



COURSE SCHEME FOR UNDER GRADUATE CLASSES UNDER CHOICE BASED CREDIT SYSTEM (CBCS) FROM 2016 ONWARDS

Semester	Core Courses (12) 4+2= 6 credits	AECC (2) Ability Enhancement Course 2 credits each	SEC (4) Skill Enhancement Course 4 Credits each	DSE (6) Discipline Specific Elective 4+2=6 credits	ENG (4) 2 Credits
1st	DSC-1A	Commu Eng-I- 2 Evs -I 2			
	DSC-2A				
	DSC-3A				
2nd	DSC-1B	Commu Eng-II- 2 Evs -II 2			
	DSC-2B				
	DSC-3B				
3rd	DSC-1C		SEC-I		ENG-I
	DSC-2C				
	DSC-3C				
4th	DSC-1D		SEC-II		ENG-II
	DSC-2D				
	DSC-3D				
5th			SEC-III	DSE-1A	ENG-III
				DSE-2A	
				DSE-3A	
6th			SEC-IV	DSE-1B	ENG-IV
				DSE-1B	
				DSE-1B	
	6 x 12= 72	4 x 2 = 8	4 x 4=16	6 x 6=36	2 x 4=8 140 credits

NOTE: For taking Geography as one of the core subject in B.A/B.Sc course, a candidate is required to take one core course from Geography in the first and second semester comprising of 6 credits each (theory 4 credits + practical 2 credits). In third and fourth semester a candidate is required to take one core course of 6 credits each (theory 4 credits +practical 2 credits) along with one skill enhancement course (SEC) comprising of four credits in both third and fourth semesters. In the fifth and sixth semester, a candidate is required to take at least one Discipline Specific Elective (DSE) of 6 credits along with one Skill enhancement course (SEC) of four credits each for fifth and sixth semester.

Course Structure UGSCBCS -2016 B.A/B.Sc. Geography

Semester	Name of the Course	Course Number	Nature of Course	Credits
1st	Elements of Physical Geography	GG-CR-16101	CORE	4
	Practical-Cartography	GGP-CR16101	CORE	2
2nd	Philosophies & Methodologies in Geography	GG-CR-16201	CORE	4
	Practical-Surveying	GGP-CR-16201	CORE	2
3rd	Human Geography	GG-CR-16301	CORE	4
	Practical- Quantitative Techniques in Geography	GGP-CR-16301	CORE	2
	Surveying and its Applications	GG-SEC-16301	Skill Enhancement Course	2
	Practical	GG-SEC-16301	Skill Enhancement Course	2
4th	Geography of India	GG-CR-16401	CORE	4
	Practical- Remote Sensing Techniques	GGP-CR-16401	CORE	2
	Regional Planning Development	GG-SEC-16401	Skill Enhancement Course	2
	Practical	GG-SEC-16401	Skill Enhancement Course	2
5th	Geography of Tourism	GG-DSE-16501	Discipline Specific Elective	4
	Practical-	GG-DSE-16501	Discipline Specific Elective	2
	Economic Geography	GG-DSE-16502	Discipline Specific Elective	4
	Practical- Map Projections	GG-DSE-16502	Discipline Specific Elective	2
	GIS & GPS Applications	GG-SEC-16501	Skill Enhancement Course	2
	Practical	GG-SEC-16501	Skill Enhancement Course	2
	Geography of Jammu and Kashmir	GG-GE-16501	Generic Elective	4+2
6th	Understanding Disasters	GG-DSE- 16601	Discipline Specific Elective	4
	Practical-	GG-DSE-16601	Discipline Specific Elective	2
	Field Techniques and Survey based project Report	GG-SEC- 16601	Skill Enhancement Course	2
	Practical	GG-SEC- 16601	Skill Enhancement Course	2
	Indian Geography	GG-GE-16601	Generic Elective	4+2

Note: Lectures per week: 4 of one hour. Practical per week: 2 of two hours each



GG-CR-16101 Elements of Physical Geography Marks: 60

Credit-I

- 1) Introduction to Physical Geography and its Various Branches
- 2) Structure of Earth's Interior
- 3) Wegener's theory of Continental Drift
- 4) Concept of Seafloor spreading, Plate Tectonics and Isostasy
- 5) Earthquakes: origin, types, measurement

