DEPARTMENT OF GEOGRAPHY

BA 1st Year, Sem. I ,
Course I(Theory)
Session: 2021-22

Programme/Class: Certificate/ BA/BSc.	Year: First	Semester: First
Name of Faculty: Dr. Sangita Chaudhay		Subject: Geography
Course Code: A110101T	Course Title: **Physical Geography**	
Credits: 4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40

Course outcomes: Students will be able to understand

- The Earth geomorphic transition from beginning to present day.
- Plate tectonics and related movements
- Landforms carved by various agents of erosion
- Earth's climate and that factors that influence it
- Oceans system and biogeography of the world.

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
I	Nature and Scope of Physical Geography, Origin of Universe, solar system and Earth (Big Bang Theory and Indian Concepts). Geological Time Scale (with special reference to evidences from India), Interior of the Earth.	8
II	Origin of Continents and Oceans, Isostacy, Earthquakes and Volcanoes, Geosynclines, Continental Drift theory, Concept of Plate Tectonics.	8
III	Rocks, Folding, Faulting, Weathering, Erosion, Cycle of Erosion by Davis and Penck, Drainage Pattern.	8
IV	Fluvial, Karst, Aeolian, Glacial, and Coastal Landforms	8
V	Composition and Structure of atmosphere: Insolation, Atmospheric pressure and winds.	8
VI	Airmasses and Fronts, cyclones and anti-cyclones, Humidity, precipitation and rainfall types.	7
VII	Ocean Bottoms, composition of marine water-temperature and salinity. Circulation of Ocean water Waves, Currents and Tides, Ocean deposits, Corals reefs and it's type.	7
VIII	Biosphere: Meaning and Concept, components Of Biosphere, concept Of Biotic succession, Biome: Tropical evergreen	6

	rainforest biome, Savanna biome, Temperate grassland biome, Tundra biome, Hot desert and semi desert biome.	

Suggested Readings:

1. Singh, Savindra (2018), Physical Geography (Eng./Hindi) Allahabad, India: PrayagPustak
2. Huggett, R.J. (2007): *Fundamentals of Geomorphology*. New York, U.S.A.: Routledge.
3. Khullar, D.R. (2012). *Physical Geography*. New Delhi. India: Kalyani Publishers.
4. Strahler, A. H. and Strahler, A N. (2001): *Modern Physical Geography* (4/E). New York, U.S.A.: John Wiley and Sons, Inc.
5. Thornbury, W. D. (2004): *Principal of Geomorphology*. New York, U.S.A.: Wiley.
6. Bloom, A. L. (2003). Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, New Delhi, India: Prentice-Hall of India
7. Dr. Alka Gautam: Bhautik Bhugol, Rastogi Publication, Meerut
8. Majid Husain: Bhautik Bhugol, Rawat Publication, New Delhi

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:
Assignment / Test / Quiz(MCQ) / Seminar/ Presentations

Suggested equivalent online courses:https://onlinecourses.swayam2.ac.in/cec21_hs03/preview
https://onlinecourses.swayam2.ac.in/nos20_sc25/preview

Geography Deptt.
R.G. College, Meerut

DEPARTMENT OF GEOGRAPHY
BA 1st Year, Sem. I
Course II (Practical)
Session: 2021-22

Program/Class: Certificate/BA/BSc.	Year: First	Semester: First
Name of Faculty: Dr. Deepshikha Sharma Ms.Gitanjali Chauchan	Subject: Geography	
Course Code: A110102P	Course Title: **Elements of Map and Surveying**	

Course Learning Outcomes
On completion of this course, learners will be able to:
- Understand the basic idea of Map, Scale and Topographic sheets

Credits: 2	Core Compulsory
Max. Marks: -25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w

Unit	Topics	No. ofLectures
I	Cartography: Nature and Scope. Scales–Concept and application; Graphical Construction of Plain, Comparative, Diagonal Scales and Vernier scale.	7
II	Map Projections: Classification, Properties and Uses; Graphical Construction of Polar Zenithal, Cylindrical Equal Area Projection, Bonne's and Mercator's Projections, and reference to Universal Transverse Mercator (UTM) Projection.	7
III	Topographical Map: Coverage, Scale and Topo Symbol, Interpretation Survey of India Toposheets. Representation of landforms by Contours. Types Of Profiles.	8
IV	Basics of Surveying: Surveying: meaning, classification, merits and demerits. Plane Table Surveying By Intersection and resection (only one method).	8

Suggested Readings:

1. Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, London
2. Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5th edition.
3. Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Longman, Kolkata.
4. Sharma, J. P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut 3rd. edition.
5. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi,.
6. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam, Viva, Practical File, Map Preparation, Topo sheet interpretation.

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DEPARTMENT OF GEOGRAPHY
BA 1st Year,Sem. II
Course I(Theory)
Session: 2021-22

Program/Class: Certificate/BA/B.Sc	Year: First	Semester: Second
Name of Faculty: Dr, Sangita Chaudhary	Subject: Geography	
Course Code:A110201T	Course Title: **Human Geography**	

Course Learning Outcomes
On completion of this course, learners will be able to:

- To understand the Concept, Nature, Meaning and Scope of Human Geography
- To understand the natural and Cultural Changes in and around the Human Environs and their interrelationship.

Credits: 4	Core Compulsory
Max. Marks: -25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
I	Concept and Nature, Meaning and Scope of Human Geography.Development of Geographical understanding in India with special reference to Puranas.	7
II	Man and Environment relationship- Determinism, Possibilism, and Neo-determinism	7
III	Population- Distribution and pattern, global migration - causes and consequences, concept of over population and under population.	7
IV	Human Settlements: Origin, types and pattern (Rural-Urban) characteristics, House types and their distribution with special reference to India.	7
V	Primitive Economies-Food gathering, Hunting, Pastoral herding, Fishing, Lumbering and Primitive agriculture.	8
VI	Cultural Regions, Race, Religion and Language, Cultural Diffusion.	8
VII	World Tribes: Eskimos, Kirghiz, Bushman, Masai, Semang, Pygmies.	8
VIII	Indian Tribes: Bhotias, Gaddis, Tharus, Bhil, Gond, Santhal, Nagas.	8

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Suggested Readings:

1. Chisholm, M. (1985): Human Geography, 2nd edition, Penguin Books, London.
2. B N Singh (2019) Manav Bhugol ka Swaroop, Pravalika Publication, Allahabad
3. de Blij, H.J.(1996): Human Geography: Culture, Society and Space,. 2nd edition. John Wiley and Sons, New York,
4. Haggett, P. (2004): Geography: A Modern Synthesis. 8th edition, Harper and Row, New York.
5. Hussain, M. (1994): Human Geography, Rawat Publications, Jaipur.
6. B N Singh (2021) Manav evam Arthik Bhugol, Pravalika Publication, Allahabad
7. Kaushik, S.D. and Sharma, A.K. (1996): Principles of Human Geography (in Hindi), Rastogi Publication, Meerut.
8. Norton, W. (2008): Human Geography, Oxford University Press, New York. 5th ed.
9. Singh, K. N. and Singh, J. (2001): Manav Bhugol. Gyanodaya Prakashan, Gorakhpur. 2nd edition.
10. Singh, L.R. (2005): Fundamentals of Human Geography, Sharda Pustak Bhawan, Allahabad
11. Smith, D. M.(1977): Human Geography- A Welfare Approach, Edward Arnold (Publishers) Ltd., London
12. Stoddard, R.H., Wishart, D.J. and Blouet, B.W. (1986): Human Geography. Prentice-Hall, Englewood Cliffs, New Jersey.
13. B N Singh (2020) Samajik aur Sanskritik Bhugol, Pravalika Publication, Allahabad
14. Johnston, R. J., Gregory, D., Pratt, G. and Watts, M. (2009): The Dictionary of Human Geography.5th edition, Basil Blackwell Publishers, Oxford.
15. Ali, S. Muzafer (1966). Geography of the Puranas. New Delhi, People's Pub. House.
16. Dr. Chaturbhuj Mamoria, Manav Bhugol, Sahitya Publication
17. Majid Husain: Manav Bhugol, Rawat Publication, New Delhi

Suggested Continuous Evaluation Methods:
Assignment / Test / Quiz(MCQ) / Seminar/ Presentations

Course prerequisites: 12th Standard Pass/Open to all

Suggested equivalent online courses:
Courses on Swayam / MOOCs
https://onlinecourses.swayam2.ac.in/nou20_hs18/preview

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DEPARTMENT OF GEOGRAPHY
BA 1st Year,Sem. II
Course II(Practical)
Session: 2021-22

Program/Class: Certificate/BA/BSc	Year: First	Semester: Second
Name of Faculty: : Dr. Deepshikha Sharma Ms.Gitanjali Chauchan		Subject: Geography
Course Code:A110202P	Course Title: **Thematic Mapping and Surveying**	

Course Learning Outcomes
On completion of this course, learners will be able to:

- Understand the basic idea of Map, Scale and Topographic sheets

Credits: 2	Core Compulsory
Max. Marks: -25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w

Unit	Topics	No. of Lectures
I	Maps – Classification and Types, Principles of Map Design. Diagrammatic Data Presentation – Line, Bar and Circle.	7
II	Thematic Mapping Techniques – Properties, Uses and Limitations; Areal Data -- Choropleth, Dot, Proportional Circles; Point Data – Isopleths.	7
III	Cartographic Overlays – Point, Line and Areal Data. Thematic Maps – Preparation and Interpretation.	8
IV	Instrumental Survey: Prismatic Compass	8

Suggested Readings:

1. Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, London
2. Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5th edition.
3. Sharma, J. P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut 3rd. edition.
4. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi,.
5. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad.
6. Sharma, JP. (2008): Prayogatmak Bhugol Ki Rooprekha, Rastogi Publications-Meerut.

