B.A. (HONS.) SOCIAL SCIENCES
SEMESTER-II
PAPER: GENERAL STUDIES-2 (GEOGRAPHY OF INDIA AND WORLD)
Paper Code: BSS-203

Total Course Credits - 04
Maximum Marks –100 Pass Percentage – 40%
External - 75 Marks Time Allowed: 3 hours
Internal Assessment – 25 Marks Total Teaching Periods: 60

INSTRUCTIONS FOR PAPER SETTER

1. The question paper will consist of three sections: A, B and C. Sections A and B will have four questions each from the respective sections of the syllabus and will carry 12 marks each (Total 48 Marks). The students are required to attempt any two questions from each section. Section C will consist of 09 short answer type questions covering the entire syllabus uniformly, each question carries 03 marks (27 marks). All questions are compulsory in section C.
2. The paper setter should mention that the use of outlined stencils of the world/continents/countries by the candidates is allowed.

INSTRUCTIONS FOR STUDENTS

- Candidates are required to attempt two questions each from the sections A and B of the question paper and section C is compulsory.
- Credit will be given for suitable maps and diagrams.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS

a) 5 marks will be awarded on the basis of attendance and participation in Class.
b) 10 marks will be awarded for submission of an assignment of 8-10 pages.
c) 10 marks will be awarded as per the performance of students in written tests (MST).
d) There will be two tests in each semester.

COURSE OBJECTIVES & LEARNING OUTCOMES:

1. To acquaint the students with Geography of World and India.
2. To provide comprehensive understanding of World & India's geographical
3. Dimensions: political as well as physical.
4. To know about World & India's human and economic resources base.
5. To prepare the students for competitive exams.

PEDAGOGY: Teacher should use maps and other modern aids like PPTs, video shows, etc. Students should be encouraged to use atlas in the classroom.

UNIT- I

1. Introduction to India: Location, Neighboring Countries, Important straits, States and International Boundaries.
2. Physical Features of India: The Himalayas, The Great North Indian Plains, Peninsular Plateau, Indian Desert, Coastal plains and islands.
3. River Systems of India: Himalayan rivers, Peninsular rivers, West-flowing and east-flowing rivers, Hydro power projects.
4. Climate of India: Monsoons – driving mechanism, El-Nino, La-Nina, Seasons, Cyclones.
5. Minerals and industries of India; mineral distribution, Weber's model of industrial location, Distribution and problems of Indian industries.
6. Physical and man-made disasters in India.

UNIT- II

7. Agriculture in India; Soils, Crops, Green Revolution, Land Utilization, Von Thunen's model of agricultural location.
8. Natural Vegetation of India; Classification, Biosphere Reserves, National Parks.
9. Transport Network; Roads, Rails & Waterways, Pattern of world trade.
10. Population of India; Distribution, Population Theories, Density, Growth, Literacy & Gender Composition, Sustainable development of cities.
11. World Geography; Continents, Developed & Developing Countries, brief of South Asia.

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. Field Work/Educational Tour.
5. PPT Presentation.

Books Recommended: -

1. Deshpande, C.D.: *India: A Regional Interpretation*, India Council of Social Science Research, New Delhi, 1992.
2. Jackson, Richard H. and Lloyd, E. Hudman : *World Regional Geography: Issues for Today*, John Wiley, New York 1991.
3. Chopra S.N.*: India: An Area Study,* Vikas Publishing House, 1977.
4. Hussain, Majid: *Geography of India,* Tata McGraw-Hill, Delhi, 2013.