Credit –II

- 1) Origin and characteristics and Classification of rocks
- 2) Weathering: Factors and Types
- 3) Earth movements
- 4) Exogenetic and Endogenetic Forces/Processes
- 5) Landform and their formation (Fluvial, Glacial, Aeolian and Karst)

Credit -III

- 1) Definition and Significance of Climatology
- 2) Insolation and Global Energy Budget
- 3) Atmospheric Pressure and Winds (Planetary, Periodic and Local winds)
- 4) Precipitation: Types and Global Distribution Patterns
- 5) Atmospheric Disturbances: Tropical and Temperate Cyclones / Anti-cyclones

Credit -IV

- 1) Surface configuration of the Ocean floor- Continental Shelf, Continental Slope, Abyssal Plain, Mid- Oceanic Ridges and Oceanic Trenches
- 2) Coral reefs: Significance, Origin and Types
- 3) Tides: Origin and Types
- 4) Currents: Origin and Types; Currents of Atlantic ocean
- 5) Oceans as Store-houses of resources for the future

Suggested Readings

1. Singh, S.: Geomorphology, Prayag Pustakalaya, Allahabad, 1998.
2. Sparks, B.N.: Geomorphology, Prayag Pustakalaya, Allahabad, 1998
3. D. S. Lal, Physical Geography, Sharda Pustak Bhawan, 2009
4. Savindra Singh, Physical Geography, Prayag Pustak Bhawan, 2000
5. Majid Hussain, Physical Geography, Anmol Publications Pvt. Ltd., 2007
6. S. A. Qazi, Principles of Physical Geography, AHP Publishing Co. 2004
7. Satopa Mukherjee, Understanding Physical Geography, Oriental Longman 2002
8. A. H. Strahler & A. N. Strahler, Modern Physical Geography, John Willy & sons, Inc. 2001.
9. Barry, R. G & Chorley, R.J., Atmosphere, Weather and Climate Routledge, 1998.
10. Critchfield, H, General Climatology, Prentice Hall, New York, 1975.
11. Stringer, E.T Foundation of Climatology, Surjeet Publication, Delhi, 1982.
12. Grald, S, General Oceanography- An Introduction, John Wiley & Sons, New York, 1980.
13. King, C.A.M., Oceanography for Geographers, E Arnold, London, 1975.



GGP-CR-16101-Practical

Cartography

30 Marks

Credit – V

- 1) Essentials of Map: Scale, Projection, Direction and Conventional Signs
- 2) Scales: Definition and Types
- 3) Construction of Scales: Plain, Diagonal and Comparative
- 4) Contours: Definition and importance: Representation of different Landforms by Contours

Credit – VI

- 1) Drawing of Profile: Serial, Longitudinal, Superimposed, Composite and Projected Profiles
- 2) Uses of line and Bar graphs for representing population, agriculture, industry and transport data
- 3) Representation of population distribution, density, growth by different Cartographic methods – Point, Line and Area.
- 4) Digital Cartography : Definition, Scope and Applications

Suggested Readings

1. Robinson, A.H et al., Elements of Cartography, John Wiley & Sons, U.S.A., 1995.
2. Sarkar, A.K., Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
3. Singh, R.L and Dutt, P.K., Elements of Practical Geography, Kalyani Publishers New Delhi, 1979.
4. Gopal Singh, Map World and Practical Geography, Vikas Publishing House, 2000
5. Kali Charan Sahu, Textbook of Remote Sensing and Geographic Information System, Atlantic Publishers and Distributors, 2008



GG-CR-16201 Philosophies & Methodologies in Geography

Marks: 60

Credit-I

- 1) The Nature of Geography
- 2) Objectives and relevance of Geography
- 3) Various Branches of Human Geography
- 4) Major themes of Geography (Areal Differentiation, Man-Environment Interaction & Spatial organization)
- 5) Dualism in Geography:
 - i. Regional/Systematic
 - ii. Physical/Human
 - iii. Historical/Contemporary

Credit –II

- 1) Contribution of Phoenicians in the field of Geography
- 2) Contribution of Greeks in the field of Geography
- 3) Contribution of Romans in the field of Geography
- 4) Contribution of Arabs in the field of Geography
- 5) Impact of Dark-ages on Geography