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam, Viva, Practical File, Map Preparation.

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DEPARTMENT OF GEOGRAPHY

BA 2nd Year

Course I(Theory)

Programme / Class: BA	Year Second	Session:2021-22
Name of Faculty: Dr. Deepshikha Sharma Ms Anupriya Sharma(R.S.)		Subject: Geography
Course Code: A211	Course Title: **Economic Geography**	
Core Compulsory		
Max. Marks: 35	Min. Passing Marks: 15	

Course outcomes: Students will be able to understand

- At the end the course student should learn importance of various economic activities.
- Conservation methods and awareness about economic participation.
- Assessment of role of various industries and their locational analysis.

UNIT	Course Contents
I	Nature, Scope and development of Economic Geography .Major concepts – Economic landscape, Stages of economic development, typology of economic activities (Primary, secondary, tertiary quaternary) Resourceconcept and classification.
II	Soil and major soil types; Forest types and their products ; Agricultural Land use and Locational theory by Von Thunen ; Distribution, production and international trade of principal crops-rice, wheat, sugarcane, cotton, tea, coffee and rubber, Agricultural regions of the world by Whittlesey.
III	Marine resources and Aquarculture-Major Fishing Areas, their production and trade. Nature of Occurrence, distribution, production and trade of minerals-iron ore, Maganese, Bauxite, Copper, Mica and Gold (in major producing countries) Power Resources – Production and utilization of coal, petroleum, hydroelectricity and atomic energy
IV	Loctational factors of Industries and their relative significance, Webers theory of Industrial location. Types of industries, Location patterns and development trends of Manufacturing industries-Iron and steel, Textiles, Sugar and Paper, Major Industrial regions of U.S.A. U.K. and Japan.
V	Means and modes of transport-major trans-continental railways, International Air and Sea routes trough Panama and Suez Canals, Changing pattern of international Trades, Major Trade organizations and trade blocks- SAARC, ASEAN and OPEC-their objectives and trade relations.

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Books Recommended:

_ Allexander, J.W. , Economic Geography
_ Robinson, A.H. jones, C.F. and Darkenwarld G.G. Principles of Economic Geography.
_ Boesh, Hans, A Geography of World Economy.
_ Bengston and Reyen, Fundamentals of Economic Geography.
_ Zimmerman, E.W. Introduction to World Resources.
_ Chisholm, M., Modern World Development- A Geographical Perspective

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DEPARTMENT OF GEOGRAPHY

BA 2nd Year

Course II(Theory)

Programme / Class: BA	Year: Second	Session: 2021-22
Name of Faculty: Dr. Deepshikha Sharma Ms Anupriya Sharma(R.S.)		Subject: Geography
Course Code: A212	Course Title: **Geography of India**	
		Core Compulsory
Max. Marks: 35		Min. Passing Marks: 15

Course outcomes: Students will be able to understand

- Students would gain understanding of 'new' geography of their country.
- The spatial variations of dimensions of vitality and vulnerability would help them see the strength and weakness of the country.
- The course would help students to contextualize much of their further learnings, teaching and research on India within the contents of this course.

UNIT	Course Contents
I	India in the context of Asia and the world : Structure, Relief and Drainage System ; Major Physiographic regions of India; The Indian Monsoon-origin and characterstics, effect of El Nino and La Nina. Climatic divisions; Soil types and conservation
II	Forest resources-their utilization and conservation ; Power resources (Water, Coal, Mineral oil and Atomic) and Mineral resources (Iron ore, Bauxite, Mica, Manganese) their reserve, distribution, production, trade and conservation. Major River Valley Projects; Tehri Dam & Narmada Valley.
III	Indian Economy : Agriculture - main characteristic and problems of Indian agriculture; Irrigation, mechanization and Green Revolution; post revolution scenario-recent trends; Major Agricultural regions. Industries - Locational factors; development and spatial pattern of major industries (Iron and Steel, Textiles, Cement, Sugar, Paper, Oil Refinery and Fertilizers) Major Industrial regions/complexes of India..
IV	Population-growth, distribution and density, demographic and occupational structure, Literacy, Urbanization with special reference to post-Independence period, Population problems. Transport and Trade- Development of Transport Net-work, railway zones, road development and air routes; Foreign trade-salient features, recent trends and trade direction, Major ports.
V	Regional development & disparities after independence; Major issues and planning of some problem areas-Flood prone areas, Drought prone areas and Tribal areas

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. **Books Recommended:**

_ Spate, O.H.K. & Learmonth A.T.A. India and Pakistan
_ Singh R.L. (ed), India-A Regional Geography.
_ Sen Gupta, P., Economic Regions and Regionalization of India.
_ Mitra Ashok, Levels of Economic Development of India.
_ Singh, J., India-A Comprehensive Systematic Geography.
_ Sharma, T.C. & Countino, O., Economic Geography of India.
_ Verma, R.V. Geography of India (Hindi)
_ Bansal, S.C., Geography of India (Hindi)
_ Gopal Singh, Geography of India
_ Ramamurti, Geography of India Systematic.
_ Tiwari, R.C., Geography of India
_ Majid Hussain: Geography of India.
_ Khullar: Geography of India.

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DEPARTMENT OF GEOGRAPHY

BA 2nd Year

Course III(Practical)

Programme / Class: BA	Year: Second	Session: 2021-22
Name of Faculty: Mrs. Gitanjali Chauhan Ms. Rashika Yadav		Subject: Geography
Course Code: A811	Course Title: **Statistical analysis , Weather Maps and Geological Maps**	
		Core Compulsory
Max. Marks: 30		Min. Passing Marks: 10

Course outcomes: Students will be able to understand

- Understand the basic idea of Map, Scale and Topographic sheets
- The students will learn various statistical skills.
- The students will know how the statistical theories and functions will be applied in geography.
- The students will learn about the significance test to strengthen their argument with facts and represent data.

UNIT	Course Contents (A) Lab Work
I	**Statistical Analysis** (i) Measures of Central Tendency and their geographical applications- Mean, Median, Mode. Measures of Dispersion-Quartile and Standard Deviation, Variance, Co-efficient of Correlation. (ii) Graphical Representation of Statistical Data-Histogram, Polygon, Frequency Curve, Scatter Diagram.
II	**Cartographic Representation of Statistical Data** (i) Graphs: Band graph, Hythergraph, Climograph. (ii) Diagrams: Compound Bar, Wheel, Rectangle, Circle. (iii) Distribution Maps: Using Dots, Isopleth and Choropleth methods.
III	**Weather Maps** Use of weather instruments and weather symbols (Indian) Study and Interpretation of Indian daily Weather maps/ reports specially of January, March, July and October, Weather forecasting.
IV	**Geological Maps** Identification of rock types, bedding planes, Drawing of cross-section and determination of dip and bed thicknesssimple and folded.
	(B) Viva-Voce & Sessional Records
	DIVISION OF MARKS: **(A) Lab Work** : One question from each unit with internal choice, Duration three hours -40 **(B)** Viva-Voce & Sessional Records – 10

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Books Recommended:

_ Monkhouse, F.J. : Maps & Diagrams.
_ Robinson, A.H : Elements of Cartography.
_ Gregory, S., Statistical Method and the Geographer.
_ Smith, H.T.V. Aerial Photographs and their Applications.
_ Singh, R.L., Elements of Practical Geography.
_ Sing, L.R. & Singh, R.N. Map work and practical Geography (Eng./Hindi)
_ Sharma, J.P. Prayogatmak Bhoogol Ki Rooprekha (Hindi).
_ Hira Lal, Prayogatmak Bhoogol Ke Adhar (Hindi)
_ Singh, J. et. al Bhaumikiya manchitro ki Rooprekha (Hindi)
_ Lal, Hira, Matratmak Bhoogol (Hindi)
_ Tiwari, R.C. and Tiwari, Sudha, Abhinav Prayogic Bhoogol.

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DEPARTMENT OF GEOGRAPHY

BA 3rd Year

Course I (Theory)

Programme/Class: BA	Year: Third	Session: 2021-22
Name of Faculty: Dr. Sushma Gaur		Subject: Geography
Course Code: AB511	Course Title: **Environmental Studies**	
		Core Compulsory
Max. Marks: 35		Min. Passing Marks: 15

Course outcomes: Students will be able to understand

- The course aim is to give basic understanding of concept Environment, Climate Change and Disaster Management.
- Understanding of the concept of appraisal and conservation of Environment and Natural Resources.
- It will help in developing understanding about various Impacts of Climate Change.
- This course shall introduce the basic concepts related to disaster Management.
- This paper shall help in understanding Global effort in field of disaster management.