5. Johnson, B.L.C.: *India: Resources and Development*, Arnold Heinemann, London, 1980.
6. Johnson, B.L.C.: *South Asia*, Heinemann, London, 1981.
7. Khullar, D.R.: *India: A comprehensive Geography*, Kalyani Publishers, New Delhi, 2013.
8. Mankoo, Darshan Singh: *A Regional Geography of the World*, Kalyani Publishers, Ludhiana; 2006.
9. Malkit Singh: *Geography of India*, Rasmeet Publication, Jallandhar. 2013.
10. Sengupta, S.N.: *Geography of India, Concept Publishing Company 1992.*
11. Singh, R.L (Ed.): *India: A Regional Goegraphy,* National Geographical Society of India, Varanasi, 1971.
12. Singh, Jagdish: *India: A Comprehensive Systematic Geography,* Gynodaya Prakashan, Gorkhpur, 1994.
13. Singh, Gopal: *A Geography of India,* Atma Ram and Sons, Delhi, 1995,
14. Shrama, T.C and Countinho, O.*: Economic and Commercial Geography of India*, Vikas, Delhi, 1991.
15. Spate, O.H.K. and Learmonth A.T.A.: *India and Pakistan, land, People and Economy*, Meuthen London, latest Edition.
16. Singh, Malkit: *World Regional Geography*, (in Punjabi) Rasmeet Parkashan, Jalandhar, 2007.
17. Tirtha, Ranjit and Gopal Krishan: *Emerging India*, Conpub Ann Arbour, Publishers, Michigan, 1992.
18. Tiwari, R.C: *Geography of India*, Pravalika Publications, Allahabad, 2013.

B.A. (HONS.) SOCIAL SCIENCES
SEMESTER-I
SUBJECT: GEOGRAPHY
PAPER: PHYSICAL GEOGRAPHY-I: GEOMORPHOLOGY
PAPER CODE: BSS-107

Total Course Credits - 03
Maximum Marks - 70 Pass Percentage - 40%
Theory - 50 Marks Time Allowed: 3 hours
Internal Assessment - 20 Marks Total Teaching Periods: 60

INSTRUCTIONS FOR THE PAPER SETTER

1. The question paper will consist of three Units I, II and III. Unit I and II will have four questions each from the respective Unit of the syllabus and will carry 8 marks each (Total 32 Marks). Students are required to attempt any two questions from each Unit. Unit III will consist of 09 short answer type questions covering the entire syllabus uniformly; all the questions will be compulsory; each question will carry 02 marks (Total 18 marks).
2. The paper setter should mention that the use of outlined stencil maps of the world/continents/countries by the candidates are allowed.

INSTRUCTIONS FOR THE CANDIDATES

1. Candidates are required to attempt two questions each from Unit I and II and 09 compulsory short answer type questions from Unit III.
2. Candidates are allowed to use outlined stencil maps of the world/continents/countries. They are also allowed to use simple calculators.
3. Credit will be given for suitable maps and diagrams.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS

a) 5 marks will be awarded on the basis of attendance in class.
b) 5 marks will be awarded for the submission of an assignment.
c) 10 marks will be awarded as per the performance of students in written tests (MST). There will be two tests in each semester.

OBJECTIVES AND LEARNING OUTCOMES:

1. To introduce the students to the basic concepts of Physical Geography, mainly Geomorphology.
2. To make the students aware of the need for protection and conservation of different landforms.
3. To prepare the students for competitive exams.

PEDAGOGY: Teachers should use audio-visual aids, maps, diagrams and other forms of illustrations. Relevant educational field trips must be arranged to illustrate the theory being taught.

Unit- I

1. Introduction to Geography: Meaning and Importance of Geography, Nature and Scope of Geography, Divisions of Physical Geography (Geomorphology, Climatology, Oceanography and Biogeography).
2. Theories of the origin of the Earth: Laplace, Big Bang Theory.
3. Realms of the Earth: Brief introduction to Atmosphere, Lithosphere and Hydrosphere.
4. The Constitution of the Earth's interior: Crust, Mantle, Core.
5. The Continental Drift Theory by Wegner, Isostasy and Plate Tectonics.
6. Forces of Compression and Tension; Landforms resulting from Compression and Tension.

Unit- II

7. Classification of Rocks: Origin, Classification and Characteristics of: Igneous Rocks, Sedimentary Rocks and Metamorphic Rocks.
8. Earthquakes and volcanoes: Causes, types and distribution.
9. Major landforms: Mountains, Plateaus and Plains.
10. Geomorphic Agents and Processes; Weathering and Erosion, Concept of Davisian Cycle of Erosion.
11. Geomorphic landscapes: Landforms formed by Fluvial, Glacial and Aeolian.

