

**JSS COLLEGE OF ARTS, COMMERCE AND
SCIENCE
(AUTONOMOUS)
B.N. ROAD, MYSURU-570025**



DEPARTMENT OF GEOGRAPHY

**Revised Syllabus for Undergraduate (UG)
CBCS scheme - 2017-18**

PROFORMA OF INSTRUCTIONS AND EXAMINATION

PROGRAMME: BA in Economics, Geography

CODE: BA11 (2017-18)

| Year | SEM | Course code & Core course | Title of the paper | L + P hours per week | L:T:P | Total Credit | Total | | Percentage | | | Maximum Marks in | | | Exam | | |
|-------|-----------------------------------|---|--|-------------------------|----------|--------------|-------|----|-----------------|----|----|------------------|----|----|------|----|----------------|
| | | | | | | | hours | | exam/Assessment | | | Duration | | | | | |
| | | | | | | | Th | Pr | Th | Pr | IA | Th | Pr | IA | Th | Pr | |
| I BA | I | DLA23011 | Physical Geography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | DSC-I :Theory | | | | | | | | | | | | | | | |
| | DLA23311 DSC-I: Pract-I | Contour diagrams and meteorological instruments | 4 | | | | | | | | | | | | | | |
| | II | II | DLB23011 | Human Geography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h |
| | | | DSC-II: Theory | | | | | | | | | | | | | | |
| | | DLB23311 DSC-II: Pract-II | Interpretation of Topographical Maps and Indian Daily Weather Maps | 4 | | | | | | | | | | | | | |
| II BA | III | DLC23011 | General Cartography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | DSC-III:Theory | | | | | | | | | | | | | | | |
| | | DLC23311 DSC-III:PractIII | | | | | | | | | | | | | | | Map Projection |
| | IV | IV | DLD23011 | Environmental Geography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h |
| | | | DSC-IV: Theory | | | | | | | | | | | | | | |
| | | DLD23311 DSC-IV:PractIV | Statistical Methods in Geography | 4 | | | | | | | | | | | | | |

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|--------|-----------------------------|---|--|----------|----------|----|----|----|----|----|----|----|----|----|----|----|
| III BA | V | | Choose any one | 4 | | | | | | | | | | | | |
| | | DSE-V: Theory | | | | | | | | | | | | | | |
| | | DLE23011(A)/ | DSE- A: Geography of India | | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h |
| | | DLE23011(B) | DSE- B: Economic Geography | | | | | | | | | | | | | |
| | | DLE23711 DSE- V:Pract- V | Fundamentals of GIS | 4 | | | | | | | | | | | | |
| | | SEC | Choose any one | | | | | | | | | | | | | |
| | | DLE23211(A)/ | SEC-A : Regional Planning and Development | | | | | | | | | | | | | |
| | | DLE23211 (B) | SEC-B: Remote Sensing and GPS Based Project Report | 4 | 04:00:00 | 4 | 60 | - | 70 | - | 30 | 70 | - | 30 | 3h | -- |
| | | GE 1 | Regional Geography of India | 4 | | | | | | | | | | | | |
| | | DLE23411 | | | | | | | | | | | | | | |
| | DLE23711 GE-I V:Pract-I | Computer Mapping | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | Theory | Choose any one | 4 | | | | | | | | | | | | | |
| | DSE-VI: | | | | | | | | | | | | | | | |
| | DLF23011(A)/ | DSE- A: Disaster Management | | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | DLF23011(B) | DSE -B :Geography of Tourism | | | | | | | | | | | | | | |
| | DLF23711 | Computer Mapping and GPS Surveying | 4 | | | | | | | | | | | | | |
| | DSE- VI:PractVI | | | | | | | | | | | | | | | |
| | SEC | Choose any one | 4 | | | | | | | | | | | | | |
| | DLF23211(A)/ | SEC-A : GIS Based Project Report | | | | | | | | | | | | | | |
| | DLF23211(B) | SEC-B: Field Techniques and Survey Based Project Report | | 04:00:00 | 4 | 60 | - | 70 | - | 30 | 70 | - | 30 | 3h | -- | |
| | GE-2 | Regional Geography of India | 4 | | | | | | | | | | | | | |
| | DLF23411 | | | | | | | | | | | | | | | |
| | DLF23711 GE-2 VI:Pract-I | Computer Mapping | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | | | | 56 | | | | | | | | | | | |

PROFORMA OF INSTRUCTIONS AND EXAMINATION

PROGRAMME: BA in Kannada, Geography

CODE:BA13 (2017-18)

| Year | Sem | Course code & Core course | Title of the paper | L + P hours per week | L:T:P | Total Credit | Total | | Percentage | | | Maximum Marks in | | | Exam | | |
|----------|----------------------------------|---------------------------|---|----------------------|----------|--------------|-------|----|-----------------|----|----|------------------|----|----|------|----------------|-----------------|
| | | | | | | | hours | | exam/Assessment | | | Duration | | | | | |
| | | | | | | | Th | Pr | Th | Pr | IA | Th | Pr | IA | Th | Pr | |
| I BA | I | DLA23013 | Physical Geography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | DSC-I :Theory | | | | | | | | | | | | | | | |
| | II | DLB23013 | Human Geography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | | | | | | | | | | | | | | | | DSC-II: Theory |
| | | DLB23313 | Contour diagrams and meteorological instruments | 4 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| II BA | III | DLC23013 | General Cartography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | DSC-III:Theory | | | | | | | | | | | | | | | |
| | | DLC23313 | | | | | | | | | | | | | | | |
| | IV | DLD23013 | Environmental Geography | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | | | | | | | | | | | | | | | | DSC-IV: Theory |
| | | | | | | | | | | | | | | | | | DLD23313 |
| DLD23313 | Statistical Methods in Geography | 4 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | DSC-IV:PractIV | |

