delhi: Manohar Singh, K.S. (1995): The Scheduled Tribes, New Delhi: Oxford University Press.
- Johan Beatie: Other culture.
- Majumdar and Madan: Introduction to Social Anthropology.
- Bohannan: Social Anthropology

**MATHEMATICS****PAPER I - ABSTRACT ALGEBRA**

03ABA109.1

**Unit - I ( Ring theory )**

Ring, Examples of Rings, Ring with unity, Zero divisors, Integral Domain and Fields, their examples and properties. Characteristic of a ring and intergral domain. Subrings, subfields, Prime filed, Ring homomorphism, Embedding of Rings, Field of quotients of an integral domain.

**UNIT – II**

Ideals and their properties. Principal ideal and principal ideal ring, Prime ideal, Maximal ideal. Ideals and Quotient rings, Euclidean rings, Unique Factorisation Domain, Polynomial rings, Remainder theorem, Factor theorem, Polynomials over the rational fields.

**Unit - II (Linear Algebra)**

Vector Spaces : Definition and examples of a 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 basis, invariance of the number of elements of a basis set, Dimension, existence of complimentary subspace of a subspace of a finite dimensional vector space, dimension of sums of subspaces, quotient space and its dimension.

**UNIT – III**

Linear transformations : Linear Transformations and their representation as matrices, the algebra of linear transformations, Sylvesten Law of Nullity.

**Unit - IV**

Change of basis, Dual space, Dual Basis, Bidual space, Adjoint of a linear transformation, Annihilator of a sub space.

**UNIT – V**

Eigenvalues and Eigenvectors, Similar matrices, equivalent matrices, Similarity of Linear transformations, Reduction to triangular form, Minimal Polynomial. Diagonalisation of Matrices.

**PAPER II – ANALYSIS**

03ABA109.2

**Unit - I (Metric Spaces)**

Real Number System as a complete Ordered Field.

The point set theory, Open and Closed sets, Limit point of a set, Neighbourhood, Bolzano-Weierstrass theorem, Heine-Borel theorem, Compactness, connectedness, Cantor's ternary set.

**UNIT – II**

Definition and example of a metric space, Diameter of a set, Bounded set, Open sphere, Interior point and Interior of a set, Derived and Closure of set, Closed set, Closed Sphere, Properties of Open and Closed sets, Boundary point of set.

**Unit - III**

Convergent and Cauchy sequences, Complete metric space, Cantor's Intersection theorem. Dense subset, Baire Category theorem.

Limit of a function, Continuous function, Theorem on necessary and sufficient conditions for continuity of a function, Uniform continuity, Contracting mapping, Banach Fixed Point theorem, Equivalent matrices, Compactness, Sequentially compactness, Totally Bounded space, Finite Intersection properties.

**Unit - IV (Complex Analysis)**

Complex Numbers as ordered pairs, Complex plane, Geometrical representation, Connected and compact sets, Curves and region in the complex plane, Statement of Jordan curves theorem, Extended complex plane and stereographic projection, Complex valued functions limits, Convergence, continuity,

**UNIT – V**

Differentiability in the extended plane, Analytic functions. Cauchy- Riemann equations (Cartesian and Polar forms).

Harmonic functions, Construction of an analytic function, Conformal mapping, Bilinear transformation and its properties, Fixed points, Cross ratio, Inverse point, Elementary maps.  $Z$ ,  $\sin Z$  and  $\log Z$

**OPTIONAL PAPERS III (ANY ONE OF THE FOLLOWING)****PAPER III****(A) – DISCRETE MATHEMATICS**

03ABA109.3

**UNIT - I**

Sets Relations and Functions: Binary Relations, Equivalence Relations and Partitions. Partial Order Relations and Lattices. Chains and Antichains. Pigeon Hole Principle. Principle of Inclusion and exclusion. Computability and Formal Languages: Ordered Sets, Languages. Phase Structure Grammars. Types of Grammars and Languages.

**UNIT - II**

Permutations. Combinations and Discrete Probability. Graphs and Planar Graphs: Basic Terminology. Multigraphs, Weighted Graphs. Paths and Circuits. Travelling Sales person problem, planar Graphs, Trees.

