

Indira Gandhi University, Meerpur- Rewari

(A State University Established under Haryana Act No. 29 of 2013)



DEPARTMENT OF GEOGRAPHY

Syllabi and Scheme of Examination of Geography in B.A (Pass Course)
w.e.f. the academic session 2020-21

PREFEACE

The papers of Geography are introduced in the Bachelor of Arts (B.A.) which is a three-year full time degree course consisting of six semesters. Each semester shall consist of one theory and one practical paper of geography. Each course of these semesters will carry 100 marks of which 15 marks will be for internal assessment and 60 marks for theory paper. The marks of practical paper are 25.

The syllabus of the papers (courses) has been divided into four units. There shall be nine questions in all. The first question would be compulsory, shall be short answer type. It would carry six short questions from the entire syllabus. The candidate will be required to attempt all questions. Each short answer type question would carry two marks ($06 \times 2 = 12$ marks). There shall be two questions from each unit and the candidate shall be required to attempt one question from each unit. Each unit shall carry 12 marks ($12 \times 4 = 48$ Marks) The duration of the examination shall be three hours. The evaluation pattern for these examinations shall be as per the University regulations. The medium of instruction shall be both English and Hindi.

Note: The break-up of marks & pattern for Internal Assessment & attendance component shall be as per university rules.

Indira Gandhi University, Meerpur- Rewari

B.A. Geography (Pass Course) with effect from the Academic Session 2020-21

B.A. FIRST YEAR - Semester-I w.e.f. 2020-21

Sr. No	Course Code	Nomenclature of the course	Theory	Internal Assessment	Practical/ Lab	Total
I	UG-GEO 101	Geography of India	60	15	-	75
II	UG-GEO 102	Maps and scales (Practical)	-	-	25	25

Semester-II

III	UG-GEO 103	Physical Geography-I	60	15	-	75
IV	UG-GEO 104	Representation of Physical Features (Practical)	-	-	25	25

B.A. SECOND YEAR- Semester-III w.e.f. 2021-22

V	UG-GEO 201	Physical Geography-II	60	15	-	75
VI	UG-GEO 202	Representation of Climatic Data and Survey (Practical)	-	-	25	25

Semester-IV

VII	UG-GEO 203	Human Geography	60	15	-	75
VIII	UG-GEO 204	Maps projections and Survey (Practical)	-	-	25	25

B.A. THIRD YEAR- Semester-V w.e.f. 2022-23

IX	UG-GEO 301	Economic Geography	60	15	-	75
X	UG-GEO 302	Distribution Maps, Diagrams and Survey (Practical)	-	-	25	25

Semester-VI

XI	UG-GEO 303	Introduction to Remote Sensing, GIS and Quantitative Methods	60	15	-	75
XII	UG-GEO 304	Introduction to Remote Sensing and Field Survey Report (Practical)	-	-	25	25

**B.A. GEOGRAPHY (PASS COURSE) - FIRST YEAR
(FIRST SEMESTER)**

Learning Outcomes and Objectives

1. To familiarize the students with the physiography of India and Haryana.
2. To provide the students an acquaintance with the demographic component of India and Haryana.
3. The aim of this course is to introduce the students to the economy and various types of resources in India and Haryana.

**B.A (GEOGRAPHY) – FIRST SEMESTER
GEOGRAPHY OF INDIA
UG – GEO 101**

**Maximum Marks: 75
External Assessment Marks: 60
Internal Assessment Marks: 15
Time: 3 Hours**

Note: There shall be nine questions in all. The candidates have to attempt five questions including Question- 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition, the candidates have to attempt four more questions selecting at least one from each unit. All questions carry equal marks.

UNIT- I

1. India: locational setting; relief and drainage systems.
2. Climate of India, climatic regions, drainage system of India, soils, natural vegetation, natural hazards- drought and flood.

UNIT – II

3. Population: distribution, density and growth.
4. Literacy, age & sex composition and levels of urbanization, migration pattern in India

UNIT- III

5. Distribution and production of major crops; Rice, Wheat, Cotton and Tea; Irrigation, Green Revolution and problems of Indian Agriculture.
6. Industries- iron and steel, cotton textile, sugar and petrochemical industries and industrial regions of India.