Credit -III

- 1) Geography as the study of Environment
- 2) Definition, Scope and significance of Ecology
- 3) Concept and broad types of Ecosystem
- 4) Biodiversity: Concept, Importance and Conservation
- 5) Ecological imbalances, causes and consequences

Credit -IV

- 1) Quantitative Techniques and their relevance in Geography
- 2) Quantitative Revolution in Geography
- 3) Geomorphic field survey: Meaning, Significance and Procedure
- 4) Socio-Economic field survey: Meaning, Significance and Procedure
- 5) Application of Remote Sensing in Geomorphology, Land use and Natural Hazards

Suggested Readings

1. Dikshit R D: Geographical Thought -A contextual History of Ideas. Prentice Hall India, New Delhi, 2000.
2. Hartshorne, Richard: Perspectives on the Nature of Geography, Rand McNally and Co., Chicago. 1959.
3. Harvey, David: Explanation in Geography, Edward -Arnold London, 1972.
4. Husain, Majid: Evolution of Geographical Thought, Rawat Publications, Jaipur, 1984.
5. James, P E: All Possible Worlds: A History of Geographical Ideas, Sachin Publication, Jaipur, 1980.
6. A.H.Strahler & A.N.Strahler, Modern Physical Geography, John Willy & sons, Inc 2001
7. M. Z. A. Khan & S.K. Agarwal, Environmental Geography, AHP Publishing Co.2010
8. S. Gupta & M. Gupta, Environment I Population and Resources, 1997



GGP-CR-16201- Practical

Surveying

Marks: 30

Credit – V

- 1) Introduction to Surveying, Classification and types of Surveying
- 2) Plain Table Survey: Definition, Accessories, Procedure and Precautions
- 3) Radial, Intersection and Resection methods of Plain Table Survey
- 4) Tracing Paper Method and Trial and Error Method

Credit - VI

- 1) Study of survey of India Topographic maps
- 2) Interpretation of survey of India topo-sheets with respect to Relief, Drainage, Settlements and Communication patterns
- 3) One day Socio-Economic field survey of local area within the District.

Suggested Readings.

1. Robinson, A.H et al., Elements of Cartography, John Wiley & Sons, U.S.A., 1995.
2. Sarkar, A.K., Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
3. Singh, R.L and Dutt, P.K., Elements of Practical Geography, Kalyani Publishers New Delhi, 1979.
4. Gopal Singh, Map World and Practical Geography, Vikas Publishing House 2000
5. Kali Charan Sahu, Textbook of Remote Sensing and Geographic Information System, Atlantic Publishers and Distributors 2008



GG-CR-16301

Human Geography

Marks: 60

Credit -I

- 1) Determinism and Possibilism
- 2) Pragmatism, Radicalism and Positivism
- 3) Behavioral Approach
- 4) Humanistic Approach

Credit -II

- 1) Races: Physical and Socio-Economic Characteristics, Spatial Distribution
- 2) Major Religious Groups: Spatial diffusion and distribution (Christianity , Islam, Hinduism and Buddhism)
- 3) Economic activities (Primary Secondary, Tertiary and Quaternary)
- 4) Human Adaptation and Environment
 - i. Cold region- Eskimo
 - ii. Mountain –Gujars

Credit -III

- 1) Population: Structure and Composition (Age, Gender), Comparison between developed and developing countries
- 2) Distribution and density of Population: Factors (Geographic, Socio-Economic and Demographic)
- 3) Concepts of Over-Population, Under-Population and Optimum-Population, Zero-Population growth
- 4) Theories of Population Growth: Malthus and Demographic Transition

Credit -IV

- 1) Meaning, Nature and Classification of Resources
- 2) Resource Conservation: Meaning and Importance
- 3) Methods of Conservation of Resources: Soil, Water, Forests and Minerals
- 4) Land degradation: Causes and Consequences

Suggested Readings

1. Beblig, H.J., Human Geography: Culture, Society and Space, John Wiley, New York, 1996.
2. Singh, K.N., People of India, An Introduction, Seagul Book, 1992.
3. Spate O.H.K, People of India, An Introduction, Seagul Books, 1992.
4. Majid Hussain, Human Geography, Rawat Publications 1994
5. L. N. Verma, Urban Geography, Rawat Publications 2006
6. Grish Chopra, Economic Geography, Commonwealth 2006
7. T. C. Sharma, Economic Geography of India, Rawat Publications 2013
8. R. K. Jain, A Textbook of Population Studies, Astha Publishers and Distributors 2014
9. Hans Raj, Fundamentals of Demography, Surjeet Publications.