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|--------|--------------------------------|--|---|----------|----------|----|----|----|----|----|----|----|----|----|----|----|
| III BA | V | | Choose any one | 4 | | | | | | | | | | | | |
| | | DSE-V: Theory | | | | | | | | | | | | | | |
| | | DLE23013(A)/ | DSE- A: Geography of India | | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h |
| | | DLE23013(B) | DSE- B: Economic Geography | | | | | | | | | | | | | |
| | | DLE23713 DSE- V:Pract- V | Fundamentals of GIS | 4 | | | | | | | | | | | | |
| | | SEC | Choose any one | | | | | | | | | | | | | |
| | | DLE23213(A)/ | SEC-A : Regional Planning and Development | | | | | | | | | | | | | |
| | | DLE23213 (B) | SEC-B: Remote Sensing and GPS Based Project Report | 4 | 04:00:00 | 4 | 60 | - | 70 | - | 30 | 70 | - | 30 | 3h | -- |
| | | GE 1 | Regional Geography of India | 4 | | | | | | | | | | | | |
| | | DLE23413 | | | | | | | | | | | | | | |
| | DLE23713 GE-I V:Pract-I | Computer Mapping | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | | Theory | 4 | | | | | | | | | | | | | |
| | | DSE-VI: | | | | | | | | | | | | | | |
| | DLF23013(A)/ | DSE- A: Disaster Management | | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
| | DLF23013(B) | DSE -B :Geography of Tourism | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | DLF23713 DSE- VI:PractVI | Computer Mapping and GPS Surveying | 4 | | | | | | | | | | | | | |
| | | SEC | Choose any one | | | | | | | | | | | | | |
| | DLF23213(A)/ | SEC-A : GIS Based Project Report | 4 | | | | | | | | | | | | | |
| | DLF23213(B) | SEC-B: Field Techniques and Survey Based Project Report | | 04:00:00 | 4 | 60 | - | 70 | - | 30 | 70 | - | 30 | 3h | -- | |
| | | GE-2 | 4 | | | | | | | | | | | | | |
| | DLF23413 | Regional Geography of India | | | | | | | | | | | | | | |
| | DLF23713 GE-2 VI:Pract-I | Computer Mapping | 4 | 04:00:02 | 6 | 60 | 60 | 50 | 20 | 30 | 70 | 70 | 30 | 3h | 3h | |
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Programme Outcome

After completing the graduation in BA in Economics, Geography the students are able to:

- PO1. Explain, graph, and analyze key economics models
- PO2. Understand current events and evaluate specific policy proposals
- PO3. To address problem that do not have clear economic solutions
- PO4. Develop critical and quantitative thinking skills
- PO5. Communicate effectively in written, oral and graphical form about specific issues
- PO6. Apply economic analysis to everyday problems in real world situations
- PO7. Understand and appreciate relationship between man and Environment
- PO8. Read, interpret, and generate maps and other geographic representations
- PO9. To extract, analyze, and present information from a spatial perspective
- PO10. Understand physical-geographic processes, global distribution of
Landforms and ecosystems
- PO11. The role of physical environment on human population
- PO12. Develop the ethical aptitudes and dispositions necessary to acquire and hold
Leadership positions in industry, government, and professional organizations

Programme Outcome

After completing the graduation in BA in Kannada, Geography the students will:

PO1. Develop human values and a sense of social service

PO2. Become a responsible and dutiful citizen.

PO3. Able to enhance critical temper and creative ability

PO4. Understand and appreciate relationship between man and Environment.

PO5. Read, interpret, and generate maps and other geographic representations

PO6. Understand physical- geographic processes, the global distribution of landforms and
Ecosystems

PO7. Role of the physical environment on human populations

Programme Specific Outcome

On completion of BA in Economics, Geography students will:

- PSO1. Understand theoretical and practical aspects of Economics and Geography
- PSO2. Evaluate Economic behavior inconsonance with Geographical factors
- PSO3. Suggest the policy makers about desirable changes to be made in Micro and Macro Economic issues based on geographical factors
- PSO4. Gain ability to understand the economic problems in Geographical indicators
- PSO5. Able to offer palatable solutions for economic and geographical challenges
- PSO6. Attain Proficiency to analyze the economic decision of Government and non-Govt. Entities that correlate with Geographical factors
- PSO7. Gain requisite knowledge to evaluate land use pattern and demographical profile
- PSO8. Apply GIS for understanding Market situation, Transport problem change in Weather Condition, Cropping Pattern, and Natural Calamities and so on

Programme Specific Outcome

On completion of BA in Kannada, Geography students will:

- PSO 1: Know more specific terminologies along with its etymology
- PSO2: Know the changes in the differences in formation of society and their culture
- PSO3: Help to understand different races, Society, and culture.
- PSO4 Understand the relationship between man and environment
- PSO6. Understand in simple language environmental problems their cause, Effect and Remedies.
- PSO7. Help the students to pursue higher studies and even in research
- PSO8 Helpful for competitive examinations
- PSO9. Students may help to guide agricultural activities, fertility of soils, their characteristics, Climatic condition, in regional language

I SEMESTER
Geography I: PHYSICAL GEOGRAPHY

Course Outcome

- CO1. Learn the details of theories regarding origin of the Earth system
- CO2. Understand the classification and characteristics of Composition of the Earth
- CO3. Learn in details with examples geomorphic agents
- CO4. Understand in details with application, if applicable, atmospheric structure and composition
- CO5. Understand in details with application, if applicable, relief of the ocean floor

| UNIT | No. of Hours |
|---|---------------------|
| 1. Physical Geography: | 10 |
| a) Meaning, Definition, Field, Nature(Multidisciplinary) and Scope, Components Of Earth System – Lithosphere, Atmosphere, Hydrosphere and Biosphere | |
| b) Theories regarding origin of the Earth: Nebular and Tidal theories | |
| 2. Lithosphere: | 15 |
| a) Structure and Composition of the earth | |
| b) Distribution of land and water bodies : Wegner’s Theory of Continental Drift and plate Tectonic | |
| 3. Geomorphic agents and processes of Denudation | 10 |
| i) River ii) Glacier iii) Underground water iv) Wind | |
| 4. Atmosphere | 15 |
| a) Meaning, composition and structure | |
| b) Distribution of Temperature, Pressure and Wind system – Insulation, Factors affecting ,Atmospheric temperature, | |
| c) Atmospheric Pressure – Factors affecting on pressure, Vertical and Horizontal distribution, Pressure belts of the world, | |
| d) Winds system – Factors affecting, types – Planetary, seasonal, local and Variable winds – with special reference to Tropical cyclones. | |
| 5. Hydrosphere | 10 |
| a) Relief of ocean floor | |
| b) Tides and Ocean currents – Indian and Pacific | |