Units	Topics
Unit-I	Geography as a study of Environment; Concepts & components of environment; Development of environmental studies; Approaches to environmental studies; Concept of ecology and ecosystem. Man-Environment relationship, Agricultural and Industrial Practices, Science, Technology and Environment.
Unit-II	The problems and causes of environmental degradation, Deforestation, soil erosion, Desertification, Air pollution, water pollution, Disposal of solid wastes.
Unit-III	Environmental management: Environmental Education; Preservation of Ecological Balance at Local, Regional and National Level; Major Environmental Policies and Programmes.
Unit-IV	Sample studies in environmental context – Ganga Action Plan, Tiger Project, Tehri Dam & Narmada Valley Project.
Unit-V	Emerging environmental issues: Population explosion, Food security, Global warming; Bio-diversity and its conservation; sustainable development

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Books Recommended:

_ Jagadish Singh, Vatavaran Niyajan Aur Samvikas.
_ P. S. Negi, Eco-Development and Environmental Geography (Hindi).
_ G. P. Yadav & Ram Suresh, Paryavaran Adhyayan.
_ V. K. Srivastava, Environmental and Ecology (Hindi).
_ Griffith Taylor, Environmental Race and Migration.
_ Sharma, H. S. and Chattopadhyay, S. K.: Sustainable Developments Concepts and Issues, Concept, New Delhi – 2000.
_ Reid, D.: Sustainable Development, Earthscan, Pub., London, 1995.

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DEPARTMENT OF GEOGRAPHY

BA 3rd Year

Course II (Theory)

Programme / Class: BA	Year: Third	Session: 2021-22
Name of Faculty: Dr. Sushma Gaur		Subject: Geography
Course Code: AB 513	Course Title: Regional study of South East Asia	
		Core Compulsory
Max. Marks: 35		Min. Passing Marks: 15

Course outcomes: Students will be able to understand

- The course aim is to give basic understanding of concept of Region and Regional Geography.
- It will help in developing understanding about various countries of South East Asia

(B) South East Asia

Unit-I Region as a geographical entity and as a component of global system. Basis of regionalization/ grouping of countries. Geographical, Political, Historical, Cultural etc.

Unit-II Structure, Relief, Climate and Climatic Regions, Vegetation, Irrigation Power and Mineral Resources.

Unit-III Population – distribution, growth, distribution pattern, migration; Agriculture, Industries, Trade and Transport.

Unit-IV Strategic importance of the region, Geographical background of the modern problems.

Unit-V Detailed regional study of any one Myanmar, Thailand, Malaysia, Singapore and Indonesia.

Books Recommended:

_ Dudely Stamp: Asia.
_ Fisher, Charles, A: South East Asia.
_ Dobby: South East Asia.
_ Dr. Jagdish Singh – Monsoon Asia.
_ Dr. V. K. Srivastava – Asia.
_ Vishwanath Tiwari – Asia, Ka Bhulolik Swaroop.
_ Mahesh Narain Nigam and B. L. Garg – Monsoon Asia.

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DEPARTMENT OF GEOGRAPHY

BA 3rd Year

Course III (Practical)

Programme / Class: BA	Year: Third	Session 2021-22
Name of Faculty: Dr. Deepshikha Sharma/ Dr Sangita Chaudhary/ Ms. Rashika Yadav		Subject: Geography
Course Code: A911	Course Title: Field Survey	
		Core Compulsory
Max. Marks: 30		Min. Passing Marks: 10

Course outcomes: Students will be able to understand

- about mapping , field surveys and socio-Economic survey.

(A) Field Work

Unit-I	Plane table Surveying ; Radiation, Intersection & Resection methods, two point problem and three point problem.
Unit-II	Surveying by Prismatic Compass - open traverse and close traverse, Elimination of error by Bowdich Method.
Unit-III	Use of Sextant ; measurement of height-accessible and inaccessible method. OR Indianclinometer;Measurementofheight-accessibleand inaccessible method.

(B) Field Study Report :

Select a village or a town or a ward of a city and prepare a report based on primary and secondary data with the help of maps and diagrams.

(C) Viva-Voce & Sessional Records

Division of Marks:

(A) Field work (One exercise from each unit. Duration four hours) 10+10+5 (25)

(B) Field Study report

(C) Viva-Voce & Sessional Records

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Books Recommended:

- Singh, R.L., Elements of Practical Geography, Kalyani Pub. New Delhi.
  Khan, Z.A., Text book of practical Geography, Concept, New Delhi-1998.
  Sharma J.P.-Prayogik Bhugol.

The Geography Department may select a village or a town or a part of a city and organize field study camp of all the students under the supervision of teaching and supporting staff. Alternatively, separate localities may be allotted to single/ small batches of students separately and supervision may be made as and when required. TA & DA will be paid by the college concerned to the teaching and supporting staff members if they accompany the students during the field work.

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R.G. College, Meerut

M.A./M.Sc. Geography
Semester I
Course I (Theory)
Session 2021-22

Program/Class: Certificate/M.A./MSc	Year: First	Semester: First
Name of Faculty: Dr. Sangita Chaudhary		Subject: Geography
Course Code: G-1018	Course Title: **Advanced Geomorphology**	

Course Learning Outcomes

On completion of this course, learners will be able to:

- The Earth geomorphic transition from beginning to present day.
- Plate tectonics and related movements
- Landforms carved by various agents of erosion
- Earth's climate and that factors that influence it
- Oceans system and biogeography of the world.

	Core Compulsory
Max. Marks: - 50+50	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit	Topics	No. OfLectures
I	Nature and scope of Geomorphology, Recent observations on some Fundamental concepts – uniformitarianism, multicyclic and polygenetic evolution of landscapes.	12
II	Earth movements – epeirogenic and orogenic earth movements. Forces of crustal instability, isostasy, plate tectonics, vulcanicity.	12
III	Exogenic Processes: Concept of gradation, Agents and processes of gradation, causes, types and classification of weathering, massmovement, erosional, and depositional processes and resultant landforms and soil formation.	12
IV	Landscape evaluation models: WM Davis, Penck, LC King, dynamics of fluvial, glacial, Aeolian, marine, and karst processes and resulting landforms complexities in geomorphological processes	12
V	Applied geomorphology – hydro-geomorphology, urban geomorphology, environmental geomorphology, geomorphic hazards and mitigation measures	12

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Suggested Readings

_ Ahmed, E. (1985): Geomorphology, Kalyani Publishers, New Delhi.
_ Bloom, A.L. (1998/2001): Geomorphology, 3rd Edition, Prentice Hall of India, New Delhi.
_ Chorley, R.J., Schumm, S.A. and Sugden, D.E. (1984): Geomorphology, Methuen and Company Ltd., London.
_ Chorley, R.J. (1972): Spatial Analysis in Geomorphology, Methuen, London.
_ Dayal, P. (1996): A Text Book of Geomorphology, Shukla Book Depot, Patna.
_ Dury, G.H. (1959): The Face of the Earth, Penguin Harmondsworth.
_ Fairbridge, R.W. (1968): Encyclopedia of Geomorphology, Reinholdts, New York.
_ Garner, H.F. (1974): The Origin of landscape- A Synthesis of Geomorphology, Oxford University Press, London.
_ Singh, Savindra: Geomorphology (in Hindi).

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam

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M.A./M.Sc. Geography
Semester I
Course II (Theory)

Program/Class: Certificate/M.A./MSc	Year: First	Semester: First
Name of Faculty: : Dr. Sangita Chaudhary		Subject: Geography
Course Code: G-1019	Course Title: **Natural Resources Management**	

Course Learning Outcomes

On completion of this course, learners will be able to:

1) At the end the course student should learn importance of natural resources.
2) Conservation methods and awareness about community participation.
3) Assessment of role of national and international efforts to mitigate resource problems.

	Core Compulsory
Max. Marks: -50+50	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit	Topics	No. ofLectures
I	Introduction: Concept, models and approaches to natural resource management; problems of resource utilization; population pressure, development and resource use; natural hazards and risk management	14
II	Use and misuse of Resources: Global and Indian scenario; historical background and future prospects of various resources; soil, water, minerals, forests.	14
III	Conservation and management of resources: Meaning, principles, philosophy and approaches to conservation; resource conservation and management methods.	14
IV	Resource appraisal and policy making: appraisal of Land resources, geophysical, geochemical, geobotanical; Policy models towards better management and conservation of resources.	15
V	Resource Development: Sustainable resource concept, methods, dimension and sustainable system; integrated resource development and its application.	15

Suggested Readings:

. **Selected Readings**

_ Adams, W.M.: Green Development: Envionment and Sustainability in the Third World, Routledge and Chapman Hall, New York, 1990.

_ Burton, I. And Kates, R.W. (1978): Readings in Resources Management and Conservation. McGraw Hill, New York.

_ Clark, G.L., Feldman, M.P. and Gertler, M.S. (eds.) (2000): The Oxford Handbook of Economic Geography. Oxford University Press, Oxford and New York.

_ Ehrlich, P.R., Ehrlich, R.H. and Holdren, J.P. (1998): Ecoscience: Population, Resources and Development. 2nd edition. Freeman and Company, San Francisco.

_ Granfelt, T.R. (1999): Management the Globalized Environment, J. & L. Composition Ltd, New York.

_ Holechek, J.L. et al (2000): Natural Resources: Ecology, Economics & Policy, Prentice Hall, New Jersey.
_ Hooja, R & Joshi, R. (1994): Desert, Drought and Development, Studies and Resource Management and sustainability; Rawat Publication, Jaipur.
_ Kates, R.W. & Burton, I. (eds) (1986): Geography, Resources and Environment, Vol I & II, University of Chicago Press, Chicago.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam.