GGP-CR-16301- Practical Quantitative Techniques

Marks: 30

Credit – V

- 1) Measures of Central Tendency: Mean, Median, Mode, Partition Values (Quartiles, Deciles & Percentiles)
- 2) Measures of Dispersion: Mean Deviation, Standard Deviation and Coefficient of Variation in data analysis
- 3) Correlation Analysis: Scatter Diagram and Karl Pearson's method
- 4) Use of above mentioned Statistical tools in Physical and Socio-Economic Data Analysis

Credit – VI

- 1) Field work and Field report of Physical Geography of the Area.

Suggested Readings

1. Pal, S.K., Statistics for Geographers- Techniques and Applications, Concept, New Delhi, 1998.
2. Jones, p .A. , Fieldwork in Geography, Longman,1968.
3. Khan, Z.A., Text Book of Practical Geography. Concept publications, New Delhi, 1963.
4. Singh, R.L. and Dutt, P.K.: Elements of Practical Geography Kalyani Publishers, New Delhi.
5. Steers, J.A., Map projections, University of London press, London
6. Ashis Sarkar, Quantitative Geography- Techniques and Presentation, Oriental Blackswan 2013
7. B. C. Panda, Remote Sensing- Principles and Applications, Viva Books 2008
8. Khan. Z.A.,text Book of Practcal Geography, Concept, New Delhi, 1998.
9. Monkhouse, F.J. & Wilkinson, H.R., maps and Diaghrams, Mthuen, London, 1994.
10. Sarkar ,A.K., Practical Geography- A Systematic Approach, orient Longman, Calcutta, 1997.
11. Singh,R.L.,Elements of Practical Geography, Kalyani Pub, New Delhi.
12. L. R. Singh, Fundamentals of Practical Geography, Sharda Pustak Bhawan 2006
13. Gopal Singh, Map World and Practical Geography, Vikas Publishing House 2000
14. N. N. Basak, Surveying and Leveling, Tata McGraw Hill 1997
15. D. N. Elhance, V. Elhance & B. M. Aggarwal, Fundamentals of Statistics, Kitab Mahal 2008.



GG-SEC-16301 Surveying and its Applications Marks 30

Credit -I

- 1) Meaning & Scope of Surveying
- 2) Types of Surveying
- 3) Surveying Instruments- Conventional and Advanced

Credit -II

- 1) Total Station - Characteristics
- 2) Functions of Total station
- 3) Procedure of Setting of Total station- Levelling, Centring and Orienting

Suggested Readings

1. Pal, S.K., Statistics for Geographers- Techniques and implications, Concept, New Delhi, 1998.
2. Robinson, A.H et al., Elements of Cartography, John Wiley and Sons, U.S.A., 1995.
3. Sarkar, A.K., Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
4. Singh, R.L, and Dutt, P.K., Elements of Practical Geograph;y Kalyani Publishers New Delhi, 1979.
5. Gopal Singh, Map World and Practical Geography; Vikas Publishing House 200.



GG-SEC-16301 (Practical) Surveying and its Applications Marks 30

Credit -III

1. Chain and tape Survey (8-exercises)
2. Plane table Survey (8-exercises)

Credit -IV

1. Dumpy level Survey (8-exercises)
2. Theodolite Survey/ Total Station (8-exercises)



GG-CR-16401

Geography of India

Marks: 60

Credit -I

- 1) Land: Physical Divisions and Drainage Systems of India.
- 2) Climate: General Climatic Conditions and Seasonal Variations in India
- 3) Monsoons: Mechanism and its types (Classical and Modern theory)
- 4) Soil: Types and Distribution

Credit –II

- 1) Population: Distribution, Density and Growth since 1951
- 2) Land Resources and Utilization
- 3) Characteristics of Indian Agriculture
- 4) Distribution and Production of Food Crops: Rice and Wheat