Reference:

1. Conserva H. T., 2004: Illustrated Dictionary of Physical Geography, Author House, USA.
2. Gabler R. E., Petersen J. F. and Trapasso, L. M., 2007: Essentials of Physical Geography (8th Edition), Thompson, Brooks/Cole, USA
3. Garrett N., 2000: Advanced Geography, Oxford University Press.
4. Goudie, A., 1984: The Nature of the Environment: An Advanced Physical Geography, Basil Blackwell Publishers, Oxford
5. Hamblin, W. K., 1995: Earth's Dynamic System, Prentice Hall, N.J.
6. Husain M., 2002: Fundamentals of Physical Geography, Rawat Publications, Jaipur.
7. Monkhouse, F. J. 2009: Principles of Physical Geography, Platinum Publishers, Kolkata
8. Strahler A. N. and Strahler A. H., 2008: Modern Physical Geography, John Wiley & Sons, New York.
9. B.N Tikka – Physical Geography
10. Savindra Singh – Physical Geography

I SEMSETER

Practical I: Contour Diagrams and Meteorological Instruments

| UNIT | | No. of Hours |
|-------------|--|---------------------|
| 1. | a). Representation of Relief Features: Hachure and Spot height, Bench Mark and contours | 30 |
| | b). Contour Diagrams. Slopes – Uniform, Undulating, Convex, Concave, Conical hill, Ridge, V & U shaped Valleys, Hanging valley, Plateau, Mountain pass, Rapids and waterfalls. | |
| 2. | a) Meteorological Instruments- Functions and uses- Centigrade & Fahrenheit Thermometer, Maximum and Minimum thermometer, Hygrometer, Mercury barometer, Aneroid Barometer, Wind vane, Cup Anemometer, Rain gauge | 30 |

References:

1. Gopal Singh : Map work and practical geography; Surjeet Book Depot, Delhi.
2. John and Keats : Cartographic design and production.
3. Mishra R.P : Fundamentals of Cartography, Prasaranga, University of Mysore, Mysore.
4. Monkhouse F.J
And Wilkinson H.R : Maps and Diagrams, Mathuen & Co. Ltd, London
5. Raisz .F : General Cartography, Mc Graw Hill Book Co. Inc.
6. Ranganath : An introduction to Practical Geography (Kan & Eng) Vidhyanidhi prakashana, Gadag.
7. Singh R.L : Elements of Practical Geography; Students Friends, Allahabad, India, 2006.
8. Khullar : Elements of Practical Geography; New Academic, Publishing co, Jalandhar.
9. S.S. Nanjannavar : Practical Geography (kan & Eng. Version) Vidhyanidhi Prakashana, Gadag.

II SEMSETER
Geography II: HUMAN GEOGRAPHY

Course Outcome

- CO1. Write down the details of human geography importance
- CO2. Deliberate in details with examples race, religion and language study
- CO3. Specify the details of demographic age transition study
- CO4. Understand in details with application, if applicable, population composition
- CO5. Learn in details with application, if applicable, human settlement study

| UNIT | No. of Hours |
|--|---------------------|
| 1. Definition, Nature, Scope, Branches and Importance of Human Geography | 8 |
| 2. Space and Society: Origin, Distribution and Types of Race, Religion and Language | 12 |
| 3. Population Growth, Distribution and Density, Demographic Transition Theory. | 10 |
| 4. Population Composition- Age Structure, Sex Ratio, Literacy rate | 10 |
| 5. Human Settlements: Meaning, evolution and types – Rural and urban, patterns of settlements, trends of world urbanization. | 20 |

Reading List

1. Chandna, R.C. (2010) Population Geography, Kalyani Publisher.
2. Daniel, P.A. and Hopkinson, M.F. (1989) 'The Geography of Settlement', Oliver & Boyd, London
3. Johnston R; Gregory D, Pratt G. et al. (2008), 'The Dictionary of Human Geography', Blackwell Publication.
4. Jordan-Bychkov et al. (2006) 'The Human Mosaic: A Thematic Introduction to Cultural Geography' W. H. Freeman and Company, New York
5. Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.
6. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.
7. Ghosh, S. (2015) Introduction to settlement geography. Orient Black Swan Private Ltd., Kolkata
8. Hussain, Majid (2012) Manav Bhugol. Rawat Publications, Jaipur

II SEMSETER
Practical II: INTERPRETATION OF TOPOGRAPHICAL MAPS
AND INDIAN DAILY WEATHER MAPS

| UNIT | No. of Hours |
|--|---------------------|
| 1. a) Importance of Topographical Maps - b).Conventional signs and symbols. Interpretation of topographical maps pertaining to i) Physical Landscape - a. Relief features, b. Drainage system. c. Natural vegetation, land use and land cover ii) Cultural landscape – Settlements and Transportation network. | 40 |
| 2. Interpretation of Indian Daily Weather Maps. 1. Conventional Signs and symbols. 2. Interpretation of Indian daily Weather Reports-Two seasons | 20 |

References:

1. Singh R. L. : Elements of Practical Geography
2. Gopal Singh : Map Work and Practical Geography
3. Gupta K. K. and Tyagi V.C. : Working with maps
4. John and Keats : Cartographic design and production
5. Mishra R. P. : Fundamentals of Cartography
6. Monkhouse F. J. : Maps and diagrams.
And Wilkenson H.R.
7. Phyllis Dink : Map Work
8. Robinson H. : Elements of Practical Geography
9. D.R. Khullar : Essentials of Practical Geography
10. Ramamurthy : Map Interpretation, University of Madras

**III SEMESTER
GEOGRAPHY III: GENERAL CARTOGRAPHY**

Course Outcome

CO1. Understand in details with application, if applicable, evolution of cartography

CO2. Identify in details with examples maps study

CO3. Write down in details with examples map scale

CO4. Specify the classification and characteristics of map projection

CO5. Understand the details of representation of data

| UNIT | No. of Hours |
|---|---------------------|
| 1. Evolution of cartography – Traditional and Digital | 06 |
| 2. Maps – Types, Elements and Uses | 09 |
| 3. Map Scale – Types and Application, Reading Distances on a Map. | 10 |
| 4. Map projection- Meaning, Types, Importance and uses | 15 |
| 5. Representation of Data – Symbols, Dots, Choropleth, Isopleths and Flow Diagrams, Interpretation of Thematic Maps. | 20 |

Note: This paper is not a practical paper, and the objective is to give basic information about various tools and techniques used in making maps. Students will not be involved in any laboratory work or hands on exercises, though a few demonstrations in the laboratories by teachers are recommended.