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. Workshop on Google Earth.

BOOKS RECOMMENDED:

1. Bunnet, R.B.: *Physical Geography in Diagrams,* Pearson Education, Noida, 1987.
2. Chawla, I. N*: Physical Geography* (Punjabi Medium), Bharat Publishers, Jalandhar.
3. Chorley, J. Richard: *Physical Geography: A Systems Approach*, 2011.
4. Christopherson, Robert W., Geosystems: *An Introduction to Physical Geography*, 8th Ed., Macmillan Publishing Company, 2011.
5. Dayal, P: *A Text Book of Geomorphology*, Shukla Book Depot, Patna,1995.
6. Dury, G.H.: *The Face of the Earth,* Penguin, England, 1973.
7. Kale V. S. and Gupta A., *Introduction to Geomorphology*, Orient Longman, Hyderabad, 2001.
8. Kale, V. and Gupta, A.: *Elements of Geomorphology*, Oxford University Press, 2001.
9. Kaur, Dhian :*The Earth*, Kalyani Publishers, Ludhiana, 2000.

10. Khullar, D.R.: *Physical Geography (Geomorphology) and Practical Geography,* Kalyani Publishers, Delhi, 2019.
11. Memoria, C.P. and Niati, J.L. :*Bhautic Bhoogol Ke Tatwa* (in Hindi), Agra, 1976
12. Monkhouse, F.J.: *Principles of Physical Geography*, New Delhi, Latest Edition.
13. Nagle, G., Spencer, K.: *AS and A Level Geography Through Diagrams,* OUP Oxford, 2001.
14. Singh, Malkeet: *Physical Geography* (Punjabi Medium), Rashmeet Publications, Jalandhar.
15. Singh, S., *Bhautik Bhugol ka Swaroop*, Prayag Pustak,Allahabad, 2009.
16. Singh, Savinder: *Physical Geography*, Gyanodya Prakashan, Gorakhpur, 2009.
17. Strahler, A.N. & Strahler, A.H. : *Modern Physical Geography*, John Wiley, New York, 1992.
18. Thornbury, W.D.: *Principles of Geomorphology,* Second Edition, Wiley Eastern Ltd., New Delhi, 1993.
19. Tikha, R.N.: *Physical Geography*, New Academic Publishing Co., Jalandhar.

PAPER -PRACTICAL GEOGRAPHY: CARTOGRAPHY AND FIELD SURVEY
PAPER CODE: BSS-107 (P)

Total Course Credit: 01 Pass Percentage: 40 %
Max. Marks: 30 Time Allowed: 6 Hours
Total Teaching Periods: 40

Session-I (Morning) Theory

Total Marks: 10 Time Allowed: 3 hours

Three exercises should be given; out of these, the candidate is required to attempt any two. Each exercise will carry five marks.
The Examiners will set the paper at the Centre on the spot.

Session-II (Evening) Viva Voice and Practical Record

Practical Record - 07 Marks
Field Survey and Plotting - 07 Marks
Viva-Voice - 06 Marks
Total Marks - 20
Note: Use of stencils and calculator is allowed.

OBJECTIVES AND LEARNING OUTCOMES:

1. To help the students understand Map Scales and their importance.
2. To acquaint the students with the principles of surveying, its importance and utility in geographical study.
3. To enable the students to represent relief features by use of different methods.

PEDAGOGY: The use of topographical sheets of Survey of India and a well equipped Cartographic laboratory with necessary instruments to prepare exercises.

Unit- I

1. History of Cartography: Definition, brief history, Maps and their types.
2. Map Scales: Types of scales, methods of construction of graphic scales (Plain Scale, Comparative scale, Time scale and Diagonal scale).

Unit- II

3. Methods of showing relief: gentle and steep slope, concave and convex slope, terraced slope, conical hill, plateau, ridge, waterfall, U and V-shaped valley.
4. Chain and Tape survey: Triangulation and Sketch.