**UNIT - III**

Finite State Machines : Equivalent Machines, Finite State Machine as Language Recognizers, Computable functions. 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.

OR

**PAPER III**  
**(B) - OPTIMIZATION TECHNIQUES &  
STATISTICS**

**UNIT - I (OPTIMIZATION TECHNIQUES)**

Formulation and Graphical solution of Linear Programming Problem, Linear independence, Linear dependence, Basis, Dimensions, Convex set and its properties.

The theory of simplex method.

The Simplex algorithm and its application to simple linear programming problem, Big-M method, Two phase method.

**UNIT - II**

Concepts of Duality in linear programming.

Formation of dual problem Assignment problem, Transportation problems.

**UNIT - III**

Probability : Law of total and compound probability, Random variable, Expectation, Moments, Moment generating functions.

Binomial, Poission and Normal distribution.

OR

**PAPER III (C) - NUMERICAL ANALYSIS AND  
PROGRAMMING IN C THEORY**

03ABA109.5

**UNIT - I (Numerical Analysis)**

Difference operators and factorial notation, Relation between difference and derivatives, Difference of polynomial, Newton's formulae for forward and backward interpolation for equal intervals.

Divided difference, Relation between divided differences and simple differences, Newton's general interpolation formula, Lagrange's interpolation formula.

**UNIT - II**

Gauss central difference formula, Stirling and Bessel interpolation formulae, Inverse interpolation.

Numerical differentiation and integration, Trapezoidal rule, Simpson's 1/3, 3/8 rules, Weddle's rule, Solution of algebraic and transcendental equations, Bisection method, Regula-Falsi Method, Newton-Raphson method.

**UNIT - III (Programming in C)**

Programmer's Model of a computer. Algorithms, Flow charts, Data types, Arithmetic and input/output instructions, Decision control Structures.

Decision statements, Logical and conditional operators, Precedence, Associativity and priority of operators, Input and output statement, Decision making statement, Loop and branching, Case control structures, Functions, Recreations, Pre processors, Arrays, Puppeting of strings.

**Practical**

Duration : 2 hrs.                      Max.Marks:25 (Science)                      23 (Arts)

Note: Distribution of marks is as follows: Science Arts

A. Two programmes (one from each section)	8+8	8+8
B. Practical Record	03	03
C. Viva Voce	06	04

**SECTION - A****Program**

- (1) To calculate the roots of quadratic equation.
- (2) To solve equation by bisection method.
- (3) To solve equation by Newton-Raphson –method

- (4) To solve equation by Regula-falsi method.  
 (5) To solve equation by secant method.

## SECTION - B

### Program

- (1) To find interpolate value by Newton forward interpolation formula.  
 (2) To find interpolate value by Lagrange's interpolation formula.  
 (3) To evaluate integration by Trapezoidal rule.  
 (4) To evaluate integration by Simpson 1/3 rule.  
 (5) To evaluate integration by Simpson 3/8 rule

## PUBLIC ADMINISTRATION

### PAPER - I : COMPARATIVE ADMINISTRATIVE SYSTEMS

### OR

### PAPER - I - ADMINISTRATIVE THINKERS

### COMPARATIVE ADMINISTRATIVE SYSTEMS

03ABA110.1

#### Unit I

Comparative Administration: Concept, Nature, Scope and Significance, Features of Administration of Developing and Developed Societies, Contribution of F.W. Riggs. Salient Features of the Constitutions of U.K., U.S.A. and France.

#### UNIT II

A comparative study of Powers and Position of President of India and U.S.A., Parliamentary System in U.K, Presidential Systems in U.S.A. and France.

#### UNIT – III

Salient Features of Administrative system of U.K. , U.S.A., France and Nepal with particular reference to Central Administration and Nature and Role of Civil Service.

#### UNIT IV

Treasury and cabinet Secretariat in Great Britain ,Independent Regulatory Commissions in the U.S.A.

#### UNIT – V

French Council of State, Swedish Ombudsman, Panchayat System in Nepal.