Credit – III

- 1) Distribution and production: Iron Ore, Coal and Petroleum in India
- 2) Cotton Textiles Industry
- 3) Iron and Steel Industry
- 4) Major Industrial Regions of India

Credit –IV

- 1) Physical Divisions: Drainage, Climate and vegetation (J&K)
- 2) Population Distribution: Density and Growth (J&K)
- 3) Agriculture with special reference to Horticulture and Saffron (J&K)
- 4) Tourism industry (J&K)

Suggested Readings

1. Drew, F .K.,The territories of India, Kashmir State. Standard Press London. 1979 :
2. Gazetter of Kashmir and Ladakh. (1890) Reprint (1974).
3. Lawrence, S.W. The Valley of Kashmir, Oxford University Press. 1895.
4. Raina, A.N. Geography of Jammu and Kashmir. National Book Trust, New Delhi, 1971.
5. Spate, O.H.K., India and Pakistan, Mac Million & Co. 1967.
6. Singh, R.L. , India, Regional Geography, Banarus Hindu University, 1987
7. Qazi, S.A., Geography of India with special reference to J&K State, APH Publishing Co. 2000.
8. Majid Hussain, Systematic Geography of Jammu and Kashmir, Rawat Publications 2000
9. R. L. Singh, India- A Regional Geography, National Geographical Society of India 2003
10. Chandra Vijay Purty, Geography of India, ABD Publishers.
11. Majid Hussain, Geography of India, 2nd Ed. Tata Mcgraw Hill, 2011
12. D. R Khullar, Geography of India,



GGP-CR-16401 –Practical Remote Sensing Techniques Marks: 30

Credit -V

- 1) Remote Sensing: Definition, Scope and Applications
- 2) Types of Remote Sensing.
- 3) Sensors and their types
- 4) Satellite Images and their Interpretation

Credit -VI

- 1) Types of Remote Sensing Data
- 2) Scale of Aerial Photographs and Methods of its Determination
- 3) GPS: Definition, Principles
- 4) Applications of GPS

Suggested Readings

1. Kali Charan Sahu, Textbook of Remote Sensing and Geographic Information System, Atlantic Publishers and Distributors 2008
2. B.C. Panda, Remote Sensing- Principles and Applications, Viva Books 2008
3. Jensen, R Fundamentals of Remote Sensing. Shree Maitree Printech Pvt Limited Noida 2007
4. Gopal Singh, Map World and Practical Geography, Vikas Publishing House 2000



GG-SEC-16401 Regional Planning & Development

Marks 30

Credit-I

- 1) Concept of Region & Types of Region
- 2) Concept of Planning & Types of Planning
- 3) Meaning & Definition of Regional Planning
- 4) Significance of Regional planning

Credit-II

- 1) Introduction of Regional Planning in India
- 2) Significance of Regional Planning in India
- 3) Achievements of Regional Planning in India

Suggested Readings

1. V.L.S Prakasa Rao (1960), Regional Planning, Indian Statistical Institute, Calcutta
2. K.V. Sundaram (1979) , Urban and Regional Planning in India, Vikas Publishers, New Delhi
3. R.P. Misra et al. (1974), Regional Planning in India, Vikas Publishers, New Delhi
4. Mahesh Chand , V. K. Puri , (2011), Regional Planning in India, Concept Publishers
5. K. Siddhartha and S. Mukherjee, (2014), Regional Planning
6. Mishra (1985) Economics of Development and Planning
7. S. K. Kulshrestha (2012)Urban and Regional Planning in India, Sage Publications
8. R. P. Misra (1974) Planning for Backward Areas, Institute of Development Studies, Mysore
9. R. P. Misra (1992), Regional Planning: Concepts, Techniques, Policies and Case Studies, Concept Publishing Company , New Delhi
10. Antoni Kuklinski, (1971) , Regional Planning, Vol. 1., United nations Research Institute for Social Development, IICD Library
11. Raj Kishore Wishwakarma (1981), Urban and regional planning policy in India, Uppal Publishing House, New delhi



GG-SEC-16401 (Practical) Regional Planning & Development Marks 30

Credit-III

1. Detailed Case Study of any Regional Plan of India

Credit-IV

Prepare a Regional Development Plan of any selected region by adopting the following Procedure;

- i. Make a concept note of the plan of selected region
- ii. Prepare a physical map of the region
- iii. Make a comprehensive inventory of all the resources and also prepare thematic maps for each resource
- iv. Prepare a regional developmental plan highlighting the objectives & targets, resources, constraints, implementation & execution, & Plan revision.



