

## **B.A./B.Sc. Geography**

Courses for B.A./B.Sc. Part I, Part II and Part III Degree examinations in Geography shall be effective from the examinations of 2008, 2009 and 2010 respectively.

The three-year undergraduate examinations in Geography will be conducted in three parts as under:

- Part I : B.A./B.Sc. Part I Examination,
- Part II : B.A./B.Sc. Part II Examination, and
- Part III : B.A./B.Sc. Part III Examination

The B.A./B.Sc. Part I and Part II examinations in Geography will comprise two theory papers each and one practical examination each and B.A./B.Sc. Part III will comprise three theory papers and one practical examination. Each theory paper will be of three hours duration and will carry 50 marks as the maximum marks. The practical examination will be of six hours duration (in two parts of three hours duration) and will carry 50 marks as the maximum marks for B.A./B.Sc. Part I and Part II and 75 marks for B.A./B.Sc. Part III. The practical examination will be conducted by two internal and one external examiners. It is obligatory to pass in the aggregate marks of the theory examination and in the practical examinations separately.

The details of theory papers and practical examination courses are given below:

### **B.A./B.Sc. Part I**

- Paper I : Physical Geography, 50 marks (3 hours duration)
- Paper II : Human Geography, 50 marks (3 hours duration)
- Practical: 50 marks (6 hours duration in two parts)

### **B.A./B.Sc. Part II**

- Paper I: Regional Geography of World, 50 marks (3 hours duration)
- Paper II: Geography of India, 50 marks (3 hours duration)
- Practical: 50 marks (6 hours duration in two parts)

### **B.A./B.Sc. Part III**

- Paper I: History of Geographical Thought, 50 marks (3 hours duration)
- Paper II: Earths Dynamic System, 50 marks (3 hours duration)
- Paper III: Geography of Population and Settlements, 50 marks (3 hours duration)
- Practical: 75 marks

### **B.A./B.Sc. Part I Geography**

The examination shall comprise two theory papers and one practical examination. The division of marks shall be as follows:

- Paper I: 50 marks (3 hours duration)
- Paper II: 50 marks (3 hours duration)
- Practical: 50 marks (6 hours duration in two parts)

Candidates are required to pass separately both in theory and in practical examinations. Practical examination shall be conducted by two internal and one external examiners.

### **Paper 1: PHYSICAL GEOGRAPHY**

(Time: 3 hours, MM 50)

The question paper will consist of 9 questions. The candidate will be required to attempt five questions in all. Question nos. 1 will be compulsory and short note type consisting of two topics from each units of which only five are to attempted. The remaining eight questions will be from the four units- two from each unit. The candidate will be required to attempt one question from each unit.

#### **UNIT I**

Meaning, scope and development of physical geography; origin of the earth – Theories of Kant, Laplace, Chamberlin, James Jeans; geological history of earth; interior of the earth; rocks; isostasy, earth's movements - endogenetic and exogenetic, volcanic and earthquakes; weathering; drainage pattern; landforms formed by running water, wind and glacier.

#### **UNIT II**

Structure and composition of the atmosphere; insolation; temperature; pressure belts and winds; planetary and local winds; monsoons; humidity and rainfall; Koeppen & Thonhwaite classification of world climates; Major climatic types - equatorial, monsoon, Mediterranean, west European and Savanna types.

### **UNIT III**

Depth zones of the oceans continental shelf, continental slope, deep sea plains and ocean deeps; bottom relief of Atlantic and Indian Oceans; salinity; tides; ocean currents; coral reefs.

### **UNIT IV**

Abiotic and biotic components of the biosphere; characteristics and types of ecosystem; biosphere as an ecosystem; biotic succession; Man and biosphere, distribution and dispersal of plants; biome types -equatorial rainforest, monsoon, savanna and temperate grassland biomes.