#### Books Recommended :

1. Ogg and Zink : Modern Foreign Government
2. H.N.Agarwal : Administrative System in Nepal
3. Podiyal : Public Administration in Nepal
4. V.D. Mahajan : Modern Select Governments
5. Vishnu Bhagwan & : World Constitution Vidya Bhusan
6. B.L. Phadia : Vishva Ke Pramukh Samividhan(Hindi)
7. Iqbal Narain : Vishva Ke Samvidhan(Hindi)
8. Preeti Joshi : Vikas Prashasan (Hindi)
9. P.D. Sharma : Tulnatmak Rajniti (hindi)
10. Ravindra Sharma : Tulnatmak Prashashnik Vyavasthayen(Hindi)
11. Surendra Kataria : Tulanatmak Prashashanik Vyavasthayen (Hindi)
12. Ferrel Heady : Public Administration : A Comparative Perspective

OR

**PAPER - I - ADMINISTRATIVE THINKERS**

03ABA110.2

**UNIT I**

Administrative ideas of Kautilya, Henri Fayol and F.W. Taylor with particular to:

1. Kautilya
  - i) The Machinery of Government
  - ii) Law & Order Administration.
2. Henri Fayol
  - i) Managerial Activities.
  - ii) Principles of Organisation
3. F.W. Taylor:
  - i) The scientific Management Movement.
  - ii) Impact of Taylorism of Organisation Theory.

**UNIT II**

Administrative Ideas of Max Weber, Chester Bernard and Herbert Simon with special reference to:

1. Max Weber:
  - i) Ideal Typical Model of Bureaucracy
2. Chester Bernard :
  - i) Organisation a consciously coordinated cooperative system.
  - ii) The Contribution- Satisfaction Equilibrium
3. Herbert Simon :
  - i) Decision Making as Heart of Administration
  - ii) Stages in Decision Making Process

**UNIT III**

Administrative Ideas of Mc Gregor, F. W. Riggs, Rensis Likert and Jawahar Lal Nehru with special reference to:

1. Mc Gregor :
  - i) Theory 'X' and Theory 'Y'
  - ii) Conflict Management
2. F. W. Riggs:
  - i) Agraria - Transitia - Industria Model
  - ii) Fused - Prismatic - Diffracted Model

3. Rensis Likert :
  - i) Supervisory Styles
  - ii) Management Systems 1-4
4. Jawahar Lal Nehru:
  - i) Concept of Planning
  - ii) Decentralized Governance

**Core Readings :**

1. F.W. Taylor : Scientific Management
2. Chester Bernard : The Functions of the Executive
3. Tilest, Kempner and Mills : Management Thinkers.
4. Herbert Simon : Administrative Behaviour.
5. Simon : The New Science of Management Decisions
6. March and Simon : Organization
7. Riggs : Administration in Developing Countries
8. Riggs (Ed): Frontiers of Developing Countries
9. Weidner (Ed) : Development Administration in Asia (In items number 8 and 9 only the articles of Riggs have to be studied)
10. Chandra Hirawat : Prashasanik Vicharak (Hindi)
11. S.S Ali: Eminent Administrative Thinkers
12. S.R. Maheshwari : Administrative Thinkers.
13. Prasad and Prasad : Administrative Thinkers (In Hindi also)
14. J.L. Nehru : Discovery of India
15. R.N. Singh : Management Thinkers
16. G.S. Sudha : Prabandha Chintan Ka Itihas (In Hindi).
17. Surendra Katari a : Prasasnik Chintak (In Hindi).
18. R.C. Pollard: Developments in Management Thought.
19. P.D. Sharma : Management Thought and Thinkers.

**Subsidiary Readings :**

1. Nicolos P. Mouzells: Organisation and Bureaucracy.
2. Fermont E. Kast & James E- Rosenzweg : Organisation & Management
3. James March and Herbert Simon : Organizations.
4. Katz and Kahn : The Social Psychology of Organisation.
5. William G. Scott: Organization Theory- A Behavioural Analysis.
6. Billy Hodge and Herbert Johnson : Management or Organisation Behaviour
7. Riggs : The Ecology of Public Administration.
8. Riggs: Thailand : Modernisation of Bureaucratic Polity .

**PAPER - II - LOCAL ADMINISTRATION IN INDIA**

03ABA110.3

**Unit I**

Meaning, Nature, and Significance of Local-Self Government in modern state. Evolution of Local-Self Government in India.