References:

1. Dent B. D., 1999: *Cartography: Thematic Map Design*, (Vol. 1), McGraw Hill.
2. Gupta K. K and Tyagi V. C., 1992: *Working with Maps*, Survey of India, DST, New Delhi.
3. Mishra R. P. and Ramesh A., 1989: *Fundamentals of Cartography*, Concept Publishing.
4. Robinson A., 1953: *Elements of Cartography*, John Wiley.
5. Sharma J. P., 2010: *Prayogic Bhugol*, Rastogi Publishers.
6. Singh R. L. and Singh R. P. B., 1999: *Elements of Practical Geography*, Kalyani Publishers
7. Singh R. L., 1998: *Prayogic Bhoogol Rooprekha*, Kalyani Publications.
8. Steers J. A., 1965: *An Introduction to the Study of Map Projections*, University of London

III SEMESTER
Practical III: MAP PROJECTION PRACTICAL

| UNIT | No. of Hours |
|--|---------------------|
| 1. Cylindrical Map Projections: A) Simple cylindrical projection B) Cylindrical Equal- area projection C) Mercator's projection | 25 |
| 2. Conical Map projections A) Simple Conical projection B) Bonne's projection C) Polyconic projection | 10 |
| 3. Zenithal map projections (Polar Case) A) Zenithal Equal -distant. B) Zenithal Equal – area C) Zenithal Gnomonic D) Zenithal Stereographic | 25 |

Note: The above map projections should be constructed with exercises, Properties and uses.

References:

1. Salar Massod. M. : Map Projections, Roa and Raghavam Co., Mysore.
2. Ranganath & Mallappa : Map Projections (kan version), Chetana Book House, Mysore.
3. Erwin Raisz : General Cartography; Mc Graw- Hill book Company Inc.
4. Singh R L : Elements of Practical Geography, Student's Friend, Allahabad.
5. George P Kellaway : Methuen & Co., Ltd., London.
6. Gopal Singh : Map work & Practical Geography, Surjeet Book Depot, New Delhi.

Geography IV: ENVIRONMENTAL GEOGRAPHY

Course outcome

- CO1. Deliberate the characteristics of interdisciplinary nature of environmental geography
- CO2. Learn in depth ecosystem study
- CO3. Identify in details with examples environmental pollution
- CO4. Understand in depth conservation and management of environment

UNIT

No. of Hours

- | | |
|--|----|
| 1. Meaning and components of environment- field and scope of environmental Geography – Interdisciplinary nature of environmental geography | 15 |
| 2. Ecosystem – Types – functions, energy flow, ecological pyramids,- Bio Geo Chemical Cycles. | 15 |
| 3. Environmental pollution -Meaning, types and causes of pollution Air pollution, water pollution, noise pollution and degradation, Depletion of ozone layer, Green house effect Climate change. | 15 |
| 4. Conservation and management of environment -role of international and national polices- role of UNO .Rio summit declarations. Kyoto Declarations. Koppen Hagen summits, | 15 |

References:

1. Casper J.K. (2010) Changing Ecosystems: Effects of Global Warming. Infobase Pub. New York.
2. Hudson, T. (2011) Living with Earth: An Introduction to Environmental Geology, PHI Learning Private Limited, New Delhi.
3. Miller, G.T. (2007) Living in the Environment: Principles, Connections, and Solutions, Brooks/ Cole Cengage Learning, Belmont.
4. Singh, R.B. (1993) Environmental Geography, Heritage Publishers, New Delhi.
5. UNEP (2007) Global Environment Outlook: GEO4: Environment for Development, United Nation's Environment Programme. University Press, Cambridge.
6. Wright R. T. and Boorse, D. F. (2010) Toward a Sustainable Future, PHI Learning Pvt. Ltd, New Delhi.
7. Singh, R.B. and Hietala, R. (Eds.) (2014) Livelihood security in Northwestern Himalaya: Case studies from changing socio-economic environments in Himachal Pradesh, India. Advances in Geographical and Environmental Studies, Springer
8. Singh, Savindra 2001. *Paryavaran Bhugol*, Prayag Pustak Bhawan, Allahabad. (in Hindi)
9. L.T Nayak – Environmental Geography (in Kannada)
10. Dr. Ranganath - Environmental Studies (in Kannada)

IV – SEMESTER**Practical IV: APPLICATIONS OF STATISTICAL METHODS IN GEOGRAPHY**

| UNIT | No. of Hours |
|---|---------------------|
| 1. a). Methods of data collection – Primary and Secondary sources, census and sampling methods | 35 |
| b) . Measures of Central Tendency: Direct and shortcut Methods a) Arithmetic mean b) Median c) Mode (Grouping and formula) | |
| 2. a). Measures of dispersion – Mean and standard deviations | 25 |
| b). Measures of association correlation | |
| c). Time series analysis | |

References:

1. Singh R. L. : Elements of Practical Geography
2. Gopal Singh : Map Work and Practical Geography
3. Misra R. P. : Fundamentals of Cartography
4. Zamir Alvi : Statistical Geography, Methods and Applications.
5. Aslam Mahmood : Statistical Methods in Geography.
6. Ashis Sarkar : Practical Geography, Orient Longman, Kolkata.
7. Dr. C K Renukarya : Basic statistics (Kan & Eng Version)

DLE23011 (A) / DLE23013 (A)