UNIT-IV (HARYANA)

7. Introduction to physiography and soil degradation.
8. Demographic aspects – growth of population, literacy, sex ratio and urbanization.
9. Agriculture, Industry and Transport.

Suggested Readings

1. Deshpande D: India – A Regional Interpretation, Northern Book Depot, New Delhi, 1992.
2. Singh, Gopal: Geography of India, Atma Ram and Sons, 2006.
3. Shafi, M: Geography of South Asia, McMillan and Company, Calcutta,2000.
4. Singh, R L (ed): India: A Regional Geography, National Geographical Society, India, Varanasi,1971.
5. Singh, Surender and Saroha, Jitender: Geography of India, Access Publishing India Pvt. Ltd., New Delhi,2014.
6. Spate, D H K and ATA Learmonth: Indian and Pakistan – Land, People and Economy, Methnen and Company, London,1967.
7. Tiwari, R.C. (2007) Geography of India, Prayag Pustak Bhawan, Allahabad.
8. Sharma, T.C. (2013) Economic Geography of India, Rawat Publication, Jaipur.

**B.A (GEOGRAPHY) – FIRST SEMESTER
MAPS AND SCALES (PRACTICAL)
UG- GEO 102**

Distribution of Marks

Exercises=15

Record File=05

Viva-voce=05

Maximum Marks: 25

Time: 3 Hour

Note: There will be four questions in all and candidate has to attempt three exercises.

1.	Introduction to Cartography	
2.	Maps and their types	
3.	Map Scales	Exercises
a.	Methods of Expressing a scale	2
b.	Conversion of Statement of Scale into R.F. and vice –versa.	1
c.	Plain Scale (Km and mile)	2
d.	Comparative Scale	4
e.	Diagonal Scale	1
4.	Measurement of Distances and Areas on Maps	2
5.	Enlargement and Reduction of Maps	2

Suggested Readings

1. F.J. Monkhouse and H.R. Wilkinson (1972) Maps and Diagrams, Methuen and Co. Ltd., London
2. L.R. Singh and Raghuvander Singh (1973), Map Work and Practical Geography, Central Book Depot, Allahabad.
3. R.I. Singh and P.K. Dutt (1968), Elements of Practical Geography, Students Friends, Allahabad.
4. Singh Gopal (2004) 4th edition, Map Work and Practical Geography, Viksa Publication House.

B.A. GEOGRAPHY (PASS COURSE) - SECOND SEMESTER

Learning Outcomes and Objectives:

1. To enable students understand the processes of endogenetic and exogenetic movements of the earth.
2. To introduce the students to the concept of cycle of erosion and various agents of gradation shaping the earth.

B.A. GEOGRAPHY - SECOND SEMESTER PHYSICAL GEOGRAPHY-I UG - GEO 103

Maximum Marks: 75
External Assessment Marks: 60
Internal Assessment Marks: 15
Time: 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five questions including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition, the candidates have to attempt four more questions selecting at least one from each unit. All questions carry equal marks.

UNIT- I

1. Definition, nature and scope of Physical Geography.
2. Interior structure of the earth, geological time scale and rocks.

UNIT- II

3. Earth movements; orogenic and epeirogenic, earthquake and volcanoes.
4. Theory of Isostasy, Wegner's theory of continental drift and Plate tectonic theory.

UNIT- III

5. Weathering: causes and its types.
6. Mass-movements: causes, types and impacts.

UNIT- IV

7. Concept of cycle of erosion; cycle of erosion by W.M. Davis
8. Processes and land forms of Wind, River, Underground water, Glacier and Sea waves.

Suggested Readings

1. Sharma H.S. Perspective in Geomorphology, Concept, New Delhi 1980.
2. Singh Savinder, Geomorphology, Prayag Publication, Allahabad 1998.
3. Singh Savinder, Physical Geography Prayag Publication, Allahabad, 1998.
4. Sparks B.W. Geomorphology, Jojngman, London, 1960.
5. Thornbury W.D. 1969 Principles of Geomorphology, New York, John Wiley & Sons.
6. Gautam, A (2010): Bhautik Bhugol, Rastogi Publications, Meerut.
7. Tikkaa, R.N. (1989): Bhautik Bhugol ka Swaroop, Kedarnath Ram Nath, Meerut.
8. Singh, S (2009) Bhautik Bhugol ka Swaroop, Prayag Pustak, Allahabad.