**UNIT – II**

The Organisational Structure of Urban Local Self Government in India with special reference to the 74th Constitutional Amendment Act. Composition, Functions, Powers and Role of various kinds of Local Bodies, Local Administration of the Metropolitan Towns, Municipal Corporations and their problems of Autonomy and Accountability.

**UNIT III**

Theory and practice of Democratic Decentralization in India, Panchayati Raj Institutions- Zila Parishad, Panchayat Samiti, Village Panchayats and Gram Sabha: their Organisation and Functions in the context of 73rd Constitutional Amendment.

Personnel Administration in Rural and Urban Local Self Government -Recruitment, Classification, Promotion and Training. Problems of Local Self Government Employees and their Service Conditions.

**UNIT IV**

Financial Administration of Local Bodies in India, strengthening of Local Resources with special reference to role of State Finance Commission.

**UNIT – V**

Mechanism of control over local bodies at State level. The role of Directorate of Local Bodies and Panchayat and Development Department of State.

**Books Recommended :**

1. R.Argel : Municipal Government in India
2. S.R.Maheshwari : Local Government in India
3. M.V.Mathur : Panchayati Raj in Rajasthan
4. R.L. Khanna : Municipal Government and Administration in India
5. S.K. Bhogle : Local Government in India
6. H.C. Sharma : Bharat main Stahaniya Sasan (Hindi)
7. Ashok Sharma : Bharat Main Sthaniya Prashashan (Hindi)

**Subsidiary Readings**

1. S.C. Jain : Community Development and Panchayati Raj
2. Government of Rajasthan : Sadik Ali Report, 1964
3. Government of Rajasthan : Rajasthan Panchayats Act, 1994
4. Government of Rajasthan : Municipalities Act, 1959
5. Government of India : Diwakar Committee Report, 1963
6. Balwant Rai Mehta : Committee Report, 1957

**Journals**

1. Nagarlok, Delhi
2. Journal of Local Self Government, Bombay
3. Kurukshetra, New Delhi

**PSYCHOLOGY****PAPER – I (PSYCHOPATHOLOGY)**

03ABA111.1

**Unit – I**

Introduction of Psychopathology – The concept of normality and abnormality.

Signs and Symptoms of Mental illness – Delusions; Hallucinations, Obsessions, Compulsions etc.

**UNIT – II**

Psychological Models of psychopathology – Psychodynamic, Behavioural, Cognitive and Existential. Psychological Assessment of Psychopathology: Diagnostic tests, Rating Scales, History taking interview; Projective tests.

**Unit – III**

Anxiety Disorders – Panic disorder and Agoraphobia, Specific Phobias, Social Phobia; Obsessive Compulsive disorder, Generalised Anxiety disorder.

Somato Form Disorder and Dissociative disorders.

Mood Disorder – Manic episode, Depressive episode, bipolar affective disorder, Dysthymia.

Schizophrenia – Delusional disorder, Brief Psychotic disorder.

**Unit-IV**

Disorder due to psychoactive substance use – Alcohol and drug dependence.

Personality Disorder – Paranoid, Schizoid, Dissociative, Impulsive, Borderline.

**UNIT – V**

Anxious avoidance and Dependent Personality.

Stress disorders – Stress due to normal calamities like earthquake, Storm etc. and life events.

Mental retardation.

**Readings :**

Lamm, A. (1997). Introduction to psychopathology, N.Y.: Sage

Buss, A.H. (1999). Psychopathology. N.Y. John Wiley.

Sarson and Sarson Abnormal Psychology PHP

Carson R. and Butcher J.N. and Mineka, S. Abnormal Psychology and Modern Life. Pearson Education Publication.



**PAPER – II (ORGANIZATIONAL BEHAVIOUR)**

03ABA111.2.

**Unit – I**

Historical context of organizational behaviour

Contributions of Taylor, Weber, Fayoll, Hawthorn studies. Definition, Challenges, Scope and Significance of Organizational Behaviour, Perspective of Understanding

**UNIT – II**

Organizational Behaviour – Open system approaches, Human relation perspective, Socio-technical approach, Developing an organizational behaviour model responsive to Indian realities. Organizational Culture and Climate.