V – SEMSETER
Geography V: GEOGRAPHY OF INDIA

Course outcome

- CO1. Deliberate in depth physical stinting of India
- CO2. Write down in details with examples Irrigation system of India
- CO3. Identify in depth population study of India
- CO4. Learn in depth resources base study of India
- CO5. Identify the characteristics of economic study of India

| UNIT | No. of Hours |
|--|---------------------|
| 1. Location, size and extent of India – Relief features- Drainage system – Climate | 15 |
| 2. Irrigation – Types, multipurpose river valley projects – DVC, Bhakra- Nangal, Alamatti | 10 |
| 3. Population – Size and Growth since 1901, Population Density and Distribution, Literacy, Sex Ratio. | 10 |
| 4. Resource Base –Livestock (cattle & fisheries),Power (Coal,& hydroelectricity) Minerals (iron ore and bauxite). | 10 |
| 5. Economy – Agriculture (Rice, Wheat, Sugarcane, Tea, Cotton); Industries (Cotton Textile, Iron-Steel, Automobile), Transportation Modes (Road and Rail). | 15 |

References:

1. Hussain M., 1992: *Geography of India*, Tata McGraw Hill Education.
2. Mamoria C. B., 1980: *Economic and Commercial Geography of India*, Shiva Lal Agarwala.
3. Miller F. P., Vandome A. F. and McBrewster J., 2009: *Geography of India: Indo-Gangetic Plain, Thar Desert, Major Rivers of India, Climate of India and Geology of India* - Alphascript Publishing.
4. Nag P. and Sengupta S., 1992: *Geography of India*, Concept Publishing.
5. Pichamuthu C. S., 1967: *Physical Geography of India*, National Book Trust.
6. Sharma T. C. and Coutinho O., 1997: *Economic and Commercial Geography of India*, Vikas Publishing.
7. Singh Gopal, 1976: *A Geography of India*, Atma Ram.
8. Spate O. H. K. and Learmonth A. T. A., 1967: *India and Pakistan: A General and Regional Geography*,

DLE23011 (B) / DLE23013 (B)

**V–SEMSTER
GEOGRAPHY V: ECONOMIC GEOGRAPHY**

Course outcome

- CO1. Identify the classification and characteristics of concepts of economic geography
- CO2. Understand the characteristics of locational theories
- CO3 .Understand in depth study of primary activities
- CO4. Learn the details of study of secondary activities
- CO5. Write down in details with examples study of tertiary and quaternary activities

| UNIT | No. of Hours |
|---|---------------------|
| 1. Definition, Approaches and Fundamental Concepts of Economic Geography; Patterns of Development. | 12 |
| 2. Locational Theories – Agriculture (Von Thunen) and Industrial (Weber). | 12 |
| 3. Primary Activities – Intensive Subsistence Farming, Commercial Grain Farming, Plantation, Commercial Dairy Farming, Commercial Fishing, and Mining (iron ore, coal and petroleum). | 12 |
| 4. Secondary Activities – Cotton Textile Industry, Petro-Chemical Industry, Major Manufacturing Regions. | 12 |
| 5. Tertiary and Quaternary Activities – Modes of Transportation, Patterns of International Trade, and Information and Communication Technology Industry. | 12 |

Reading List

1. Alexander J. W., 1963: *Economic Geography*, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
2. Bagchi-Sen S. and Smith H. L., 2006: *Economic Geography: Past, Present and Future*, Taylor and Francis.
3. Coe N. M., Kelly P. F. and Yeung H. W., 2007: *Economic Geography: A Contemporary Introduction*, Wiley-Blackwell.
4. Combes P., Mayer T. and Thisse J. F., 2008: *Economic Geography: The Integration of Regions and Nations*, Princeton University Press.
5. Durand L., 1961: *Economic Geography*, Crowell.
6. Hodder B. W. and Lee R., 1974: *Economic Geography*, Taylor and Francis.
7. Wheeler J. O., 1998: *Economic Geography*, Wiley.
8. Willington D. E., 2008: *Economic Geography*, Husband Pres

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V– SEMESTER
Practical V: FUNDAMENTALS OF G.I.S

| UNIT | | No. of Hours |
|-------------|--|---------------------|
| 1 | a) Meaning, definitions, components and importance of GIS b) Spatial entities – Point, line and polygon Sources of spatial data- Census, Topographical Maps, Aerial Photographs and Satellite Imageries | 20 |
| 2 | a) Spatial Data Structure Raster and vector data Structures Linking spatial and non spatial data b) Introduction to MapInfo software | 20 |
| 3 | a) Geo – referencing , Choice of map projection – Digitization, Attaching attribute data (Creating data base), Editing, Map layout, Thematic map | 20 |

References:

1. Burrough P.A. : Geographical Information Systems for Land Resources
2. Maguire D. J. : Computers in Geography
3. Star J. C and J.E. : Geographic Information Systems
4. Internet : GIS. Development
5. Heywood : Introduction to GIS, 2002.
6. Mahesh : Introduction to GSI Shivalingappa Chandrashekar :

V – SEMSETER
Geography VI: REGIONAL PLANNING AND DEVELOPMENT

Course Outcome

- CO1. Deliberate the details of concept of regional planning and development
- CO2. Write down in details with application, if applicable, characteristics and delineation of planning region
- CO3. Write down the characteristics of regionalization of India for planning
- CO4. Deliberate the details of models for regional planning
- CO5. Learn in depth backward regions and regional plans

| UNIT | No. of Hours |
|--|---------------------|
| 1. Concept, Need and Types of Regional Planning. | 8 |
| 2. Characteristics and Delineation of Planning Region. | 10 |
| 3. Regionalization of India for Planning (Agro Ecological Zones). | 12 |
| 4. Models for Regional Planning: Growth Pole Theory; Core Periphery Model and Growth Foci Concept in Indian Context | |
| 5. Backward Regions and Regional Plans- Special Area Development Plans in India; DVC-The Success Story and the Failures; NITI Aayog. | 15 |

References:

1. Blij H. J. De, 1971: Geography: Regions and Concepts, John Wiley and Sons.
2. Claval P.I, 1998: An Introduction to Regional Geography, Blackwell Publishers, Oxford and Massachusetts.
3. Friedmann J. and Alonso W. (1975): Regional Policy - Readings in Theory and Applications, MIT Press, Massachusetts.
4. Gore C. G., 1984: Regions in Question: Space, Development Theory and Regional Policy, Methuen, London.
5. Gore C. G., Köhler G., Reich U-P. and Ziesemer T., 1996: Questioning Development; Essays on the Theory, Policies and Practice of Development Intervention, Metropolis- Verlag, Marburg.
6. Haynes J., 2008: Development Studies, Polity Short Introduction Series.
7. Johnson E. A. J., 1970: The Organization of Space in Developing Countries, MIT Press,
8. Peet R., 1999: Theories of Development, The Guilford Press, New York
9. UNDP 2001-04: Human Development Report, Oxford University Press
10. World Bank 2001-05: World Development Report, Oxford University Press, New

DLE23211 (B) / DLE23213 (B)

V – SEMESTER

**Geography VI: REMOTE SENSING AND GPS BASED PROJECT
REPORT**

Course Outcome

- CO1. Understand the characteristics of concept of remote sensing
- CO2. Identify in details with examples study of aerial photography
- CO3. Specify the details of principals of remote sensing satellites
- CO4. Write down the classification and characteristics of interpretation and application of remote sensing
- CO5. Deliberate in details with application, if applicable, study of global positing system

UNIT

No. of Hours

- | | |
|--|----|
| 1. Remote Sensing: Definition, Development, Platforms and Types. | 12 |
| 2. Aerial Photography: Principles, Types and Geometry. | 12 |
| 3. Satellite Remote Sensing: Principles, EMR Interaction with Atmosphere and Earth Surface; Satellites (Land sat and IRS) and Sensors. | 12 |
| 4. Interpretation and Application of Remote Sensing: Land use/ Land Cover. | 12 |
| 5. Global Positioning System (GPS) – Principles and Uses | 12 |

Practical Record: A project file consisting of five exercises will be done from aerial photos, satellite images (scale, orientation and interpretation) and GPS field survey.

Reading List

- 1. Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press.
- 2. Jensen J. R., 2004: Introductory Digital Image Processing: A Remote Sensing Perspective, Prentice Hall.
- 3. Joseph, G. 2005: Fundamentals of Remote Sensing, United Press India.
- 4. Lillesand T. M., Kiefer R. W. and Chipman J. W., 2004: Remote Sensing and Image Interpretation, Wiley. (Wiley Student Edition).
- 5. Nag P. and Kudra, M., 1998: Digital Remote Sensing, Concept, New Delhi.
- 6. Rees W. G., 2001: Physical Principles of Remote Sensing, Cambridge University Press.
- 7. Singh R. B. and Murai S., 1998: Space-informatics for Sustainable Development, Oxford and IBH Pub.
- 8. Wolf P. R. and Dewitt B. A., 2000: Elements of Photogrammetry: With Applications in GIS, McGraw-Hill.

DLE23411

**GENERIC ELECTIVES - I
V – SEMESTER
GEOGRAPHY V: REGIONAL GEOGRAPHY OF INDIA**

Course outcome

- CO1. Identify the characteristics of size and extent of India
- CO2. Understand the classification and characteristics of multipurpose river
- CO3. Identify the classification and characteristics of Population density and distribution
- CO4. Learn in details with examples power resources of India
- CO5. Specify the characteristics of Transportation modes

UNITS

No. of Hours

- | | |
|--|----|
| 1. Location, size and extent of India – Relief features- Drainage system – Climate | 15 |
| 2. Irrigation – Types, multipurpose river valley projects – DVC, Bhakra- Nangal, Alamatti | 10 |
| 3. Population – Size and Growth since 1901, Population Density and Distribution, Literacy, Sex Ratio. | 10 |
| 4. Resource Base –Livestock (cattle & fisheries),Power (Coal,& hydroelectricity) Minerals (iron ore and bauxite). | 10 |
| 5. Economy – Agriculture (Rice, Wheat, Sugarcane, Tea, Cotton); Industries (Cotton Textile, Iron-Steel, Automobile), Transportation Modes (Road and Rail). | 15 |

Reference:

1. Hussain M., 1992: Geography of India, Tata McGraw Hill Education.
2. Mamoria C. B., 1980: Economic and Commercial Geography of India, Shiva Lal Agarwala.
3. Miller F. P., Vandome A. F. and McBrewster J., 2009: Geography of India: Indo- Gangetic Plain, Thar Desert, Major Rivers of India, Climate of India, Geology of India, Alphascript Publishing
4. Nag P. and Sengupta S., 1992: Geography of India, Concept Publishing
Pichamuthu C. S., 1967: Physical Geography of India, National Book Trust.
5. Sharma T. C. and Coutinho O., 1997: Economic and Commercial Geography of India, Vikas Publishing.
6. Singh Gopal, 1976: A Geography of India, Atma Ram.
7. Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional Geography,

DLE23711

**GENERIC ELECTIVES - I
V – SEMESTER
PRACTICAL V: COMPUTER MAPPING**

| UNIT | No. of Hours |
|---|---------------------|
| 1. Introduction to Computer : Generation of Computers, Hardware and Software Components | 20 |
| 2. Computer graphics : Creating Data base in computer, creation of Line, Bar and Pie diagrams. Thematic Maps - Choro chromatic and Schematic Maps | 20 |
| 3. GPS - Meaning, Function and its applications. | 10 |
| 4. Tour report / Factory visit | 10 |

References:

1. Singh L.R. : Fundamentals of Practical Geography, Sharadha Pustaka Bhavan, Alahabad, 2006
2. Dr. M.A. Siddaqui : Introduction to Geographical Information System, Sharadha Pustaka Bhavan, Alahabad, 2006
3. Chang : Introduction to GIS, Tata McGraw Hill W, New Delhi.