Books Recommended:

1. Singh, Malkeet: *Cartography* (Punjabi Medium), Rashmeet Publication, Jalandhar.
2. Tikha, R.N: *Cartography and Practical Geography* (Punjabi Medium), Punjab State University Text Book Board.
3. Khullar, D.R.: *Essentials of Practical Geography*, New Academic Publishing Co., Jalandhar,2009.
4. Monkhouse, F.J.: *Maps and Diagrams*, Methuen & Co., London, 1994 reprint.
5. Robinson, A.H.: *Elements of Cartography*, John Wiley, New York.
6. Singh, Gopal: *Map work & Practical Geography*, Vikas Publishing House Pvt. Ltd., New Delhi,1995.
7. Singh, L.R& Singh, Raghunandan: *Map Work and practical Geography,* central Book Depot, Allahabad (1993).
8. Mishra, R.P. and Ramesh, A.: *Fundamentals of Cartography,* Concept Publishing Co., New Delhi, 1989.
9. Sarkar, Asish: *Practical Geography: A Systematic Approach* (2nd Edition), Orient BlackSwan, Hyderabad, 2011.
10. Rather, G.M.: *A Text of Practical Geography*, Arina Publishers, New Delhi, 2011.
11. Singh, Gopal, *Map Work and Practical Geography*, Vikas Publication House, 2004.

B.A. (HONS.) SOCIAL SCIENCES
SEMESTER-II
SUBJECT: GEOGRAPHY
PAPER: PHYSICAL GEOGRAPHY-II: CLIMATOLOGY AND OCEANOGRAPHY
PAPER CODE: BSS - 207

Total Course Credits - 03
Maximum Marks - 70 | Pass Percentage - 40 %
Theory - 50 Marks | Time Allowed: 3 hours
Internal Assessment - 20 Marks | Total Teaching Periods: 60

INSTRUCTIONS FOR THE PAPER SETTER

1. The question paper will consist of three sections: A, B and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 8 marks each (Total 32 Marks). The students are required to attempt any two from each section. Section C will consist of 09 compulsory short answer type questions covering the entire syllabus uniformly. The student shall attempt 09 compulsory short answer type questions covering the entire syllabus uniformly. Each short answer type question carries 02 marks (Total 18 marks).
2. The paper setter should mention that the use of outlined stencil maps of world/continents/countries by the candidates are allowed.

INSTRUCTIONS FOR THE CANDIDATES

1. Candidates are required to attempt two questions each from sections A and B of the question paper and 09 compulsory short answer type questions from section C.
2. Candidates are allowed to use outlined stencil maps of the world/continents/countries. They are also allowed to use simple calculators.
3. Credit will be given for suitable maps and diagrams.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS

a) 5 marks will be awarded on the basis of attendance in class.
b) 5 marks will be awarded for the submission of an assignment.
c) 10 marks will be awarded as per the performance of the student in written tests (MST). There will be two tests in each semester.

OBJECTIVES AND LEARNING OUTCOMES:

1. To introduce the students to the basic concepts of Physical Geography.
2. To acquaint the students with the study of Climatology and its various aspects.
3. To help the students in understanding the importance and need for conserving ocean resources for our future.
4. To prepare the students for competitive exams.

PEDAGOGY: Use of P.P.Ts and documentaries on climates and oceans are strongly recommended.

Unit- I

1. Definition of Climatology; Difference between Climate and Weather, Elements and Controls of Climate and Weather.
2. Atmosphere: Importance, Composition and Structure of the Atmosphere.
3. Insolation; Factors controlling its horizontal distribution.
4. Temperature and Koppen's Climatic classification; Horizontal and vertical distribution of temperature, Introduction to Koppen's Classification of world climate.
5. Atmospheric Pressure and Wind System; World Pressure belts, General circulations of winds, Classification of winds (Planetary, periodic and local winds), Tropical Cyclones, Temperate Cyclones and Anticyclones and Jet Streams, Forces affecting winds.
6. Moisture and Precipitation; Forms of condensation (clouds, dew, frost and snow), Types of rainfall and distribution of rainfall in the world.
7. Atmospheric pollution; causes, effects and controls of air pollution.