B.A. GEOGRAPHY - SECOND SEMESTER
REPRESENTATION OF PHYSICAL FEATURES (PRACTICAL)
UG - GEO 104

Distribution of Marks
Exercises=15
Record File=05
Viva-voce=05

Maximum Marks: 25
Time: 3 Hour

Note: There will be four questions in all and candidate has to attempt three exercises.

	Exercises
1. Introduction to Topographical Sheets India and adjacent countries a. Degree Sheet b. Half Degree Sheet c. Quarter Degree Sheet d. Series of Scale e. Conventional Signs	5
2. Methods of representing relief	1
3. Representation of Topographical features by contours. Slopes (Concave, convex, undulating and terraced) Valleys (V Shaped, U shaped, Gorge, Re-entrant) Ridges (Conical hill, Volcanic hill, Plateau, Escarpment) Complex features (waterfall, sea cliff, overhanging cliff, Fiord coast)	4
4. Drawing of Profiles a. Cross Profiles: Serial, superimposed, projected and composite profiles. b. Longitudinal Profiles	5

Suggested Readings

1. F.J. Monkhouse and H.R. Wilkinson (1972) Maps and Diagrams, Mothuen and Co. Ltd., London.
2. L.R. Singh and Raghuvander Singh (1973), Map Work and Practical Geography, Central Book Depot, Allahabad.
3. R.I. Singh and P.K. Dutt (1968), Elements of Practical Geography, Students Friends, Allahabad
4. Singh Gopal (2004) 4th edition, Map Work and Practical Geography, Vikas Publication House, New Delhi.

**B.A. GEOGRAPHY (PASS COURSE) SECOND YEAR
(THIRD SEMESTER)**

Learning Outcomes and Objectives:

1. To enable students to understand the atmospheric and hydrospheric components of the earth system;
2. To familiarize the students with the processes and dynamics of Oceanic circulation.

**B.A. GEOGRAPHY (THIRD SEMESTER)
PHYSICAL GEOGRAPHY-II
UG – GEO 201**

**Maximum Marks: 75
External Assessment Marks: 60
Internal Assessment Marks: 15
Time: 3 Hours**

Note: There shall be nine questions in all. The candidates have to attempt five questions including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition, the candidates have to attempt four more questions selecting at least one from each unit. All questions carry equal marks.

UNIT-I

1. Weather and climate; origin, composition and structure of atmosphere.
2. Insolation, global heat budget, horizontal and vertical distribution of temperature, inversion of temperature.

UNIT-II

3. Atmospheric pressure: measurement and distribution, pressure belts, planetary, seasonal and local winds.
4. Humidity: measurement and variables; evaporation and condensation, precipitation: forms, types and distribution; hydrological cycle.

UNIT-III

5. Air masses: concept and classification; fronts: type and characteristics.
6. Weather disturbances: tropical and extra-tropical cyclones.

UNIT-IV

7. Configuration of oceanic floor and bottom relief of Pacific and Atlantic oceans; temperature of oceans.
8. Oceanic currents; circulation in Pacific, Atlantic and Indian Oceans; Oceanic resources.

Suggested Readings

1. Barry, RG and Chorley R.J., Atmosphere, Weather and Climate, Routledge, 1998.
2. Critchfield, H., General Climatology, Prentice-Hall of India, 2002.
3. King, C. Oceanography for Geographers, Edward Arnold, London, 1975.
4. Trewartha, GT: An Introduction to Climate, Mc-Graw Hill, New York, 1981.
5. Trewartha, G.T., The Earth's Problems Climates, University of Wisconsin Press, USA.
6. Gupta L S (2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi.
7. Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhawan, Allahabad.
8. Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad.
9. Singh, S (2009): Jalvayu Vigyan, Prayag Pustak Bhawan, Allahabad.

B.A. GEOGRAPHY (THIRD SEMESTER)
REPRESENTATION OF CLIMATIC DATA AND SURVEY (PRACTICAL)
UG - GEO 202

Distribution of Marks:

Exercises=15

Record File=05

Viva-voce=05

Maximum Marks: 25

Time: 3 Hour

Note: There will be four questions in all and candidate has to attempt three exercises.