M.A./M.Sc. Geography
Semester I
Course III (Theory)
Session 2021-22

Program/Class: Certificate/M.A./MSc	Year: First	Semester: First
Name of Faculty: Dr.Sushma Gaur	Subject: Geography	
Course Code: G-1020	Course Title: **History of Geographical Thought**	

Course Learning Outcomes

On completion of this course, learners will be able to:

1) The students will be able to understand and analyse the principal issues confronting historical geography.
2) The students will get an insight into various components of historical geography.

	Core Compulsory
Max. Marks: -50 +50	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w

Unit	Topics	No. ofLectures
I	The field of geography: Meaning, philosophy and purpose of Geography. Geography as a social science and natural science. Concepts in the philosophy of geography – distributions, relationships, interactions, areal differentiation and spatial organization.	14
II	Geography in the ancient and medieval period: Contribution of Greek and Roman Geographers- Character of Geography in medieval period- the Dark Age, the Arabic period and the Renaissance period.	14
III	Geography in the modern period: Contribution of German (Humboldt, Ritter & Ratzel), French (Blache and Brunhes), Russian (Gerasimov, Lomonosov), British (L.D. Stamp and Mackinder) and American (Richard Hartshorne, Semple & Huntington) Schools.	14
IV	: Dualisms in geography: systematic & regional geography; physical & human geography. The myth and reality about dualism. Regional geography. Concept of region, regionalization and the regional methods.	15
V	History and Development of Geographical Thought in India: Contribution of Indian Scholars in Geography. Geographical contribution in British Period. Development of Indian Geography after independence. Expansion of Geography Teaching in Indain Universities and Professional Institutions	15

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Suggested Readings:

_ Abler, Ronald; Adams, Jons, S. Gould, Peter, N.J. (1971) : Spatial Organization: The Geographer's View of the World, Prentice Hall, New Jersey.
_ Ali S.M. (1966) : The Geography of Puranas, Peoples Publishing House, Delhi.
_ Amedeo, Douglas (1971) : An Introduction to Scientific Reasoning in Geography, John Wiley, U.S.A.
_ Bansal, S.C. (2010) : History of Geographical thought (in Hindi).
_ Dikshit, Shreekant (2000): Bhugoolik Chintan, Udhav ke Vikas, Varanasi.
_ Dikshit, R.D. (ed.) (1994): The Art & Science of Geography Integrated Readings, Prentice Hall of India, New Delhi.
_ Danieals, P., Bradshow, M., Shaw, D. And Sidaway, J. (2000): An Introduction to Human Geography. Issues for the 21st Century. Prentice Hall, London.
_ Dikshit, R.D. (2004): Geographical Thought. A Critical History of Ideas. Prentice-Hall of India, New Delhi. (in English and Hindi).
_ Harvey, D. (1969): Explanation in Geography. Arnold, London.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam.

M.A./M.Sc. Geography
Semester I
Course IV (Theory)
Session 2021-22

Program/Class: Certificate/M.A./MSc	Year: First	Semester: First
Name of Faculty-Mrs.Geetanjali Chauhan	Subject: Geography	
Course Code: G-1021	Course Title: **Advanced Geography of India (Physical & Regional)**	

Course Learning Outcomes

On completion of this course, learners will be able to:

1. Students would gain understanding of 'new' geography of their country.
2. The spatial variations of dimensions of vitality and vulnerability would help them see the strength and weakness of the country.
3. The course would help students to contextualize much of their further learnings, teaching and research on India within the contents of this course.

	Core Compulsory
Max. Marks: 50+50	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w

Unit	Topics	No. ofLectures
I	Making of India through Geological Time : Geology, Structure and Relief of India, Physical Divisions of India.	14
II	Unit II : Drainage System and Watersheds, Hydrology and Water Balance, Climate Characteristics, Mechanism of Indian Monsoon, Climatic Regions of India	14
III	Soil Resource & Conservation, Problem of Soil Erosion, Problem of deforestation, Forest Resources and their Conservation, Types of Soils and Natural Vegetation, Resource Regions of India	14
IV	Different Schemes of Physiographic Regionalisation of India, their bases and Comparative Studies.	15
V	Detailed case Studies of Uttarakhand Himalayas and Gangetic Plain with respect to their Geology, Structure, Relief, Drainage and Physiographic Divisions.	15

Suggested Readings:

_ Centre for Science & Environment: State of India's Environment, New Delhi, 1988.

_ Deshpande, C.D. (1992): India: A Regional Interpretation ICSSR & Northern Book Centre.

_ Ganguly, S. and Neil, DeVotta (eds.) (2003): Understanding Contemporary India, Lynne Reinner Publishers, Boulder and London.

_ Gole, P.N. (2001): Nature Conservation and Sustainable Development in India. Rawat Publications, Jaipur and New Delhi.
_ Khullar, D.R. (1968): India. A Comprehensive Geography. Kalyani Publishers, New Delhi, 2006.
_ Bansal, S.C. (2011) : India : An Advanced Geography of India : Meenakshi Prakashan, Meerut (in Hindi).
_ Krishnan, M.S.: Geology of India and Burma, 4th Edition, Higgin Bothams Private Ltd., Madras.
_ Majid, Husain (2008): Geography of India, Tata McGraw Hill Company, New Delhi.
_ Nag, P. and Gupta, S.S. (1992): Geography of India, Concept Publishing Company, New Delhi.
_ Singh, J. (2003): India: A Comprehensive and Systematic Geography, Gyanodaya Prakashan, Gorakhpur.
_ Singh, R.L. (Ed.) (1971): India: A Regional Geography, National Geographical Society of India, Varanasi.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam.

M.A./M.Sc. Geography
Semester I
Course V (Practical)
Session 2021-22

Program/Class: Certificate/M.A.	Year: First	Semester: First
Name of Faculty: Mrs.Geetanjali Chauhan	Subject: Geography	
Course Code: G-518	Course Title: **Statistical Techniques and Cartography**	

Course Learning Outcomes

On completion of this course, learners will be able to:

- Understand the basic idea of Map, Scale and Topographic sheets
- The students will learn various statistical skills.
- The students will know how the statistical theories and functions will be applied in geography.
- The students will learn about the significance test to strengthen their argument with facts and represent data.

Credits: 2	Core Compulsory
Max. Marks: -50 +50	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w

Unit	Topics	No. ofLectures
I	Types of profiles, Slope Analysis by different methods (Wentworth and Henry Raisz), Morpho-metric Analysis.	14
II	Standard Deviation, Mean, Quartiles One and Three, Ranking methods. Probability.Theory of Probability Geographical Application of statistical techniques	14
III	Correlation – Spearman's and Carl Parsons Methods, Line of Regression, Chi-squaretest, binomial test.	14
IV	Techniques of MappingsDrainage density, flow diagrams, population mapping.	15
V	Field work Field work and data processing techniques, sampling tests, dispersion diagrams.	15

Note For written test in all 10 questions shall be given selecting 02 questions from each unit.

Suggested Readings:

David Unwin (1981): Introductory Spatial Analysis, Methuen, London.

Gregory, S. (1978): Statistical Methods and the Geographer, Longman, London.

Hammond, R. and P.S. McCullagh (1974): Quantitative Techniques in Geography: An Introduction, Clarendan Press, Oxford.

John, P. Cole and Cuchlaine A.M. King (1968): Quantitative Geography, John Wiley, London

Johnston R.J. (1973): Multivariate Statistical Analysis in Geography, Longman, London.

Koutsoyannis, (1973): Theory of Econometrics, Mcmillan, London.Yadav, Hirilal (1998): Matratamak Bhaugool, Radha Publication, New Delhi.

This course can be opted as an elective by the students of following subjects: Open for all

Note: The students shall be attempting five questions selecting one question from each unit

Each question shall be carrying 15 marks.

For Examination Break-Up of Marks-	Written Test (3 Hrs.)	75 marks
	Viva - voce	10 marks
	Record work	15 marks

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M.A./M.Sc. Geography

Semester II

Course VI (Theory)

Session 2021-22

Program/Class: Certificate/M.A./M.sc.	Year: First	Semester: Second
Name of Faculty: Dr. Sangita Chaudhary		Subject: Geography
Course Code: G2018	Course Title: **OCEANOGRAPHY AND CLIMATOLOGY**	

Course Learning Outcomes

On completion of this course, learners will be able to:

- Dynamic of climate and related theories
- Assessment of different aspects of sea floors

	Core Compulsory
Max. Marks: -50+50	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit	Topics	No. ofLectures
I	Nature and scope of climatology and its relationship with meterology. Composition and structure of the atmosphere. Insolation and Heat Budget. Green House Effect. Distribution of Temperature and Pressure. Planetary wind system. Jet Streams and Monsoon machanism.	14
II	Humidity and Precipitation. Acid Rain, Air Masses and Fronts, Origin of Cyclones, Anticyclones and Thunderstorms and their effects. Ocean atmospheric interaction: EI Nino and La Nina Phenomenon.	14
III	Climatic classification of Koeppen and Thornthwaite, Major – climates of the world-tropical, temperate, desert and mountain climate. Climatic changes and Global warming.	14
IV	Nature and scope of oceanography. Distribution of land and water. Surface configuration of the ocean floor. Submarine relief of the pacific. Atlantic and Indian Ocean, Composition of Oceanic Water. Distribution of Temperature and Salinity.	15
V	CirculationofOceanicWater:Waves, TidesandCurrents.	15

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	OceanDeposits:theirsources and kinds. Corals and coral reefs: Types and theories of their origin.	