**Unit – III**

Job satisfaction : Theories and factors, factors Influencing job satisfaction and ways to improve job satisfaction. Motivation – Theories and skills involved in motivating workers. MBO (Management By Objectives) Behaviour modification and employee involvement programs. Employee training – Need, importance and methods.

**UNIT – IV**

Leadership and Communication – Nature and types of leaders, Behavioural and contingency theories of leadership. Contemporary issues in leadership. Leadership and power in action, skills involved in managing politicking.

Communication – Model, Sources, Types, Directions and network of communication, Barriers and Distortions of communication, Cross cultural communication, skills involved in communication and listening, Communication and decision making, various models of decision making.

**Unit – V**

Organizational change and Development – Nature, Force and Approaches to change management. Organizational development Intervention techniques, Cultural issues in change and development, Skills in managing change at individual level.

Conflict negotiation and stress in organization – Nature, Sources and techniques of managing conflict in organization, Conflict and Negotiation - strategies, Work stress – Sources and Techniques and skills involved in managing stress, Role of unions, social welfare schemes for employees.

**Readings :**

Robbins, SP (2000). Organisational behaviour : Concepts, controversies and applications. VII Edition, New Delhi: Prentice Hall of India.

Pfeffer, J.(1994). Competitive advantage through people: Unleashing the power of work force. Boston: Havard Business School Press.

Dunnette M.D. & Hough, L.M. (1992). Handbook of industrial and organizational psychology, (2nd Edition) Palo Alto: Consulting Psychology Press.

Cummings, L.L. & Staw, B.M. (eds). (1999). Research in organizational behaviour. Greenwich, CT: JAI Press.

**PSYCHOLOGY – PRACTICALS**

03ABA111.3

**1. Short Projects**

- Take up a short project (individually or jointly) on the issue of their interest under the supervision of the teacher.
- Follow a methodological approach (experimental / survey / observation / use of secondary data).
- Write a report.

**2. Developing case account**

- Choose atleast 3 cases with different problems.
- Study, making relevant observation, reporting his speech (verbal/non-verbal) and conduct interviews, obtain background information of factors leading to present problem
- Analysis & drawing valid inferences.

**3. Field visit to psychologically relevant settings eg.**

- Hospitals
- Schools
- Old age homes
- Clinics
- N.G.O.
- Industries

Take down notes and submit the report based on the field visit.

Note : Teachers may evolve methods of practicals examination

- May ask students to present their case.
- Extensive Viva of the students.

## ENVIRONMENTAL RISK AND IMPACT ASSESSMENT

Course/Paper : 03ABA112.1

**Introduction :** Defining environmental risk in different perspectives.

**Principles and procedures :** Nature and purpose of environmental impact assessment (EIA). Characteristics of big project. Current issues in EIA. Worldwide spread of EIA. EIA regulations in India. Risk Assessment v/s Environmental Impact Assessment. Life cycles Assessment. Strategic Environmental Assessment.

**Process and Methods of EIA :** Stages, Scoping, Alternatives, Impact Identification, Establishing the Environmental base line. Impact prediction, evaluation and mitigation. Criteria and standards for assessing significant Impact. Cost- Benefit Analysis and valuation of Environmental Impacts. Public Participation, presentation and review. EIA monitoring and auditing.

**Practice :** Air quality Assessment; Water Impact Assessment; Social Impact Assessment; Ecological Impact Assessment; Landscape and visual Impact Assessment; Environmental Impact of surface and underground mining of metals, minerals and fossil fuels. Cumulative Effects Assessment.

Issues and problems in environmental assessment.

### Suggested readings:

Glasson J., Therivel R., Chadwick. A., 1994, Introduction to environmental impact assessment- Principles and procedures, process, Practice and prospects. Research Press, Delhi.

Morris. P. & Therivel. R., 2001, Methods of environmental impact assessment, 2nd Ed. Spon Press, New York, With a chapter on GIS and EIA by A.R. Bachiller & G. Wood, p. 381-401.

Petts Judith, 1999, Handbook of environmental impact assessment. Vol. 1, Blackwell Science.

## ENVIRONMENTAL POLLUTION AND HEALTH

Course/Paper : 03ABA112.2.