1. Measurement of temperature, rainfall, pressure and humidity.
2. Representation of temperature and rainfall.
 - a. Combined Line and Bar Graph Exercise 1
 - b. Distribution of temperature (Isotherms) Exercise 1
 - c. Distribution of rainfall (Isohytes) Exercise 1
 - d. Hythergraph Exercise 1
 - e. Rainfall deviation diagram Exercise 1
3. Climograph (wet and dry places) - Exercise 2
4. Distribution of pressure (Isobars) - Exercise 2
5. Weather map interpretation (January & July) - Exercise 2
6. Chain and tape survey Exercise 2

Suggested Readings

1. Mishra R.P. and Ramesh A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi.
2. Monkhouse, FJ, and Wilkinson H.R., 1972. Maps and Diagrams, Methuen Press, London
3. Robinson, A.H. et.al. Elements of Cartography, John Wiley & Sons, 1995.
4. Singh, R.L., 1979. Elements of Practical Geography, Kalyani Publisher, New Delhi.

B.A. GEOGRAPHY (PASS COURSE) FOURTH SEMESTER

Learning Outcomes and Objectives:

1. To make the students familiar with the man- environment relation and human adaptation to the environment.
2. The students will have the ability to understand the growth, distribution and composition of population in different parts of the world;
3. Analyze the types and patterns of rural settlements in India and other regions of the world.

B.A. GEOGRAPHY (FOURTH SEMESTER)

HUMAN GEOGRAPHY

UG – GEO 203

Maximum Marks: 75

External Assessment Marks: 60

Internal Assessment Marks: 15

Time: 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five questions including Question- 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition, the candidates have to attempt four more questions selecting at least one from each unit. All questions carry equal marks.

UNIT - I

1. Nature and scope of human geography; branches of human geography; approaches to the study of human geography.
2. Division of mankind: spatial distribution of tribes of India: Santhals, Gonds and Bhils.

UNIT - II

3. Concept of man- environment relation: A historical approach.
4. Human adaptation to the environment (i) cold region Eskimos (ii) Hot Region – Bushman.

UNIT - III

5. Distribution, density and growth of world population.
6. Population theories: Malthus and optimum population theory.

UNIT-IV

7. Rural settlements: meaning, classification and types.
8. Population pressure, resource use and environment degradation; concept of deforestation, air and water pollution.

Suggested Readings

1. Aggarwal, A: The Citizen's Fifth Citizen's Report, Centre for Science & Environment, New Delhi, 1999.
2. Alexander, John. W.: Economic Geography, Prentice Hall of India Ltd., New Delhi, 1988.
3. Bergwan, Edward E: Human Geography: Culture Connections and Landscape, Prentice- Hall, New Jersey, 1985.
4. Carr, M. Patterns: Process and Change in Human Geography, McMillan Education, London, 1987.
5. Chandna, R.C.: A Geography of Population: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi, 1986.
6. DeBlij, H. J.: Human Geography, Culture, Society and Space, John Wiley, New York, 1996.
7. Fellman, J.L.: Human Geography-Landscapes of Human Activities, Brown and Benchman Pub., USA, 1997.
8. Global Environment Outlook: Earthscan, London, 2000.
9. McBride, P.J. Human Geography; Systems Patterns and Change, Nelson, UK and Canada, 1996.
10. Michael, Can: New Patterns: Process and Change in Human Geography, Nelson, 1996.
11. Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.
12. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan, Allahabad.
13. Hussin, Majid (2012) Manac Bhugol, Rawat Publications, Jaipur.

B.A. GEOGRAPHY (FOURTH SEMESTER)
MAP PROJECTIONS AND SURVEY (PRACTICAL)
UG - GEO 204

Distribution of Marks:
Exercises=15
Record File=05
Viva-voce=05

Maximum Marks: 25
Maximum Time: 3 Hours

Note: There will be four questions in all and candidate has to attempt three exercises.