Suggested Readings (Climatology):

- Barry, R.G. and Chorley P.J. (1998): Atmosphere, Weather and Climate. Routledge, London and New York.
- Critchfield, J.H. (1993): General Climatology, Prentice Hall, India, New Delhi.
- Das, P.K. (1987): Monsoons National Book Trust, New Delhi.
- Fein, J.S. and Stephens, P.N. (1987): Monsoons, Wiley Interscience.
- Indian Met. Deptt. (1968): Climatological Tables of Observatories in India, Govt. of India.
- Lal, D.S. (1986): Climatology, Chaitanya Publication, Allahabad.
- Lydolph, P.E. (1985): The Climate of the Earth, Rowman.
- Menon, P.A. (1989): Our Weather, P.B.T. New Delhi.
- Peterson, S. (1969): Introduction to Meteorology, Mc Graw Hill Book, London.
- Robinson, P.L. and Henderson S. (1999): Contemporary Climatology, Henlow.
- Sharma, R.C. & Meera Vatal : Oceanography for Geographers

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.

Marks Distribution: Written Exam and Assignment

M.A./M.Sc. Geography

Semester II

Course VII

Session 2021-22

Program/Class: Certificate/M.A,/MSc	Year: First	Semester: Second
Name of Faculty: Dr Sangita Chaudhary		Subject: Geography
Course Code: G 2019	Course Title: **Laws, Models & Theories in Geography**	

Course Learning Outcomes

On completion of this course, learners will be able to:

- Student will enable to understand the nature and philosophy of the subject in order to apply their knowledge in the field of research and development

	Core Compulsory
Max. Marks: 50+50	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit	Topics	No. ofLectures
I	Development of Theoretical Geography, Definition and Meaning of Model, Paradigm, Theory and Law, Systems Analysis in Human Geography.	14
II	Laws of Isostasy, Mountain Building, Buys Ballot's Law, Gravity Model, Centrifugal, Centripetal Forces, Coriolis Force. Koeppen's, Thornthwait's Model, Davis and Penck Cycles of Erosion.	14
III	Locational Theories – Von Thunen's, Alfred Weber's, Isards, Losch, Central Place Theory.	14
IV	Cropping Intensity, crop-Combination, Productivity Analysis.	15
V	Urban Primacy, Rank Size Rule, Nearest Neighbour Analysis.	15

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Suggested Readings:

- Baskin, C.W. (Translator): Central Places in Southern Germany, Prentice Hall Inc. Englewood Cliffs New Jersey, 1966. Originally written by C.W. Christaller in German with title Die ZentralenOrteSudevtsch Land in 1933.
- Weber, Alfred (1957): Theory of Location of Industries, Chicago University Press, Chicago.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.

Marks Distribution: Written Exam. And assignment

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M.A./M.Sc. Geography

Semester II

Course VIII

Session 2021-22

Program/Class: Certificate/M.A./M.Sc.	Year: First	Semester: Second
Name of Faculty: Dr. Sushma Gaur		Subject: Geography
Course Code: G 2020	Course Title: **Advanced Geography of India (Socio-economic)**	

Course Learning Outcomes

On completion of this course, learners will be able to:

- The course would help students to contextualize much of their further learnings, teaching and research on India within the contents of this course.

Credits: 2	Core Compulsory
Max. Marks: -25+75	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit	Topics
Unit- I	Agricultural system and technological problems of Indian agriculture, developments, agrarian reforms, green revolution achievements and shortcomings, need of 2nd green revolution, Agro-climatic regions of India. Regionalization of agriculture in India, crop combination regions of India, food production and population growth.
Unit- II	Energy in India- Conventional and Non-conventional power resources, regional set-up of Hydel and Thermal Power stations, locational patterns and analysis of coal & petroleum resources, govt. policies and conservation of energy resources.
Unit- III	Analysis of Agro-Based (Sugar), Forest Based (Paper & Pulp) and Mineral based industries (Iron & Steel), Industrial regions of India, Modes of transport, their significance and development, the pattern of foreign trade.

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Unit- IV	: Socio-economic implications of explosive growth of population, distribution and density of population, population resource regions, trends of urbanization, urban regions, population problems and policies.
Unit- V	Basis of Economic Regionalization macro, meso and micro regional division of India, economic regionalization in India, Detailed study of the meso-regions of Great-Plains-their inter-regional disparities with reference to agricultural. Human Resource development.

Suggested Readings:

- Brahmanand, P.R. et., (1987): The Development Process of Indian Economy, Himalaya Pub. House.
- C.D. Deshpande, (1992): India A Regional Interpretation, ICSSR, New Delhi.
- Farmer, B.H. (1983): Introduction to South Asia. Methuen and Company Ltd. and Company Ltd., London.
- Ganguly, S. And Neil, DeVotta (eds.) (2003): Understanding Contemporary India. Lynne Reinner Publishers., Boulder and London.
- Gole, P.N. (2001): Nature Conservation and Sustainable Development in India. Rawat Publications, Jaipur and New Delhi.
- Johnson, B.L.C. (1983): Development in South Asia. Penguin Books, Harmonsworth.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.

Marks Distribution: Written Exam and Assignment

M.A./M.Sc. Geography

Semester II
Course IX

Session 2021-22

Program/Class: Certificate/M.A./M.Sc.	Year: First	Semester: Second
Name of Faculty: Mrs Gitanjali Chauhan		Subject: Geography
Course Code: G 2021	Course Title: **Regional Planning and Development**	

Course Learning Outcomes

On completion of this course, learners will be able to:

1) The students will be able to understand and analyse the principal issues confronting the regions today.
2) The students will get an insight into 'how regions work', through case-study from India.
3) The students will be able to understand and analyse the principal issues confronting the different regions of India.

Credits: 2	Core Compulsory
Max. Marks: -25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w

Unit – I	Regional concept in geography, Concept, Nature and Scope of Regional Planning., changing concept of the region from an inter-disciplinary view-point, concept of space, area and locational attributes. Types of region: Formal and functional; uniform and nodal, single purpose and composite regions, in the context of planning; regional hierarchy	14
Unit – II	Physical regions, planning regions of India, regional divisions according to variations in leve of socio-economic development; special purpose regions-river valley regions, metropolitan regions, problem regions – hilly regions, tribal regions, regions of drought and floods.	14
Unit – III	Approaches to Delimitation of different types of regions and their utility in planning. Planning process – Sectoral, temporal and spatial dimensions; short-term and long term perspectives of planning.	14
Unit – IV	Regional development strategies – concentration vs. dispersal, case studies for plans of developed and developing countries, Regional plans of India.	15

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Unit – V	Concept of Multi-level planning; decentralised planning; Panchayati Raj System, role and relationship of Panchayati Raj Institutions (Village Panchayat, Panchayat Samiti and Zila Parishad) and administrative structure (Village, Block and District). Regional development in India, problems and prospects.	15

Suggested Readings:

- Bhat, L.S.(1973): Regional Planning in India, Statistical Publishing Society, Calcutta. Bhat, L.S. et al.(1976) : Micro-Level Planning : A Case Study of Karnal Area, Haryana, K.B. Publications, New Delhi.
- Chandna, R.C. (2000): Regional Planning: A Comprehensive Text. Kalyani Publishers., New Delhi.
- Chaudhuri, J. R. (2001): An Introduction to Development and Regional Planning with special reference to India. Orient Longman, Hyderabad.
- Friedmann, J. (1992): Empowerment: The Politics of Alternative Development. Blackwell, Cambridge MA and Oxford.

This course can be opted as an elective by the students of following subjects: Open for all

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam and Assignment

M.A./M.Sc. Geography

Semester II

Course X (Practical)

Session 2021-22

Program/Class: Certificate/M.A./M.Sc.	Year: First	Semester: Second
Name of Faculty: Mrs Gitanjali Chauhan		Subject: Geography
Course Code: G 618	Course Title: **Advanced Cartography**	

Course Learning Outcomes

On completion of this course, learners will be able to:

1. The students will learn various statistical skills.
2. The students will know how the statistical theories and functions will be applied in geography.
3. The students will learn about the significance test to strengthen their argument with facts and represent data.

	Core Compulsory
Max. Marks 100	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit	Topics	No. ofLectures

Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0 or 3-1-0 Etc.

Unit	Topics	No. of Lectures Total 60…….
I	Determining the dot value through (Areal or Stilgenbauer's method) & (Volumetric or Sten de Geer's method).	15
II	Conversion of contour maps into block diagrams: multiple section method, layer method.	15

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III	Determination of average slope: S. Finster Walder's method and C.K. Wentworth's method, slope- category method of Raisz and Henry	15
IV	Map projection: International projection, stereographic projection, Mercater with great circle loxodrome, interrupted Mollweide projection, sanson-flamsteed's sinusoidal projection.	15

from each unit. Each question shall be carrying 15 marks.

For Examination Break-Up of Marks- Written Test (3 Hrs.) 75 marks

Record Work 15 marks

Viva-voce 10 marks

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- **Suggested Readings:**

- Cromely, Robert G. (1992): Digital Cartography Englewood Cliffs, New Jersey, Prentice-Hall, Inc.