Unit- II

8. Oceanography; Definition, Topography of the ocean basin (continental shelf, continental slope, deep sea plains and oceanic deep features).
9. Temperature and salinity in oceanic water; Factors controlling world patterns of distribution of temperature and salinity.
10. Movements of oceanic waters; Waves, Tides and Currents of Atlantic and Pacific Ocean Marine Deposits and Corals: origin and types.
11. Oceans as a storehouse of resources for the future: Benefits of ocean resources to human beings.

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. Field Work/Educational Tour.

Books Recommended:

1. Bhutani, Smita: *Our Atmosphere*, Edited by R.C. ChandanKalyani publishers, Ludhiana. Delhi, 2000.
2. Chawla, I. N: *Physical Geography* (Punjabi Medium), Bharat Publishers, Jalandhar.
3. Critchfield, H. J: *General Climatology*, Prentice Hall of India Pvt. Ltd., New Delhi, 1975.
4. Critchfield, H: *General Climatology*, Prentice-Hall of India, 2002.
5. Frederick K. and Edward J. Tarbuck: *The Atmosphere: An Introduction to Meteorology*, Prentice Hall of India Pvt. Ltd., New Delhi, 1995.
6. Khan, N.: *An Introduction to Physical Geography*, Concept, New Delhi, 2001.

7. Khullar, D.R.: *Physical Geography (Atmosphere and Hydrosphere) and Practical Geography,* Kalyani Publishers, Delhi, 2019.
8. King, C. A. M.: *Oceanography*, E. Arnold, London, Latest Edition.
9. Lal, D.S.: *Climatology*, Mc Graw Hill, New York, 2005.
10. Monkhouse, F.J.: *The Principals of Physical Geography*, University of London Press London, 2001.
11. Sharma R.C. & M Valet: *Oceanography for Geographer*, Chetyna Allahabad, 1970.
12. Singh, Malkeet: *Physical Geography* (Punjabi Medium), Rashmeet Publications, Jalandhar.
13. Singh, Savindra: *Climatology*, Prayag Pustak Bhavan, Allahabad, 2004.
14. Trewartha, G.T: *An Introduction to climate*, McGraw Hill Book Co., New Delhi.
15. Trewartha, G.T: *The Earth's Problems Climates,* University of Wisconsin Press, USA.

PAPER: PRACTICAL GEOGRAPHY: CARTOGRAPHY AND WEATHER MAPS
PAPER CODE: BSS -207 (P)

Total Course Credits: 01 Pass Percentage: 40 %
Max. Marks: 30 Time Allowed: 6 Hours
Total Teaching Periods: 40

Session-I (Morning) Theory

Total Marks: 10 Time Allowed: 3 hours

Three exercises should be given; out of these, the candidate is required to attempt any two. Each exercise will carry five marks.
The paper will be set by the Examiners at the Centre on the spot.

Session-II (Evening) Viva-Voice and Practical Record

Practical Record - 07 Marks
Report on Local Weather - 07 Marks
Viva-Voice - 06 Marks
Total Marks - 20
Note: Use of stencils and calculator is allowed.

OBJECTIVES and LEARNING OUTCOMES:

1. To understand the directions and methods of finding North and their importance.
2. To illustrate the importance of Weather Maps.
3. To acquaint the students with local Weather and Climate.

PEDAGOGY: The use of topographical sheets of Survey of India and weather maps. A well equipped cartographic laboratory with necessary instruments to prepare exercises.

Unit- I

1. Directions and Bearings: Direction, Plotting of Course, Methods of finding True North with the help of Pole star, a watch and a rod, Bearings and its conversion.
2. Enlargement and Reduction; Graphic methods (Square and Triangle method), Instrumental methods (Pantograph, Xeroxing and Photographic)

Unit- II

3. Weather maps; general introduction to the study of weather maps, weather symbols employed in Indian daily weather reports and Interpretation of Indian daily weather reports.
4. Local Weather Report; A Brief Weather Report of 10-12 pages.