Total Exercises = 15

1. Introduction to Map Projection: Meaning, Classification and importance; Characteristics of lines of latitudes and longitudes.
2. Cylindrical projections: Characteristics, applications and drawing; (3)
 - a. Simple cylindrical projection
 - b. Cylindrical equal area projection
 - c. True shape or orthomorphic or Mercator's Projection (5)
3. Conical Projections: Characteristics, applications and drawing
 - a. Simple conical projections with one standard parallel
 - b. Simple conical projection with two standard parallel
 - c. Bonne's Projection
 - d. Polyconic projection
 - e. International Map Projection

4. Zenithal Projections: Characteristics, applications and drawing. (5)
 - a. Polar Zenithal Equidistant Projection.
 - b. Polar Zenithal Equal Area Projection
 - c. Polar Zenithal Gnomonic Projection
 - d. Polar Zenithal Stereographic Projection.
 - e. Polar Zenithal Orthographic Projection

5. Characteristics, drawing and applications of
 - a. Sinusoidal and (2)
 - b. Mollweide Projections

6. Plane Table Survey (2)

Suggested Readings

1. Goyal K.K.1981. Practical Geography, Manthan Publication, Rohtak.
2. GregoryS. 1963.Statistical Methodsand the Geography,Longman,London.
3. Khan, A.A. 1996. Text Book of Practical Geography, Concept, NewDelhi,.
4. Lawarence, GRP1968. Cartographic Methods, Methuen, London,
5. Monkhouse, F.J. and Wilkinson, H.R1994. Maps and Diagrams, Methuen, London,
6. Pal. S.K. 1998: Statistics for Geoscientist- Techniques and Applications, Concept Publication, New Delhi,.
7. Sarkar, A.K 1997: Practical Geography-A Systematic Approach, Orient Longman, Calcutta,
8. Singh,R.L.1972. Elements of Practical Geography,Kalyani Pub.,New Delhi
9. Steers, J.B. Map Projections; University of London Press, London.

**B.A. GEOGRAPHY (PASS COURSE) THIRD YEAR
(FIFTH SEMESTER)**

Learning Outcomes and Objectives:

1. To introduce students to classification of economic activities and their impact on environment.
2. To impart knowledge about natural resources and importance of their utilization.
3. To acquaint students with understanding of the spatial distribution of crops, mineral resources and industries in the world.

**B.A. GEOGRAPHY - FIFTH SEMESTER
ECONOMIC GEOGRAPHY
UG – GEO 301**

**Maximum Marks: 75
External Assessment Marks: 60
Internal Assessment Marks: 15
Time: 3 Hours**

Note: There shall be nine questions in all. The candidates have to attempt five questions including Question -1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition, the candidates have to attempt four more questions selecting at least one from each unit. All questions carry equal marks.

UNIT- I

1. Definition, nature, scope of economic geography; it's relation with economics and other branches of social sciences.
2. Classification of economic activities and their impact on environment.

UNIT- II

3. World natural resources: types, bases and classification.
4. Conservation and utilization of natural resources.

UNIT- III

5. Spatial distribution of food (rice and wheat), commercial (cotton and sugarcane) and plantation crops (tea, rubber and coffee).
6. Classification of mineral resources (ferrous and non-ferrous); distribution and production of coal, iron ore, petroleum and natural gas.

UNIT- IV

7. Classification of industries; world distribution and production of iron and steel and textile industry, major industrial complexes of the world.
8. Transport, communication and trade: geographical factors in their development; major modes of water, land and air transport; recent trends in international trade

Suggested Readings

1. Hartshorne T Nand Alexander JW. 1988. Economic Geography, Prentice Hall, New Delhi.
2. Jones CF and Darkenwald GG. 1975. Economic Geography. McMillan Company, New York
3. Thomas, RS. 1962. The Geography of Economic Activities. McGraw Hill, NewYork.
4. Wheeler J et al. 1995. Economic Geography. John Wiley,New York.

B.A. GEOGRAPHY - FIFTH SEMESTER
DISTRIBUTION OF MAPS, DIAGRAMS AND SURVEY (PRACTICAL)
UG – GEO 302

Distribution of Marks:
Exercises=15
Record File=05
Viva-voce=05

Maximum Marks: 25
Time: 3 Hour

Note: There will be four questions in all and candidate has to attempt three exercises.