- Dent, B. (1985): Principles of Thematic Map Design, Reading, Massachusetts, Addision – Wesley Publishing Co.

- Dorling, D. and Fairborn, D. (1997): Mapping, Ways of Representing the World, Longman, Harlow.

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M.A./M.Sc. GEOGRAPHY
Semester III
Course XI
Session 2021-22

Program/Class: MA/M.Sc.	Year: Second	Semester: Third
Name of Faculty: Ms Rashika Yadav	Subject: Geography	
Course Code: G 3018	Course Title: Recent Issues in Geography	

Course Learning Outcomes

On completion of this course, learners will be able to:

- Understand about the contemporary issues in geography.
- Identify the technologies in Geography.

	Core Compulsory
Max. Marks: 50+50	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit- I : Recent Conceptual Development in Geography: Philosophical Issue – Positivism, Behaviouralism, Phenomenology, Idealsim, Existentialism and Humanistic Geography, Spatial Justice, Radicalism & Postmodernism.

Unit- II : Recent Methodological Development in Geography: Quantitative Revolution and use of Statistical Techniques. Use of Hardware and Software Technologies in data analysis and mapping, use of models and paradigms in geography.

Unit-III : Use of Technologies in Geography: Remote Sensing and GIS and GPS.

Unit-IV : Scientific Methods in Geographical Research: Hypothesis Testing, Problem Solving approach in Geography, Project Formulation and Project Evaluation Techniques.

Unit-V : Recent Issues in Indian Geography Post Colonialism and Indian Geography, Trends of Geographical Researches in India, Prospects of Professional Opportunities in Geography, Future of Indian Geography, Problems, Perspectives and Prospects.

- **Suggested Readings: _**
- Adams, P., Steven, H. and Karel, T. (eds.) (2001): Texture of Place. Exploring Humanistic
- Geographies. University of Minnesota Press, Minneapolis.
- _ Anderson, K., Domosh, M., Pile, S. and Thrift, N. (eds.) (2003): Handbook of Cultural
- Geography. Sage Publications, London.
- _ Barnes, T. and Gregory, D. (eds.) (1997): Readings in Human Geography: The Poetics and
- Politics of Inquiry. Arnold, London.
- _ Bunkše, E. V. (2004): Geography and the Art of Life. John Hopkins University Press,
- Baltimore.
- _ Buttimer, A. (1971): Society and Milieu in the French Geographic Tradition. Rand
- McNally, Chicago.
- _ Daniels, P., Bradshaw, M., Shaw, D. and Sidaway, J. (2000): An Introduction to Human
- Geography. Issues for the 21st Century. Prentice Hall, London.

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M.A./M.Sc. GEOGRAPHY
Course XII
Session 2021-22

Program/Class: MA/M.Sc.	Year: Second	Semester: Third
Name of Faculty: Dr. Sushma Gaur		Subject: Geography
Course Code: G 3019	Course Title: Interdisciplinary Research Methods and Techniques	

Course Learning Outcomes

On completion of this course, learners will be able to:

- The students will be able to understand the theme of research.
- The students will be able to find new techniques and areas which are helpful for their applications.

	Core Compulsory
Max. Marks: -50+50	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit- I : Conceptual Foundation of Research: Meaning and types of research, objectives and motivation of research, concepts of pure and applied research, scientific approach to geographic research, Basic Components of Research, defining a research problem, construction of research design, Hypothesis formulation.

Unit-II : Sampling Techniques and Selection of Geographic Variables: Aims of Sampling, Basic Components of Sampling Methods, Nature of Geographic Data, Continuous and discrete data. Level of measurements: various scales, data transformation; its process and methods.

Unit-III : Data Collection: methods of field observation, role of field methods in geographic studies, Techniques for primary data collection, preparation of questionnaires. Data collection from secondary sources. Tabulation and Data Analysis.

Unit-IV : Cartographic analysis of data. Techniques of data representation by quantitative maps. Hypothesis Testing. Basic principles and procedures of correlation, significance of statistical analysis and interpretation of data.

Unit-V : Drafting of the research report quantitative & qualitative interpretations, writing manuals (Arranging themes, maintaining coherence, cross comparison concluding, referencing noting etc.) Proof marks & marked proof, size scale and types of report, organisation and designing of report, Evaluating a report.

Suggested Readings:

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_ Ahuja, R. (2001): Research Methods, Rawat Publications, Jaipur and New Delhi.
_ Bhattacharyya, D. K. (2005): Research Methodology, Excel Books, New Delhi
_ Blackburn, J. and Holland, J. (eds.) (1998): Who Changes? Institutionalising Participation in Development. IT Publications, London.
_ Blaxter, L., Hughes, C. and Tight, M. (1996): How to Research. Open University Press, Buckingham.
_ Mishra, R.P. : Research Methodology.
_ Crang, Mike (1999): Cultural Geography. Routledge, London.
_ Daniels, P., Bradshaw, M., et al. (2000): Human Geography: Issues for the 21st Century. Prentice Hall, London, and Pearson Publishers., Singapore. Indian reprint, 2003.

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M.A./M.Sc. GEOGRAPHY
Course XIII
Session 2021-22

Program/Class: M.A./ M.Sc.	Year: Second	Semester: Third
Name of Faculty: Dr. Sushma Gaur	Subject: Geography	
Course Code: G 3020	Course Title: Advanced Geography of Uttar Pradesh	
Course Learning Outcomes On completion of this course, learners will be able to: • It enhance to Buit up strategies for sustainable development of regional variations. • 2. students will be able to understand various agricultural issues at UP & national level.		
	Core Compulsory	
Max. Marks: -50+50	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w		

Unit-I	Locational Set-up of Uttar Pradesh in India and its changing map. Relief and Physical Divisions, Structure, Drainage, Ground Water Resource, Soils and their types, Climate and Climatic regions and vegetative cover.
Unit-II	Problems Related to Over Utilisation of Natural Resources in Uttar Pradesh: Usar and Sodic soils formation and soil erosion, Under ground water scarcity, Depletion of forest cover and wild life, Surface Water Resource Utilities, Drinking Water and Power Shortage, Flood and drought affected parts.
Unit-III	Spatio Temporal Trends of Agricultural production, Development of Irrigational facilities including canals and dams, Agricultural Productivity and Crop-Combination regions, Power Generation and its distribution in different sectors of economy, Agro-Processing industry and their problems with special reference to sugar industry.
Unit-IV	Human Resource Development in Uttar Pradesh: Demographic and Religious composition (Density, Rural-Urban distribution of Population, Sex-ratio, S/C/ S/T population, Literacy and trend of urbanisation), occupational Structure and Poverty Eradication programmes initiated. Accessibility and Transport infrastructural gaps.
Unit-V	Planning for Balanced Development: Planning for sustainable development including health, education, drinking water, Emerging Political Issues and Voting Behaviour in General elections and Policy of the State Government for Balanced regional development.
Suggested Readings:	

Geography Deptt.
R.G. College, Meerut

_ Despande C.D. (1992): India-A Regional Inter-Pretation ICSSR, Northern Book Centre, New Delhi.
_ Singh R.L.(ed.) (1971): India-A Regional Geography, National Geographical Society, India, Varanasi.
_ Tiwari, A.R. : Geography of Uttar Pradesh, N & T.
_ Tirtha, R. & Gopal Krishna (1966): Emerging India, Rawat Publications, Jaipur.
_ Kundu A., Raza Moonis (1982): Indian Economy: The Regional Dimension, SpectrumPublishers, New Delhi.
_ Mamoria, C.B. : Advanced Geography of India.
_ Bansal, S.C. : Advanced Geography of India (Hindi), Meenakshi Prakashan, Meerut.

M.A./M.Sc. GEOGRAPHY
Course XIV
Session 2021-22

Program/Class: MA/M.Sc.	Year: Second	Semester: Third
Name of Faculty: Dr. Sangita Chaudhary		Subject: Geography
Course Code: G 3022	Course Title: Ecology and Environment	

Course Learning Outcomes

On completion of this course, learners will be able to:

- Students will be developing the quality to keep an eye on every aspect of environment/ ecology.
- Students will be able to apply their enhanced vision in their research analyses.