Books Recommended:

1. Singh, Malkeet: *Cartography* (Punjabi Medium), Rashmeet Publication, Jalandhar.
2. Tikha, R.N: *Cartography and Practical Geography* (Punjabi Medium), Punjab State University Text Book Board.
3. Khullar, D.R.: *Essentials of Practical Geography*, New Academic Publishing Co., Jalandhar,2009.
4. Monkhouse, F.J.: *Maps and Diagrams*, Methuen & Co., London, 1994 reprint.
5. Robinson, A. H.: *Elements of Cartography*, John Wiley, New York, 1995.
6. Singh, Gopal: *Map Work & Practical Geography*, Vikas Publishing House Pvt. Ltd., New Delhi,1995.
7. Singh, L. R & Singh, Raghunandan: *Map Work and practical Geography,* Central Book Depot, Allahabad (1993).
8. Mishra, R. P. and Ramesh, A.: *Fundamentals of Cartography,* Concept Publishing Co., New Delhi, 1989.

B.A. (HONS.) SOCIAL SCIENCES
SEMESTER-III
SUBJECT: GEOGRAPHY
PAPER-: GEOGRAPHY OF RESOURCES AND ENVIRONMENT
PAPER CODE: BSS-307

Total Course Credits - 03
Maximum Marks - 70 Pass Percentage - 40%
Theory - 50 Marks Time Allowed: 3 hours
Internal Assessment - 20 Marks Total Teaching Periods: 60

INSTRUCTIONS FOR THE PAPER SETTER

1. The question paper will consist of three Units I, II and III. Unit I and II will have four questions each from the respective Unit of the syllabus and will carry 8 marks each (Total 32 Marks). Students are required to attempt any two questions from each Unit. Unit III will consist of 09 short answer type questions covering the entire syllabus uniformly; all the questions will be compulsory; each question will carry 02 marks (Total 18 marks).
2. The paper setter should mention that the use of outlined stencils of the world/continents/countries by the candidates are allowed.

INSTRUCTIONS FOR THE CANDIDATES

1. Candidates are required to attempt two questions each from Unit I and II and 09 short answer questions from Unit III.
2. Candidates are allowed to use outlined stencil maps of the world/continents/countries. They are also allowed to use simple calculators.
3. Credit will be given for suitable maps and diagrams.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS

a) 5 marks will be awarded on the basis of attendance and performance in class.
b) 5 marks will be awarded for submission of an assignment of 8-10 pages (Topic: Map filling exercise).
c) 10 marks will be awarded as per the performance of students in written tests (MST). There will be two tests in each semester.

OBJECTIVES AND LEARNING OUTCOMES:

1. To understand the interrelationship of geography, resources and environment.
2. To be acquainted with the challenges related to conservation and management of resources.
3. To analyse various global environmental issues and their geographical analysis.

PEDAGOGY: Maximum use of maps to distribute resources and other modern aids.

Unit- I

1. Geography of Resources: Definition, Nature, Scope and Significance and Classification of Resources.
2. Mineral and Energy Resources: Distribution, economic and environmental significance, international trade and conservation of Iron Ore, Copper, Coal and Mineral Oil.
3. Biodiversity and Sustainable Development.
4. Forest Resources: Types, distribution, environment and economic significance and conservation.
5. Soil Resources: Types, distribution, significance, soil degradation and conservation.
6. Water Resources: Hydro Power, Utility, significance and sustainability, Water crisis and Human Beings.

Unit- II

7. Human Resources: Quantitative and qualitative aspects of the population (distribution, density, growth, literacy and urbanisation).
8. Population-Resources Relationship: Population – Resource regions of the world, Demographic Transition Theory.
9. Introduction to Environmental Geography: Definition and Significance, Human-Environment Relationship.
10. Emerging Environmental Issues: Air Pollution, Water Pollution, Population Explosion & Depleting Biodiversity.
11. Food Security: Concepts, Measurements, Need, Policies (with special reference to PDS).