Water sources, quality and standards. Water purification and surveillance of drinking water quality. Infections and diseases spread by contaminated water.

**Air pollution:** composition and sources. Air quality monitoring. National and international standards for monitoring air quality. Diseases caused by air pollution. Quality of indoor air and its effect on health. Ventilation: standards, methods and health hazards. Radiation pollution: sources, biological effects and protection. Meteorological environment monitoring. Air temperature and biological effects.

**Noise pollution:** source and standards. Noise pollution: health hazard and protective measures.

Housing standard and effect on health. Methods of disposal of solid waste. Diseases related to soil pollution. Problems and methods of excreta disposal.

Arthropods of medical importance. Vector-borne diseases: transmission and control. Impact of fleas, ticks and mites on health. Zoonotic diseases and their prevention and control. Hospital environment in the context of health and disease.

**Pollution control in India:** Government obligation, mechanism and legislation in the context of public health.

### Suggested readings:

Leslie Collier, Balows Albert and Sussman Max, Topley and Wilson's Microbiology and Microbial infections. Oxford University Press.

Murray J.F. and Nadel. J.A., 2000, Text book of respiratory medicine, 3rd Edn., W.B. Saunders & Co.

Park. J.E. and Park. K., 1994, Text book of preventive and social medicine, Banarsi Das & Bhanot, Jabalpur.

## GEOLOGY PALAEOONTOLOGY

Course/Paper:03ABA113.1

### UNIT – I

Definition and sub-disciplines. Process of fossilization, preservation. Use of fossils. Brief concept of species. Ecosystem. Adaptation and functional morphology.

### UNIT – II

Methods of description and illustration of fossils; taxonomic categories and codes of systematic nomenclature. Theory of evolution.

Fossil records, modes, rates and patterns of evolution. Origin, migration and extinction of Species. Applications of palaeontologic data in palaeoecology, evolution, stratigraphy, palaeoceanography and palaeogeographic reconstructions.

### UNIT – III

Invertebrate Palaeontology: Morphology, geological history, classification, evolutionary trends, ecology, biogeography and stratigraphic distribution of the following phyla: Brachiopoda, Mollusca (Class Bivalvia, Gastropoda and Cephalopoda), Echinodermata (Class Echinoidea), Arthropoda (Class Trilobita), Hemichordata (Class Graptoloidea), Cnidaria (Class Anthozoa), Bryozoa.

### UNIT – IV

Vertebrate Palaeontology. Stratigraphic distribution of vertebrates. Jawless and jawed fishes. Amphibians. Dinosaurs. Cenozoic diversification of mammals. Evolutionary trends in Equidae, Proboscidae and Hominidae

### UNIT – V

Palaeobotany: Fossil record of land plants and their stratigraphic distribution. Gondwana and Deccan Intertrappean Flora.

Micropalaeontology: Microfossils and their applications. Morphology, ecology and stratigraphic distribution of foraminifera and radiolaria

## IGNEOUS AND METAMORPHIC PETROLOGY

Course/Paper:03ABA113.2

### UNIT – I

Rock associations in time and space. Concept of rock series, system, phase and component. Basic principles of equilibrium thermodynamics. Phase rule and one- and two-component systems. Systems with more than two components. Effect of fluids on melting behaviour.

### UNIT – II

Pressure-temperature variation with depth; magma generation and physical properties of magmas. Crystallisation of various types of magmas and Bowen's reaction series. Partial melting, magmatic differentiation and assimilation.

### UNIT – III

Classification and nomenclature of igneous rocks. Textures and structures of igneous rocks. Igneous structures and field relationships. Mafic rocks: layered intrusions, flood basalts, MOR and intraplate basalts. Subduction related igneous activity. Granitoids; Alkaline rocks; Anorthosites; Ophiolites. Composition of meteorites.

### UNIT – IV

Types of metamorphism: regional, contact, ductile and brittle shear zone, impact, and ocean-floor metamorphism. Metamorphic zones and facies concept. Nomenclature of metamorphic rocks and index minerals. Isograds.

Structures and textures of metamorphic rocks. Relationship between metamorphism and deformation.