	Core Compulsory
Max. Marks: -50+50	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit- I	Meaning and definition of Ecology and Environment, Geography as Human Ecology Conceptual background. The Environment – meaning, structure and types, Man Environment Relationship, Perception of Environment.
Unit- II	Ecology: meaning and its relation with Geography, Ecosystems: Kinds, structure and functions, energy flow, food chains, food webs and trophic levels, nutrient cycles, Major Biomes of the World.
Unit- III	: Geographical aspects of major environmental problems: Natural hazards- floods, drought, landslides, earthquakes and cyclones, Man-induced hazards – Rapid urbanisation, transport development, Agricultural development, Big dams.
Unit- IV	Environmental Pollution – the concept and types of pollution, ecological impact of pollution- the environmental concerns, the green house effects, ozone depletion, Environmental Policy and Legislation.
Unit- V	Ecological basis of environmental Management – Concept, need and approaches, Indian and International efforts for environmental conservation and management since 1972. Environmental problems and programmes in India. Environmental impact and assessment of controversial River Valley Projects like Tehri Hydro and Narmada Valley (Sardar Sarovar) Projects, National Parks.
	Suggested Readings:

Geography Deptt.
R.G. College, Meerut

_ Anjuneyulu, Y. (2004): Introduction to Environmental Science. B. S. Publications, Hyderabad.
_ Athavale, R. N. (2003): Water Harvesting and Sustainable Supply in India. Rawat Publications., Jaipur.
_ Blaikie, P., Cannon, T. and Davis, I. (eds.) (2004): At Risk: Natural Hazards, Peoples Vulnerability and Disasters. Routledge, London.
_ Bodkin, E. (1982): Environmental Studies, Charles E. Merril Pub. Co., Columbus, Ohio.
_ Chandna, R.C. (1998): Environmental Awareness, Kalyani Publisher, New Delhi.
_ Eyre, S.R. and Jones, G.R.J. (eds.) (1966): Geography as Human Ecology, Edward Arnold, London.
_ Gautam, A. (2007): Environmental Geography, Sharda Pustak Bhawan, Allahabad.
_ Khoshoo, T. N. (1981): Environmental Concerns and Strategies. Ashish Publishing House, New Delhi.
_ Kormondy, E.J. (1989): Concepts of Ecology, Prentice Hall.

Geography Deptt.
R.G. College, Meerut

M.A./M.Sc. GEOGRAPHY
Course XV (Practical)
Session 2021-22

Program/Class: M.A./M.Sc.	Year: Second	Semester: Third
Name of Faculty: Dr. Deepshikha Sharma Smt.Gitanjali Chauhan	Subject: Geography	
Course Code: G -518	Course Title: Advanced Surveying, Remote Sensing and GIS	

Course Learning Outcomes

On completion of this course, learners will be able to:

- Overall understanding of potential of Remote Sensing, GIS and GPS
- Understanding of image interpretation
- Understanding of GIS analysis workflow and integrated applications in various domains of Geography

	Core Compulsory
Max. Marks: -100	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w	

Unit –I	Prismatic Compass Surveying (Mathematical Techniques for Closed Traversing), Interpolation of Contours by Indian Clinometer, Sextant measurement (Vertical and Horizontal), Telescopic Alidade, Dumpy Level (Simple & Differential Levelling, Rise and Fall Methods, Theodolite.
Unit –II	Air Photos and Photogrammetry : Elements of Photographic System; types, scales, Calculation and Measurement of height of aircraft and ground coverage, resolution, radiometric characteristics, film, filters, aerial cameras, film exposures, vertical photographs, relief displacement, image parallax, Numbering of Photographs Air Photo interpretation : shape, size pattern, tone, texture, shadows etc. Photo Mosaics and their comparison with topographical maps.
Unit – III	Definition, types and scope of Remote sensing, Development of Remote sensing, stages in remote sensing data acquisition, electromagnetic radiation and electromagnetic spectrum, black body radiation and radiation laws, Interaction of EMR with Earth's surface features, Role of atmosphere in remote sensing. Types and salient characteristics of orbital platforms, types and geometry sensors, sensors resolutions and application, remote sensing data products, Indenting of remote sensing data in India.
Unit - IV	Definition and development of GIS, computer environment for GIS, Spatial Data : Elements of spatial data; quality and error variations-raster and vector data structures, Database Management Systems: and spatial modeling-output format and generation., GIS Application: GIS as a Decision Support System-expert. GIS in Land Information System, Urban Management, Environmental Management and Emergency Response System. Use of GPS in data generation and mapping.

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Note : A Geographical Survey Camp of not less than 10 days duration in different area other than of college premises of India will be arranged to acquaint students with the advanced surveying techniques and the spot study of aerial photographs & satellite imageries. Students are required to submit survey camp report containing not more than 10 pages and supported by 5 maps prepared during survey camp. There will be one teacher and one supporting staff on every 10 students group of guiding the students. T.A. & D.A. will be paid by the college concerned to the teaching and supporting staff members accompanying the students during survey camp. For purpose of examination two surveying exercises from Unit-I will be given to each group of not more than 2 students. These exercises will be of 3 hours duration.

There will be a written test of 3 hours duration for rest of units-II, III & IV. Students will have to attempt 3 questions out of 6 questions (2 from each Unit).

The distribution of marks shall be follows :-

(1) Two surveying exercises 30 Marks

(2) Written Test 30 Marks

(3) Survey Camp Report 20 Marks

(4) Sessional Record and Viva Voce Test 10+10 = 20 Marks

(Students those do not attend survey camp, their evaluation in practical course should be done in80 Marks).

Suggested Readings:

_ Barrett, E.C. and Curtis L.F.: Fundamentals of Remote Sensing and Air Photo Interpretation.

_ Campbell, J.: Introduction to Remote Sensing.

_ Luder, D.: Aerial Photography Interpretation : Principles and Application.

_ Star, J. and J. Estes : Geographic Information Systems :An Introduction.

_ Fraser Taylor D.R. : Geographic Information Systems.

_ Burrough P.A.: Principles of Geographic Information Systems for Land Resources Assessment.

_ Campbell, J. B. (2002): Introduction to Remote Sensing. 5th edition. Taylor and Francis, London.

_ Cracknell, A. and Hayes, L. (1990): Remote Sensing Year Book, Taylor and Francis, London.

_ Curran, P.J. (1985): Principles of Remote Sensing, Longman, London.

_ Deekshatulu, B.L. and Rajan, Y.S. (ed.) (1984): Remote Sensing. Indian Academy of Science, Bangalore.

_ Floyd, F. and Sabins, Jr. (1986): Remote Sensing: Principles and Interpretation, W.H. Freeman, New York.

_ Guham, P. K. (2003): Remote Sensing for Beginners. Affiliated East-West Press Private Ltd., New Delhi.

_ Hallert, B. (1960): Photogrammetry, McGraw Hill Book Company Inc., New York.

_ Harry, C.A. (ed.) (1978): Digital Image Processing, IEEE Computer Society, California

_ Hord, R.M. (1982): Digital Image Processing of Remotely Sensed Data, Academic Press, New York.

_ Leuder, D.R. (1959): Aerial Photographic Interpretation: Principles and Application. McGraw Hill, New York.

_ Lillesand, T.M. and Kiefer, R.W. (2000): Remote Sensing and Image Interpretation. 4th edition. John Wiley and Sons, New York.

_ Nag, P. (ed.) 1992: Thematic Cartography and Remote Sensing, Concept Publishing. Company, New Delhi.

M.A./M.Sc. Geography
Semester IV
Course IV (Theory)
Session 2021-22

Programme/Class: M.A./M.Sc.	Year: Second	Semester: IV
Name of Faculty: Dr. Sangita Chaudhary	Subject: Geography	
Course Code: G 4021	Course Title: Agricultural Geography	(Theory)

Course outcomes:

- The students will be able to understand and analyse the historical perspective of agriculture.
- The students will be able to analyse the agriculture development and productivity and its impacts on various sectors
- The students will be able to get updated knowledge of contemporary issues and strategies.

Max. Marks: 50+50	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0 or 3-1-0 Etc.

Unit	Topics	No. of Lectures
I	Nature, scope, significance and development of agricultural geography. Approaches to the study of agricultural geography: Sources of agricultural data.	14
II	Determinants of agricultural land use-Physical, cultural. Land holding and land tenure systems. Selected agricultural concepts and their measurements; cropping pattern, crop concentration, intensity of cropping, degree of commercialization, diversification and specialization, efficiency and productivity, crop combination regions and agricultural development. Green Revolution-its impact and consequences.	14
III	Theories of agricultural location based on several multi-dimensioned factors: Von Thunen's theory of agricultural location and its recent modifications; Whittlesey's classification of agricultural regions; land use and land capability.	14
IV	Agriculture in India- Land use and shifting cropping pattern. Regional pattern of productivity in India. Green Revolution, White Revolution, Food deficit and food surplus regions; nutritional index. Specific problems in	15

	Indian agriculture and their management and planning. Agricultural Policy in India.	
V	Contemporary issues; Food, nutrition and hunger, food security, drought and food security, food aid programmes; environmental degradation, role of irrigation, fertilizers, insecticides and pesticides, technological know-how. Employment in the agricultural sector: landless labourers, women, children, occupational health and agricultural activities. Land reforms, land use policy and planning.	15

Teaching Learning Process: Class discussions/ demonstrations, Power point presentations, Class activities/ assignments, Field visits., Internship, etc.

1. Bayliss Smith, T.P. (1987): The Ecology of Agricultural Systems. Cambridge University Press, London.

2) Berry, B.J.L. et. Al. (1976): The Geography of Economic Systems. Prentice Hall, New York.

3) Brown, L.R. (1990): The Changing World Food Prospects- The Nineties and Beyond. World Watch Institute, Washington D.C.

4) Dyson, T. (1996): Poupulation and Food-Global Trends and Furure Prospects. Routledge, London.

5) Gregor, H.P.(1970): Geography of Agriculture. Prentice Hall, New York

M.A./M.Sc. Geography
Semester IV
Course III (Theory)
Session 2021-22

Programme/Class: M.A./M.Sc.	Year: Second	Semester: IV
Name of Faculty: Dr. Sushma Gaur	Subject: Geography	
Course Code: G 4020	Course Title: Urban Geography	(Theory)

Course outcomes:

1) Engage with literature on urban every-day and diverse forms of agency and methodologies
2) Reflect the ways in which methodological lenses are constituted through understanding urban cultural spaces
3) Innovative methodological approaches and field Journal writing

Max. Marks: 50+50	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0 or 3-1-0 Etc.