DLF23011 (A) / DLF23013 (A)

VI – Semester
Geography VI: DISASTER MANAGEMENT

Course Outcome

- CO1. Identify in details with application, if applicable, hazards and disasters concepts
- CO2. Specify the characteristics of flood, landslide, drought are in India
- CO3. Write down in details with examples earthquake tsunami and cyclone are in India
- CO4. Identify the classification and characteristics of human induced disasters
- CO5. Learn in details with examples response and mitigation to disaster

| UNIT | No. of Hours |
|---|---------------------|
| 1. Hazards, Risk, Vulnerability and Disasters: Definition and Concepts. | 12 |
| 2. Disasters in India: (a) Causes, Impact, Distribution and Mapping: Flood, Landslide, Drought. | 12 |
| 3. Disasters in India: (b) Causes, Impact, Distribution and Mapping: Earthquake, Tsunami and Cyclone. | 12 |
| 4. Human induced disasters: Causes, Impact, Distribution and Mapping. | 12 |
| 5. Response and Mitigation to Disasters: Mitigation and Preparedness, NDMA and NIDM; Indigenous Knowledge and Community-Based Disaster Management; Do's and Don'ts During Disasters | 12 |

Reading List

1. Government of India. (1997) Vulnerability Atlas of India. New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
2. Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
3. Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
4. Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi. Chapter 1, 2 and 3
5. Singh, R. B. (ed.), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
6. Sinha, A. (2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
7. Stoltman, J.P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
8. Singh Jagbir (2007) "Disaster Management Future Challenges and Oppurtunities", 2007. Publisher- I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).

DLF23011 (B) / DLF23013 (B)

VI – SEMESTER
Geography VI: GEOGRAPHY OF TOURISM

Course outcome

- CO1. Learn in depth geography of tourism concepts
- CO2. Specify in details with examples types of tourism
- CO3. Learn in details with application, if applicable, recent trends of tourism
- CO4. Identify in details with application, if applicable, impact of tourism
- CO5. Understand the details of tourism in India

| UNIT | No. of Hours |
|--|---------------------|
| 1. Origin, Development and significance of Tourism – factors influencing on tourism | 10 |
| 2. Type of Tourism: Nature Tourism, Cultural Tourism, Medical Tourism, Pilgrimage | 15 |
| 3. Recent Trends of Tourism: International and Regional; Domestic (India); Eco- Tourism, Sustainable Tourism, Meetings, Incentives, Conventions And Exhibitions (MICE), Carrying capacity of Tourism | 15 |
| 4. Impact of Tourism: Economy; Environment; Society | 10 |
| 5. Tourism in India: Tourism Infrastructure; Case Studies of Himalaya, Desert and Coastal and Heritage; National Tourism Policy | 10 |

Reference:

1. Dhar, P.N. (2006) International Tourism: Emerging Challenges and Future Prospects. Kanishka, New Delhi.
2. Hall, M. and Stephen, P. (2006) Geography of Tourism and Recreation – Environment, Place and Space, Routledge, London.
3. Kamra, K. K. and Chand, M. (2007) Basics of Tourism: Theory, Operation and Practise, Kanishka Publishers, Pune.
4. Page, S. J. (2011) Tourism Management: An Introduction, Butterworth-Heinemann- USA.
5. Raj, R. and Nigel, D. (2007) Morpeth Religious Tourism and Pilgrimage Festivals Management: An International perspective by, CABI, Cambridge, USA, www.cabi.org.
6. Tourism Recreation and Research Journal, Center for Tourism Research and Development, Lucknow
7. Singh Jagbir (2014) “Eco-Tourism” Published by - I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India(www.ikbooks.com).

VI – SEMESTER
Practical VI: COMPUTER MAPPING AND GPS SURVEYING

| UNIT | No. of Hours |
|---|---------------------|
| 1. Introduction to Computer : Generation of Computers, Hardware and Software Components | 20 |
| 2. Computer graphics : Creating Data base in computer, creation of Line, Bar and Pie diagrams. Thematic Maps - Choro chromatic and Schematic Maps | 20 |
| 3. GPS Surveying: Concepts, Segments and applications, plotting way Points by using map source software. | 20 |
| 4. Tour report / Factory visit | |

References:

1. Singh L.R. : Fundamentals of Practical Geography, Sharadha Pustaka Bhavan, Alahabad, 2006
2. Dr. M.A. Siddaqui : Introduction to Geographical Information System, Sharadha Pustaka Bhavan, Alahabad, 2006
3. Chang : Introduction to GIS, Tata McGraw Hill W, New Delhi.

VI – SEMESTER
Geography VI: GIS BASED PROJECT REPORT

Course Outcome

- CO1. Identify the characteristics of study of GIS
- CO2. Specify in depth GIS data structures
- CO3. Write down in depth GIS data analysis
- CO4. Deliberate in details with examples Application of GIS in Land use
- CO5. Identify the classification and characteristics of Application of GIS in Urban and Forest monitoring

| UNIT | No. of Hours |
|--|---------------------|
| 1. Geographical Information System (GIS): Definition and Components. | 12 |
| 2. GIS Data Structures: Types (spatial and Non-spatial), Raster And Vector Data Structure. | 12 |
| 3. GIS Data Analysis: Input; Geo-Referencing; Editing and Output; Overlays. | 12 |
| 4. Application of GIS in Land Use/Land Cover Mapping. | 12 |
| 5. Application of GIS in Urban Sprawl and Forests Monitoring | 12 |

Practical Record: A project file consisting of 5 exercises on using any GIS Software on above mentioned themes.

Reference:

1. Bhatta, B. (2010) Analysis of Urban Growth and Sprawl from Remote Sensing, Springer, Berlin Heidelberg.41
2. Burrough, P.A., and McDonnell, R.A. (2000) Principles of Geographical Information System- Spatial Information System and Geo-statistics. Oxford University Press
3. Chauniyal, D.D. (2010) Sudur Samvedan evam Bhogolik Suchana Pranali, Sharda Pustak Bhawan, Allahabad
4. Heywoods, I., Cornelius, S and Carver, S. (2006) An Introduction to Geographical Infromation system. Prentice Hall.
5. Jha, M.M. and Singh, R.B. (2008) Land Use: Reflection on Spatial Informatics Agriculture and Development, New Delhi: Concept.
6. Nag, P. (2008) Introduction to GIS, Concept India, New Delhi.
7. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi
8. Singh, R.B. and Murai, S. (1998) Space Informatics for Sustainable Development, Oxford and IBH, New Delhi.