### UNIT – V

Equilibrium and non-equilibrium reactions with or without fluids during metamorphism. Metasomatism. Common chemographic diagrams for metamorphic rocks. Metamorphism of mafic rocks, pelitic sediments and calcareous rocks.

## EDUCATION

### TEACHING LEARNING PROCESS

Course/Paper:03ABA114.1

#### Unit 1 – Teaching and Learning

- Modalities of teaching: Training, Instruction, Conditioning, Indoctrination and Educative teaching.
- Concept of Learning, Types of Learning.
- Relation between Teaching and Learning.
- Levels of Learning and Teaching: Memory, Understanding and retention.

#### Unit 2 – Teaching Effectiveness

- Concept of teaching effectiveness.
- Variables involved in teaching effectiveness.
- Techniques for teaching effectiveness.
- Assessment of teaching effectiveness.

#### Unit 3 – Teaching Strategies

- Concept of teaching strategies.
- Difference between Teaching Strategies and Teaching Tactics.
- Mastery learning, Personalized System of Instruction, PIM, CAI.
- Simulation and Gaming.

#### Unit 4 – Methods of Teaching

- Telling method, Lecture method.
- Discussion, Demonstration, Brain Storming.
- Assignment, Project method.
- Supervised study.

#### Unit 5 – Technological Aids in Teaching–Learning

- Teaching Aids: Nature, Characteristics, advantages and disadvantages and limitations.
- Projected and Non–Projected aids.
- Audio–Visual appliances.
- Computers and internet.

#### References

1. Aggarwal J.C. Essentials of Educational Technology, Vikas Publishing house, New Delhi.
2. Kumar K.L. (1996) Educational Technology, New Age International Pvt. Ltd
3. Kulkarni, S. S. (1986), Introduction to Educational Technology, New Delhi: Oxford–IBH Pub. Co
4. Mattoo, B. K., New Teaching Technology for Elementary School Teachers, New Delhi: Federation of Management of Educational Institutions.
5. Murunalini, T. (1997), Education and Electronic Media, New Delhi: ABH Publishing Corporation.
6. Sharma, R. A. (2001), Technological Foundations of Education, Meerut: R. Lal Book Depot.

## GUIDANCE AND COUNSELING

Course/Paper:03ABA114.2

#### Unit 1 – The concept of Guidance

- Meaning, nature and scope of guidance.
- Philosophical, Psychological and Sociological bases of guidance.
- Need and importance of educational guidance services in schools.

#### Unit 2 – Vocational Guidance

- Purpose and functions of vocational guidance.
- Relation between educational and vocational guidance.
- Relation between vocational guidance and work education.

#### Unit 3 – Educational Guidance

- Basic data necessary for educational guidance.
- Knowledge about pupils' abilities, aptitudes and interests.
- Construction, administration and interpretations of Cumulative record cards, Individual inventories.

#### Unit 4 – The Concept of Counseling

- Meaning, nature and scope of Counseling.
- Different types of counseling.
- Various steps and techniques of Counseling.

#### Unit 5 – Mental Health

- Concept of Mental health and hygiene.
- Causes and symptoms of maladjustment.
- Adjustment Mechanisms.

#### References

1. Bengalee, M. (1984), Guidance and Counseling, Bombay: Seth Publishers.
2. Crow and Crow (1968), Introduction to Guidance, 2nd Ed., New Delhi: Earasia Publishing Co.
3. Jayaswal, Monica (1968), Guidance and Counseling, Lucknow: Prakashan Kendra.
4. Dave Indn. (1984), The Basic Essential of Counseling, New Delhi: Sterling Publishers.
5. Nugent, Frank A. (1990), An Introduction to Profession of Counseling, Columbus: Merrill Publishing Co.
6. Rao, S. N. (1992), Counseling and Guidance, New Delhi: Tata McGraw Hill.
7. Mehdi, B. C. (1978), Guidance in Schools, 3rd Ed. New Delhi: NCERT.
8. Bennet, M. E. (1963), Guidance and Counseling in Groups, New York: McGraw Hill.
9. Mehta, P.H. and Wadia, K. A. (1972), Handbook for Counselors, New Delhi: NCERT.
10. Stefflire, B. (1972), Theories of Counseling, (Ed), New York, McGraw Hill. B "Teaching social studies in high schools", Health & Co