### **BOOKS RECOMMENDED:**

1. A.Holmes and D.L.Holmes: Principles of Physical Geology, ELBS.
2. A.N.Strahler and A.H.Strahler: Modern Physical Geography,
3. John Wiley and Sons, New York.
4. F.Press and R.Siever: The Earth, W. H. Freeman and Co., San Francisco.
5. M.J.Bradshaw et.al.: The Earth's Changing Surface, ELBS.
6. J.S.Gardner: Physical Geography, Harper Row and Co.
7. R.H.Bryant: Physical Geography, W.H.Allen and Co.
8. Savindra Singh: Physical Geography, Prayag Pustak Bhawan, Allahabad.
9. Savindra Singh: Bhautik Bhoogol, Vasundhara Prakashan ,Gorakhpur
10. G.T.Trewartha and L.A.Horn: An Introduction to Climate, McGraw Hill and Co.
11. H.J.Critchfield: General Climatology, Prentice Hall of India, New Delhi.
12. D.S. Lal: Climatology, Sharda Pustak Bhawan, Allahabad.
13. Savindra Singh: Climatology, Prayag Pustak Bhawan, Allahabad
14. M.G.Gross: Oceanography, A View of the Earth, McGraw Hill and Co.
15. R.C.Sharma and M.Vatal: Oceanography for Geographers, Chaitanya Publishing House, Allahabad.
16. Healey Cox and Moors: Biogeography, Blackwell and Co.
17. Wytts: Principles of Biogeography, McGraw Hill & Co.
18. Savindra Singh: Environmental Geography, Prayag Pustak Bhawan, Allahabad.
19. Savindra Singh: Paryavarana Bhoogol , Prayag Pustak Bhawan, Allahabad
20. Savindra Singh: Jalvayu Vigyan , Prayag Pustak Bhawan, Allahabad
21. Daya Shankar Lal: Jalvayu Vigyan avam Samudra Vigyan, Sharda Pustak Bhawan, Allahabad

## **PAPER II: HUMAN GEOGRAPHY**

Time: 3 hours

MM: 50

The question paper will consist of 9 questions .The candidate will be required to attempt five questions in all. Question nos. 1 will be compulsory and short note type consisting of two topics from each unit of which only five are to attempt. The remaining eight questions will be from the four units- two from each unit. The candidate will be required to attempt one question from each unit.

### **UNIT I**

Nature, scope and development of human geography; Branches of human geography; man and environment relationship - determinism, possibilism Human ecology of Mts & Neodetermina deserts and probalism; approaches - ecological, spatial, behavioural and welfare.

### **UNIT II**

Human adaptation to the environment; Population growth, distribution, migration problems and planning; races and tribes; rural and urban settlements –functional types, patterns and morphology.

### UNIT III

Types of farming; agricultural regions of the world; distribution and production of iron ore, coal, petroleum and hydroelectricity; location and development of iron and steel, cotton textile and chemical industry; fishing; major oceanic and rail routes; pattern of world trade.

### UNIT IV

Cultural and social processes - social interactions, social groups and organization; diffusion of cultures; cultural hearths; major cultural realms, major religions of the world.

#### Books Recommended:

1. C.W.Hammond : Elements of Human Geography, Allen and Unwin.
2. G.J.Fielding : Geography as a Social Science, Harper and Row, New York.
3. Majid, Hussain : Human Geography, Rawat Publications, Jaipur.
4. M.Chisolm : Human Geography : Evolution or Revolution, Penguin Series in Geography.
5. R.Knowles and J.Wareing : Economic and Social Geography, W.H.Allen and Co.
6. P.Hagget : Geography : A modern Synthesis, Harper Row and Co.
7. Kashinath Singh evm Jagdish Singh : Arthik Bhoogol ke Mool Tatwa,Gyanodaya Prakashan ,Gorakhpur.
8. B.P.Rao evm V.K.Srivastava : Arthik Bhoogol ke Mool Tatwa,Vasundhara Prakashan , Gorakhpur.
9. Majid Husain :Manav Bhoogol , Rawat Prakashan ,Jaipur.
10. B.P.Rao evm V.K.Srivastava : Arthik Bhoogol avam Manav Bhoogol,Vasundhara Prakashan ,Gorakhpur.
11. Wegner and Mikel : Readings in Cultural Geography.
12. Ram Chandra Tiwari: Adhivas Bhoogol ,Prayag Pustak Bhawan,Allahabad
13. Edward E.Bergman: Human Geography; Culture Connections and Landscape, Prentice Hall, N.J.1995.
14. J.L.Fellman: Human Geography-Landscape of Human Activities, Brown and Benchman Pub.U.S.A.1997.
15. B.M.Mishra: Agricultural Management & Planning in India Policy Issues,Chug Publications,Allahabad
16. B.N.Mishra: Agricultural Management & Planning in India-Problems,Chug Publication , Allahabad.
17. Can Michael: New Patterns: Process and Change in Human Geography, Nelson, 1997.