VI – SEMESTER

**Geography VI: FIELD TECHNIQUES AND SURVEY BASED PROJECT
REPORT**

Course Outcome

- CO1. Understand the characteristics of field techniques
- CO2. Deliberate in details with application, if applicable, case study rural and urban
- CO3. Specify in details with examples field work in Geographical studies
- CO4. Understand in details with examples preparation of questionnaires
- CO5. Learn the details of designing the field report

UNIT

No. of Hours

- | | |
|---|----|
| 1. Field Work in Geographical Studies – Role, Value and Ethics of Field-Work | 10 |
| 2. Defining the Field and Identifying the Case Study – Rural /Urban /Physical /Human / Environmental. | 10 |
| 3. Field Techniques – Merits, Demerits and Selection of the Appropriate Technique; Observation (Participant / Non Participant). | 12 |
| 4. Questionnaires (Open/ Closed / Structured / Non-Structured); Interview with Special Focus on Focused Group Discussions; Space Survey (Transects and Quadrants, Constructing a Sketch). | 16 |
| 5. Designing the Field Report – Aims and Objectives, Methodology, Analysis, Interpretation and Writing the Report. | 12 |

Practical Record

- 1. Each student will prepare an individual report based on primary and secondary data collected during field work.
- 2. The duration of the field work should not exceed 10 days.
- 3. The word count of the report should be about **8000 to 12,000** excluding figures, tables, photographs, maps, references and appendices.
- 4. One copy of the report on A 4 size paper should be submitted in soft binding.

References:

- 1. Creswell J., 1994: *Research Design: Qualitative and Quantitative Approaches* Sage Publications.
- 2. Dikshit, R. D. 2003. *The Art and Science of Geography: Integrated Readings*. Prentice-Hall of India, New Delhi.
- 3. Evans M., 1988: "Participant Observation: The Researcher as Research Tool" in *Qualitative Methods in Human Geography*, eds. J. Eyles and D. Smith, Polity.
- 4. Mukherjee, Neela 1993. *Participatory Rural Appraisal: Methodology and Application*. Concept Pubs. Co., New Delhi.
- 5. Mukherjee, Neela 2002. *Participatory Learning and Action: with 100 Field Methods*. Concept Pubs. Co., New Delhi
- 6. Robinson A., 1998: "*Thinking Straight and Writing That Way*", in *Writing Empirical Research Reports: A Basic Guide for Students of the Social and Behavioral Sciences*, eds. by F. Pryczak and R. Bruce Pryczak, Publishing: Los Angeles.
- 7. Special Issue on "Doing Fieldwork" *The Geographical Review* 91:1-2 (2001).
- 8. Stoddard R. H., 1982: *Field Techniques and Research Methods in Geography*, Kendall/Hunt.

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**GENERIC ELECTIVES II
VI – SEMESTER
Geography VI: REGIONAL GEOGRAPHY OF INDIA**

Course Outcome

- CO1. Identify the characteristics of size and extent of India
- CO2. Understand the classification and characteristics of multipurpose river
- CO3. Identify the classification and characteristics of Population density and distribution
- CO4. Learn in details with examples power resources of India
- CO5. Specify the characteristics of Transportation modes

UNITS

No. of Hours

- | | |
|--|----|
| 1. Location, size and extent of India – Relief features- Drainage system – Climate | 15 |
| 2. Irrigation – Types, multipurpose river valley projects – DVC, Bhakra- Nangal, Alamatti | 10 |
| 3. Population – Size and Growth since 1901, Population Density and Distribution, Literacy, Sex Ratio. | 10 |
| 4. Resource Base –Livestock (cattle & fisheries),Power (Coal,& hydroelectricity) Minerals (iron ore and bauxite). | 10 |
| 5. Economy – Agriculture (Rice, Wheat, Sugarcane, Tea, Cotton); Industries (Cotton Textile, Iron-Steel, Automobile), Transportation Modes (Road and Rail). | 15 |

Reference:

1. Hussain M., 1992: *Geography of India*, Tata McGraw Hill Education.
2. Mamoria C. B., 1980: *Economic and Commercial Geography of India*, Shiva Lal Agarwala.
3. Miller F. P., Vandome A. F. and McBrewster J., 2009: *Geography of India: Indo- Gangetic Plain, Thar Desert, Major Rivers of India, Climate of India, Geology of India*, Alphascript Publishing
4. Nag P. and Sengupta S., 1992: *Geography of India*, Concept Publishing
5. Pichamuthu C. S., 1967: *Physical Geography of India*, National Book Trust.
6. Sharma T. C. and Coutinho O., 1997: *Economic and Commercial Geography of India*, Vikas Publishing.
7. Singh Gopal, 1976: *A Geography of India*, Atma Ram.
8. Spate O. H. K. and Learmonth A. T. A., 1967: *India and Pakistan: A General and Regional Geography*,

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GENERIC ELECTIVES - II

VI – SEMESTER

Practical VI: COMPUTER MAPPING

| UNIT | No. of Hours |
|--|---------------------|
| 5. Introduction to Computer : Generation of Computers, Hardware and Software Components | 20 |
| 6. Computer graphics : Creating Data base in computer, creation of Line, Bar and Pie diagrams. Thematic Maps - Choropleth and Schematic Maps | 20 |
| 7. GPS - Meaning, Function and its applications. | 10 |
| 8. Tour report / Factory visit | 10 |

References:

1. Singh L.R. : Fundamentals of Practical Geography, Sharadha Pustaka Bhavan, Alahabad, 2006
2. Dr. M.A. Siddaqui : Introduction to Geographical Information System, Sharadha Pustaka Bhavan, Alahabad, 2006
3. Chang : Introduction to GIS, Tata McGraw Hill W, New Delhi.

DEPARTMENT OF GEOGRAPHY
MODEL QUESTION PAPER FOR CBCS SCHEME
B.A GEOGRAPHY
(For I, II, III, IV, V AND VI semesters)

Time: 3 Hours

Max. Marks: 70

Part-A

I. Answer any five of the following questions. Answer should not exceed 50 words **5x2=10**

- 1).....
- 2).....
- 3).....
- 4).....
- 5).....
- 6).....
- 7).....

Part-B

II. Answer any Six of the following questions. Answer should not exceed 100 words **6x5=30**

- 8).....
- 9).....
- 10).....
- 11).....
- 12).....
- 13).....
- 14).....
- 15).....

Part –C

III. Answer any Three of the following questions. **3x10=30**

- 16).....
- 17).....
- 18).....
- 19).....
- 20).....

.....