GG-DSE- 16501- GEOGRAPHY OF TOURISM Marks:60

Credit-I

- 1) Definition and Scope of Tourism Geography
- 2) Components of Tourism
- 3) Geographical Attributes of Tourism
- 4) Butlers Theory of Tourism Development

Credit-II

- 1) Types and Forms of Tourism
- 2) Concept of Carrying Capacity
- 3) Sustainable Tourism
- 4) Environmental Impacts of Tourism

Credit-III

- 1) Characteristics of Indian Tourism
- 2) National Tourism Policy
- 3) Regional Dimension of Tourist Attraction
- 4) Problems and Prospects of Indian Tourism

Credit-IV

- 1) Significance and Potential of Tourism in J&K.
- 2) Tourist Flow and Distribution Pattern
- 3) Pilgrimage Tourism & Adventure Tourism in Jammu and Kashmir
- 4) Problems and Prospects of Tourism in J&K

Suggested Readings:

1. S. N. Singh, Geography of Tourism and Recreation, New Delhi, 1954.
2. S. C. Chandra, Geography of Tourism. Rawat Publications, New Delhi 2002.
3. P.C. Sinha, Eco-tourism and Mass tourism. Allahabad 2005.
4. M. Simith and Nichola Macleod, Key Concepts in Tourist studies. 2010
5. B.s. Badan, Tourism in India, Mumbai, 1998.
6. A.C Singh & P.S. Rana, "Tourism Geography, Patna, 2006.



GG-DSE-16501- (Practical)

Maximum Marks = 30

Credit – V

1. Determination of Tourist Potential Sites through Toposheets (8 Exercises)
2. Mapping of Tourist Nodes (8 Exercises)
3. Tourist Information System (Site Information and Route Information) (8 Exercises)

Credit – VI

1. Generation of Tourist Data (8 Exercises)
2. Field Based Tourist Perception Studies (8 Exercises)
3. Analysis of Tourism Impacts and Report Writing (8 Exercises)



GG-DSE-16502- ECONOMIC GEOGRAPHY

Marks: 60

Credit-I

- 1) Introduction to Economic Geography
- 2) Factors influencing Location of industry
- 3) Sectoral analysis of Economic activity in India
- 4) Regional disparities in economic Development

Credit-II

- 1) Classification of Industries
- 2) Heavy Industries- Petrochemical
- 3) Agro-based Industries- Cotton Textile and sugar
- 4) Locomotive industry

Credit-III

- 1) Globalization and Privatization
- 2) Globalization and its Impact on Indian Economy
- 3) Concept of Knowledge Economy
- 4) Emerging trends in Indian Economy -Economic Reforms Post-1991

Credit-IV

- 1) Sectoral Composition of the Economy of Jammu and Kashmir
- 2) Energy resources of J&K
- 3) Mineral resources of J& K
- 4) Contribution of Handicrafts and Cottage Industry in the Employment Generation in J&K State

Suggested Readings

1. Coe, N., Kelly, P., and Yeung, H. (2007) *Economic Geography: A Contemporary Introduction*, London: John Wiley & Sons
2. Leyshon, A., Lee, R., McDowell, L and Sunley, P. (eds) (2011) *The Sage Handbook of Economic Geography*, London: Sage
3. Aoyama, Y., Murphy, J., and Hanson, S. (2010) *Key Concepts in Economic Geography*, London: Sage
4. Clark, G., Gertler, M. and Feldman, M.(eds) (2003) *The Oxford Handbook of Economic Geography*, Oxford: Oxford University Press
5. Economic Geography of India by T. C Sharma
6. Economic Geography by Majid Hussain
7. Economic Geography By Prithwish Kumar Roy