Unit	Topics	No. of Lectures
I	Nature and scope of urban geography, different approaches and recent trends in urban geography, attributes of urban places during ancient, medieval and modern period, Bases and process of urbanization and development, Urban growth and theories. Central Place Theory of Christaller and Losch. Theories of Perroux and Boudeville.	14
II	Urban economic base: Basic and non-basic functions, input-output models, concept of dualism, colonial and postcolonial structure, metropolitan city and changing urban function; role of informal sector in urban economy. Functional classification of towns. Classification of urban settlements on the basis of size and function and its methods.	14
III	Organization of urban space: urban morphology and landuse structure, city core, commercial, industrial and residential area; core-country variations; city-region relations, modern urban landscape; morphology of urban settlements and its comparison with western urban settlements; urban expansion, Umland and periphery, Urban Primacy, Rank Size Rule.	14
IV	Contemporary urban issues: urban poverty, urban renewal, urban sprawl, slums; transportation, housing, urban infrastructure; environmental pollution; air, water, noise, solid	15

	waste, urban crime	
V	Urban policy and planning, development of small and medium sized towns, city planning, green belts, garden cities, urban policy, contemporary issues in urban planning globalization and urban planning in the Third World. Contributions of Indian scholars to the studies of urban settlements.	15

Teaching Learning Process: Class discussions/ demonstrations, Power point presentations, Class activities/ assignments, Field visits., Internship, etc.

1. Alam, S.M. (1964): Hyderabad – Secunderabad Twin Cities Asia Publishing House, Bombay.
2. Berry, B.J.L. and Horton, F.F. (1970): Geographic Perspectives on Urban Systems, Prentice Hall, Englewood Chiffs, New Jersey.
3. Bansal, S.C. : Urban Geography (English & Hindi both), Meenakshi Prakashan, Meerut.
4. Carter (1972): The Study of Urban Geography, Edward Arnold Publishers, London.
5. Chorley, R.J.O Haggett P. (ed.) (1966): Models in Geography, Methuen, London.
6. Dickinson, R.E. (1964): City and Region, Routledge, London.
7. Dwyer, D.J. (ed.) (1971): The City as a Centre of Change in Asia, University of Hong Kong Press, Hongkong.
8. Gibbs, J.P. (1961): Urban Research Methods, D. Van Nostrand Co. Inc. Princeton, New Jersey. Hall, P. (1992): Urban and Regional Planning, Routledge, London.
9. Hall, P. (1992): Urban and Regional Planning, Routledge, London.

M.A./M.Sc. Geography
Semester IV
Course II (Theory)
Session 2021-22

Programme/Class: M.A./M.Sc.	Year: Second	Semester: IV
Name of Faculty: Dr. Sushma Gaur	Subject: Geography	
Course Code: G 4019	Course Title: GEOGRAPHY OF RURAL SETTLEMENT	(Theory)

Course outcomes:

1) The students will learn about basic principles of urban and regional planning.
2) The students will know about pioneering thinkers in the field of urban planning.
3) The students will study about the different theoretical background and structure of the regional planning process

Max. Marks: 50+50	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0 or 3-1-0 Etc.

Unit	Topics	No. of Lectures
I	Nature, scope, significance and development of rural settlement geography. Approaches to rural settlement geography. Rural-urban continuum Definition and characteristics of rural settlements in the fringe areas and sparsely settled areas. Distribution of Rural settlements: size and spacing of rural settlements. Nearest Neighbour Analysis.	14
II	Types, forms and Patterns of rural settlements: cause and effect, Classification of rural settlements, Rural service centres, their nature, hierarchy and functions, rural-urban fringe – structure, characteristics and functions.	14
III	Social issues in rural settlements: poverty, housing and shelter, depriation and inequality, empowerment of women, health care, rural-urban interaction.	14
IV	Environmental issues in rural settlements: access to environmental infrastructure, water supply, sanitation, drainage, health hazards.	15
V	Cultural landscape elements in rural settlements in different geographical environments with special reference to India; House types and field patterns, Origin, evolution, size, socio-spatial structure of Indian villages, periodic market, Rural development planning in India.	15

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Teaching Learning Process: Class discussions/ demonstrations, Power point presentations, Class activities/ assignments, Field visits., Internship, etc.

1. Alam, S.M. et. al. (1982): Settlement System of India, Oxford and IBH Publication Co., New Delhi.
2. Brock, J.O.M. and Welb, J.W. (1978): Geography of Mankind, McGraw Hill, London.
3. Chisholm, M. (1967): Rural Settlements and Land Use, John Wiley, New York.
4. Clout, H.D. (1977): Rural Geography, Permajon, Oxford.
5. Daniel, P. and Hopkinson, M. (1986): The Geography of Settlement, Oliver & Byod, Edinburg.
6. Grover, N. (1985): Rural Settlement – A Cultural Geographical Analysis, Inter-India Publication, Delhi.
7. Hudson, F.S. (1976): A Geography of Settlement, MacDonald & Evans, New York.

M.A./M.Sc. Geography
Semester IV
Course I (Theory)
Session 2021-22

Programme/Class: M.A./M.Sc.	Year: Second	Semester: IV
Name of Faculty: Ms Rashika Yadav	Subject: Geography	
Course Code: G 4018	Course Title: Population Geography	(Theory)

Course outcomes:

1) After taking this course, a candidate should be able to appreciate the active role of population geography as a distinct field of human geography.
2) S/he should be conversant with different sources of demographic data, and well versed with debates on population-development linkages.

Max. Marks: 50+50	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0 or 3-1-0 Etc.

Unit	Topics	No. of Lectures Total 60…….
I	Population Geography: Scope and Objectives, development of Population Geography as a field of specialization- Population Geography and Demography-sources of population data, their level of reliability, and problems of mapping of population data.	14
II	Population distribution: density and growth – theoretical issues, Classical and modern theories in population distribution and growth, World patterns and their determinants, India, population distribution, density and growth profile, Concepts of under population and over population.	14
III	Population composition: age and sex, family and households, literacy and education, religion, caste and tribes, rural and urban, urbanisation, occupational structure, population composition of India.	14
IV	Population dynamics: Measurements of fertility and mortality, migration, national and international patterns, India's population dynamics, Demographic Research Methods.	15
V	Population and development: population-resource regions and levels of population and socio-economic development, population policies in developed and less developed countries. Human Development Index and its	15

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	components, India's population policies, population and environment, implications for the future.	

Teaching Learning Process: Class discussions/ demonstrations, Power point presentations, Class activities/ assignments, Field visits., Internship, etc.
1. Bilasborrow, Richard E and Daniel Hogan (1999): Population and Deforestation in the Humid Tropics, International Union for the Scientific Study of Population, Belgium. 2. Bogue, D.J. (1969): Principles in Demography, John Wiley, New York. 3. Bose, Ashish et.al. (1974): Population in India's Development (1947-2000): Vikas Publishing House, New Delhi. 4. Census of India (2001): India: A State Profile. 5. Chandna, R.C. (2000): Geography of Population, Concept, Determinants and Patterns, Kalyani Publishers, New Delhi. 6. Clarke, John I. (1973): Population Geography, Pergamon Press, Oxford. 7. Crook, Nigel (1997): Principles of Population and Development, Pergmon Press, New York.

M.A./M.Sc. Geography
Semester IV
Course I (Practical)
Session 2021-22

Programme/Class: M.A./M.Sc.	Year: Second	Semester: IV
Name of Faculty: Dr. Deepshikha Sharma Mrs Gitanjali Chauhan	Subject: Geography	
Course Code: G 818	Course Title: GEOGRAPHY OF RURAL SETTLEMENT	(Practical)

Course outcomes:

- The students will be able to understand the theme of research,
- The students will be able to find new techniques and areas which are helpful for their applications

Max. Marks: 100	Min. Passing Marks: 40

Dissertation

Note: Students under the supervision of a faculty member will be selecting a topic from their field of specialization for the dissertation work. The dissertation will be field work based applying the techniques learned by the student in practical. It must be of minimum 100 pages with 10 to 15 maps and diagrams / charts prepared by the student. Topic of the dissertation will be selected by the student in first semester. Introductory details such as identification and importance of the problem, selection of study area, review of literature, objectives, hypotheses etc., of the topic will be covered in this semester. Evaluation in each semester will be done from the work done in each semester.

Research design / conceptual framework, methodology, data collection tabulation etc. will be done in the second semester. Evaluation of dissertation will be done on the bases of the work completed in this semester.

Chapter plan, statistical & cartographic analyses of data, mapping etc. will be done in third semester. Hypotheses testing, research findings and suggestions will be done in fourth semester.

The dissertation report, duly signed by the teacher/ supervisor concerned, will be submitted in the college before the theory examination of the university or as per

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instructions given by the university. There will be internal viva-voce on dissertation. The viva-voce examination will be purely internal and shall be conducted before sending the dissertation to the university. The student will present his/ her findings before the audience of department teachers and P.G. students. The supervisor will act as an internal examiner, and the internal marks will be awarded by him/ her.

Distribution of marks for dissertation course in each semester will be as follows:

1.	Evaluation	-	50 Marks ((External)
2.	Viva – voce	-	50 Marks (Internal)

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