1. Principal of map design and layout
2. Symbolization: point, line and area symbol
3. Lettering and toponomy
4. Mechanics of map construction
5. Distribution maps
 - (i) Qualitative distribution maps
 - Choroschematic maps- 1 Exercise
 - Chorochromatic maps- 2 Exercise
 - (ii) Quantitative distribution Maps
 - Isopleth maps-3 exercise
 - Choropleth maps- 3 exercise
 - Dot Maps- 3 exercise
 - Diagrammatic Maps- 3 exercise
6. Prismatic Compass Survey – 2 Exercises.

Suggested readings

1. Mishra RP and Ramesh A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi.
2. Monkhouse FJ and Wilkinson HR. 1972. Maps and Diagrams, Methuen Press, London
3. Singh Gopal. 2004. Map Work and Practical Geography, Vikas Publication House, New Delhi.
4. Singh RL. 1979. Elements of Practical Geography, Kalyani Publishers, New Delhi

B.A. GEOGRAPHY (PASS COURSE) SIXTH SEMESTER

Learning Outcomes and Objectives:

1. To provide knowledge of aerial photographs and their interpretation.
2. To familiarize students with the basics of Remote Sensing & GIS and their application.
3. To make the students familiar with basic statistical methods in geography.

B.A. GEOGRAPHY - SIXTH SEMESTER

INTRODUCTION TO REMOTE SENSING, GIS & QUANTITATIVE METHODS

UG – GEO 303

Maximum Marks: 75

External Assessment Marks: 60

Internal Assessment Marks: 15

Time: 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five questions including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition, the candidates have to attempt four more questions selecting at least one from each unit. All questions carry equal marks.

Unit-I

1. Introduction to aerial photographs: their types and advantages.
2. Elements of aerial photo interpretation.

Unit-II

3. Introduction to Remote Sensing; electromagnetic spectrum, stages in remote sensing, type of remote sensing, satellite orbits- geostationary and near polar.
4. Application of remote sensing in various fields such as agriculture, environment and resource mapping.

Unit-III

5. Introduction to Geographical Information System: definition, purpose, components and functions.
6. Application of GIS in various fields of geography.

Unit-IV

7. Measures of Central Tendency: Mean, Median and Mode.
8. Measure of Dispersion: Range, Quartile deviation and Mean deviation, Standard deviation, Coefficient of variation.

Suggested Readings

1. Aslam Mahmood 1993. Statistical Methods in Geographical Studies, Rajesh Publications, New Delhi,
2. John R. Jensen 2009. Remote Sensing of the Environment; An Earth Resource Perspective, Pearson Education, (India Edition) New Delhi,
3. Kumar Meenakshi 2001. Remote Sensing, NCERT, New Delhi,
4. Lillesand and R.W. Kiefer, 2005. Remote Sensing and Image Interpretation, John Wiley and Sons.
5. Pritvish Nag, and M. Kudrat 1998. Digital Remote Sensing, Concept Publishing Company, New Delhi,

B.A. GEOGRAPHY - SIXTH SEMESTER
INTRODUCTION TO REMOTE SENSING, GPS AND FIELD SURVEY REPORT
(PRACTICAL)
UG – GEO 304

Maximum Marks: 25

Time: 3 Hours

A. Remote Sensing Practical – 15 Marks

Marks Breakup:

Exercise = 09

Record book: 03

Viva-voce: 03

1. Demarcation of Principal Point, Conjugate Principal point and Flight line on Aerial Photographs - 3 exercise
2. Use of Stereoscope and Identification of Features- 2 exercise.
3. Identification of Features from satellite images- 2 exercises.
4. Mapping by GIS -2 exercises.

B. Socio-economic Survey and Report Writing -10 marks.

Marks Break up

Field Survey Report = 06 marks

Viva voce= 04 marks

Suggested Readings

1. John R. Jensen, Remote Sensing of the Environment; An Earth Resource Perspective, Pearson Education, (India Edition) New Delhi,2009.
2. Lillesand and R.W.Kiefer, Remote Sensing and Image Interpretation, John Wiley and Sons,1994.
3. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi.
4. Chauniyal, D.D. (2010) Sudur Samvedan evam Bhogolik Suchana Pranali,Sharda Pustak Bhawan, Allahabad.