GG-DSE-16502- (Practical) Map Projections

Maximum Marks = 30

Credit - V

1. Map Projection and its significance
2. Classification of Map Projections
3. Limitations of existing projections
4. Conformality or Orthomorphism
5. True directions, True Distances and Equivalence

Credit – VI

1. Simple Cylindrical Projection (4 Exercises)
2. Cylindrical Equal area projection (4 Exercises)
3. Conical and polyconic Projection (4 Exercises)
4. Zenithal Map Projection (4 Exercises)



GG-SEC-16501 GIS & GPS Application Marks 30

Credit- I

- 1) Definition and Scope of GIS
- 2) Components of GIS
- 3) Spatial and Non-spatial Data
- 4) Data Processing and Analysis

Credit -II

- 1) Global Positioning System- An Introduction
- 2) GPS Structure (Segments),
- 3) Fundamentals of GPS Positioning

Suggested Readings

1. Kali Charan Sahu, Textbook of Remote Sensing and Geographic Information System, Atlantic Publishers and Distributors 2008
2. B.C. Panda, Remote Sensing- Principles and Applications, Viva Books 2008
3. Jensen, R Fundamentals of Remote Sensing. Shree Maitree Printech Pvt Limited Noida 2007
4. Gopal Singh, Map World and Practical Geography, Vikas Publishing House 2000



GG-SEC-16501 (Practical) GIS & GPS Application

Marks 30

Credit- III

1. Generation of Thematic Layers-Point, Line & Polygon (18 exercises)

Credit -IV

1. GPS operations:Calibration-Determination of Latitude, Longitude and Altitude (10 Exe)
2. Mapping of Different Land Use/Land cover Parcel With GPS (10 Exeercises)



GG-GE-16501 GEOGRAPHY OF JAMMU AND KASHMIR MARKS 60+ 30

CREDIT -I

1. Jammu and Kashmir- Space Relationships
2. Physiography of Kashmir Valley
3. Physiography of Jammu Division
4. Physiography of Ladakh

CREDIT -II

1. Climate of Jammu and Kashmir
2. Annual Rainfall & its Distribution Pattern
3. Impact of Monsoon on Jammu and Kashmir
4. Role of Western Disturbances

CREDIT -III

1. Forest Resources of Jammu and Kashmir
2. Wildlife
3. Biodiversity
4. Soil groups of Kashmir Valley

CREDIT -IV

1. Population: Distribution, Density in Jammu and Kashmir
2. Population Structure
3. Population Composition
4. Population Growth and trends in Urbanisation

Tutorials (Credit-V and Cerdit-VI)

CREDIT –V (Tutorial)

1. Water Resources of Jammu and Kashmir
2. Mineral Resources of Jammu and Kashmir
3. Hydel Energy resources of Jammu and Kashmir
4. Tourism in Jammu and Kashmir

CREDIT –VI (Tutorial)

1. Horticulture of J&K with respect to Apple Cultivation
2. Saffron Cultivation
3. Agriculture of Jammu Region
4. Agriculture in Pir-Panjal Region

Suggested Readings

1. Drew, F .K.,The territories of India, Kashmir State. Standard Press London. 1979 :
2. Gazetter of Kashmir and Ladakh. (1890) Reprint (1974).
3. Lawrence, S.W. The Valley of Kashmir, Oxford University Press. 1895.
4. Raina, A.N. Geography of Jammu and Kashmir. National Book Trust, New Delhi, 1971.
5. Spate, O.H.K., India and Pakistan, Mac Million & Co. 1967.
6. Singh, R.L. , India, Regional Geography, Banarus Hindu University, 1987
7. Qazi, S.A., Geography of India with special reference to J&K State, APH Publishing Co. 2000.