#### PRACTICALS:

The division of marks in the practicals shall be as follows:

Test in cartographic techniques (Section A and B): 30 marks

Test in field work (Section C): 10 marks.

Evaluation of sessional record work: 05 marks.

Viva-voce test: 05marks

*Note:* Test in Cartographic techniques will be of three hours duration. The candidate has to attempt 3 questions selecting atleast one question from each section. Fieldwork will be of three hours duration.

#### Section A: Analysis of Geographical Data - 10 marks

1. Classification of spatial data; geographical data matrices; concept of measurement scales -- nominal, ordinal, interval and ratio; concept & Types of variable independent deepens discrete continents map scales - representative fraction (RF)
2. Statistical methods: (i) frequency distribution - class intervals, frequency, frequency density, cumulative and relative frequency; (ii) measure of central tendencies; mean, weighted mean, median, mode; (iii) measure of dispersion -- range, quartile, mean deviation, standard deviation, variance and coefficient of variation.

3. Transformation and combination of data; linear scale, standard score ,Z score rank order, Range, standardization.

**Section B: Graphical Representation - 10 marks**

1. Scales and coordinate systems: arithmetic and logarithmic scale, Cartesian coordinates, polar coordinates.
2. Line graphs, circular graph, logarithmic graphs and scatter graphs; compound line and bar graphs, divided circles, divided rectangles and triangular graphs.
3. Histograms, frequency curves, pyramids, block piles, hythergraph and climograph.

**Section C: Field Work --- Surveying and Mapping - 10 marks**

1. Plane Table Survey:
  - (i) Preparation of map by radial and intersection methods
  - (ii) Resection (Three-point problem)
    - (a) Tracing paper or mechanical method, (b) Geometrical method, (c) Trial and error method (inside and outside the triangle)
2. Map Scales –RF, construction of plain, comparative diagonal scale
3. Prismatic Compass Survey:
  - (i) Preparation of map by open traverse (field book)
  - (ii) Preparation of map by closed traverse (field book, correction of bearing and removal of closing error)

**Books Recommended:**

1. S. Gregory: Statistical Methods and Geographer, Longmans and Co.Londan
2. M.R. Spingel: Theory and Problems of Statistics, McGraw Hill International.
3. N.M. Downie and R.W.Heath: Basic Statistical Methods, Harper Row and Co.
4. F.F. Goxton and L.J.Cowden: Applied General Statistics, Prentice Hall of India.
5. T.P. Kanitkar and S.V.Kulkarni: Surveying and Levelling, Part I, Ava Prakashan.
6. B.C. Punamia: Surveying, Standard Book House.
7. R.L. Singh: Prayogatmak Bhoogol ke Tatwa ,Tara Publications,Varanasi.
8. R.C. Tiwari evm S.Tripathi: Abhinav Prayogatmak Bhoogol, Prayag Pustak Bhawan, Allahabad
9. R.L. Singh: Elements of Practical Geography, Kalyani Publication, New Delhi
10. A.K. Sarkar: Practical Geography-A Systematic Approach, Orient Longman, Kolkata 1997.
11. G.R.P. Lawrence: Cartographic Methods, Methuen, London, 1968.