GG-DSE-16601 – Understanding Disasters

Marks 60

Credit-I

- 1) Meaning and Definition- Hazard and Disaster
- 2) Introduction to Geo-Physical Disasters
- 3) Earthquakes
- 4) Landslides
- 5) Tsunami

Credit-II

- 1) Introduction to Hydro-meteorological Disasters
- 2) Cyclones
- 3) Cloud bursts, Floods and Droughts
- 4) Introduction to Man-made Disasters- Nuclear & Chemical Disasters

Credit-III

- 1) Meaning & Scope of Disaster Management
- 2) Elements of Disaster Management-
- 3) Concept of Disaster Risk & Vulnerability

Credit-IV

- 1) Disaster Management Cycle
- 2) Response Phase
- 3) Recovery Phase
- 4) Reconstruction and Rehabilitation Phase
- 5) Disaster Mitigation & Preparedness Phase

Suggested Readings

1. Bryant Edwards (2005): Natural Hazards, Cambridge University Press, U.K
2. Carter, W. Nick, 1991: Disaster Management, Asian Development Bank, Manila
3. Firefly Guide to Global Hazards, Robert Louis Kovach, Bill McGuire, Firefly Books, 2004
4. H.K. Gupta (2003) Disaster management
5. David Etkin (2014) Disaster Theory, Elsevier



GG-DSE-16601- (Practical)

Maximum Marks = 30

Credit – V

1. Determination of Earthquake Epicenter (6 Exercises)
2. Earthquake Intensity Measurements (Scales) (6 Exercises)
3. Earthquake Response through Mock drill (6 Exercises)
4. Preparation of First Aid Box and its application in specific disasters (4 Exercises)

Credit – VI

1. Emergency Response for Flood and Fire Hazard (6 Exercises)
2. Project Report based on Field Study of any disaster hit area (12 Exercises)



GG–SEC–16601 Field Techniques & Survey Based Project Report

Marks 30

Credit – I

- 1) Relevance of Geomorphic Field-studies in Geography
- 2) Relevance of Socio-Economic Field-studies in Geography
- 3) Selection of Study-area
- 4) Selection of Geomorphic aspects and Socio-Economic Variables

Credit – II

- 1) Data: Types and Sources
- 2) Methods of Data Collection
- 3) Tabulation of Data
- 4) Analysis of Data.

Suggested Readings:

1. Pal, S.K., Statistics for Geographers- Techniques and Applications, Concept, New Delhi, 1998.
2. Robinson, A.H et al., Elements of Cartography, John Wiley and Sons, U.S.A., 1995.
3. Sarkar, A.K., Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
4. Singh, R.L, and Dutt, P.K., Elements of Practical Geography Kalyani Publishers New Delhi, 1979.
5. Gopal Singh, Map World and Practical Geography; Vikas Publishing House 200. .



GG–SEC–16601 Practical Marks 30

Credit – III

- 1) Preparation of Questionnaire
- 2) Customization of Questionnaire
- 3) Conducting of Socio-Economic Field survey of sample Households with the Structured Questionnaire
- 4) Identification and Interpretation of Geomorphic Features in the field

Credit – IV

- 1) Report writing based on results of Geomorphic and Socio-Economic Field-survey, supplemented with Photographs, Maps and Diagrams



GG-GE-16601

INDIAN GEOGRAPHY

MARKS 60+30

CREDIT -1

1. Geo-Environmental Framework of India
2. Himalayas
3. Gangetic Plain
4. Deccan Plateau

CREDIT -II

1. Climate of India
2. Monsoons
3. Retreating Monsoons
4. Western Disturbances

CREDIT -III

1. Natural Vegetation
2. Forest Resources of India
3. Biodiversity of India
4. Bio-geographic-Zones of India

CREDIT -IV

1. Population Distribution and Dynamics
2. Racial and Ethnic Composition
3. Population Explosion and related Problems
4. Urbanisation and emerging Trends

Tutorials (Credit-V and Credit-VI)

CREDIT –V (Tutorial)

1. Mineral Resources of India
2. Iron ore distribution and production
3. Coal distribution and production
Petroleum distribution and production

CREDIT –VI (Tutorial)

1. Iron and Steel Industry growth and distribution
2. Cotton Textile Industry growth and distribution
3. Sugar Industry growth and distribution
4. Major Industrial Regions

Suggested Readings

1. Spate, O.H.K., India and Pakistan, Mac Millan & Co. 1967.
2. Singh, R.L. , India, Regional Geography, Banarus Hindu University, 1987
3. R. L. Singh, India- A Regional Geography, National Geographical Society of India 2003
4. Chandra Vijay Purty, Geography of India, ABD Publishers.
5. Majid Hussain, Geography of India, 2nd Ed. Tata Mcgraw Hill, 2011
6. D. R Khullar, Contemporary Geography of India,