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. Workshop on Google Earth.

Books Recommended:

1. Agarwal, A.: *The Citizen's Fifth Report*, Centre for Science and Environmental, New Delhi, 1999.
2. Chandna, R.C.: *A Geography of Population,* Kalyani Publishers, Ludhiana, 2009.
3. Chandna, R.C.: *Environmental Awareness,* Kalyani Publishers, New Delhi, 1998.
4. Chandna, R.C.: *Environmental Geography*, Kalyani Publishers, Ludhiana, 1996.
5. Chawla, I.N.: *Geography of Resources*, Bharat Prakashan, Jalandhar, Latest Edition 2006.
6. Gautam, Alka: *Geography of Resources: Exploitation Conservation Preservation*, Sharda Pustak Bhawan, Allahabad.
7. Husain, Majid: *Human Geography*, Rawat Publications, New Delhi, 1994.
8. Kates, R.W. & Burton, I. (Eds.): *Geography, Resources and Environment,* Vols. I & II, University of Chicago Press, Chicago, 1986.
9. Misra, A.: *Environmental Studies*, Selective and Scientific Books, New Delhi, 2004.

10. Saxena, H.M.: *Environmental Geography*, Rawat Publications, Jaipur and Delhi.
11. Singh, Savindra: *Environmental Geography,* Prayag Pustak Bhavan, Allahabad, 2000.
12. Singh, Savindra: *Environmental Geography*, Pravalika Publication, 2020.
13. Singh, Malkit: *Geography of Resources and Environment* (in English and Punjabi), Rasmeet Prakashan, Jalandhar, 2001.
14. Verma, S.B., Singh, S.K.: *Environmental protection and development: emerging issues, reforms and strategies,* Deep and Deep, New Delhi, 2005.
15. Zimmerman E.W.: *World Resources and Industries,* Harper, New York.

PAPER-: PRACTICAL GEOGRAPHY: CARTOGRAPHY
PAPER CODE: BSS-307 (P)

Total Course Credit: 01 Pass Percentage: 40%
Max. Marks: 30 Time Allowed: 6 Hours
Total Teaching Periods: 40

Session-I (Morning) Theory
Total Marks: 12 Time Allowed: 3 hours
Three exercises should be given; out of these, candidates are required to attempt any two. Each exercise will carry 6 marks.
The Examiners will set the paper at the Centre on the spot.

Session-II (Evening) Viva Voice and Practical Record
Practical Record - 10 Marks
Viva-Voice - 08 Marks
Total Marks - 18

Note: Use of stencils and calculator is allowed.

OBJECTIVES and LEARNING OUTCOMES:

1. To enable students to represent the geographical data with the help of diagrams.
2. To provide training in the application of various graphical methods of depicting geographic data.

PEDAGOGY: Teachers should train the students in the use of symbols to depict various geographic data.

Unit- I

1. Symbolisation of Geographical Data: Point symbols (Dot, Circle and Sphere)
2. Isarithmic, Isopleths and Flow lines.
3. Choropleth.

Unit-II

4. Representation of Population data: Distribution, Density, Growth and Literacy.
5. Agricultural data and Industrial data: Land utilisation, distribution of crops; growth and production of industry.
6. Transport data: Traffic Flow.

BOOKS RECOMMENDED:

1. Khullar, D.R.: *Essentials of Practical Geography*, New Academic Publishing Co., Jalandhar, 2009.
2. Monkhouse, F.J.: *Maps and Diagrams,* Methuen & Co., London, 1994 reprint.
3. Mishra R.P. and Ramesh A.: *Fundamentals of Cartography,* Concept Publishing Company, New Delhi, 1989.
4. Rather, G.M.: *A Text of Practical Geography*, Arina Publishers, New Delhi, 2011.
5. Robinson, A.H.: *Elements of Cartography*, John Wiley, New York, 1995.
6. Sarkar, Asish: *Practical Geography: A Systematic Approach*, 2nd Edition, Orient Blackswan, Hyderabad, 2011.
7. Singh, Malkit: *Cartography* (in Punjabi), Rasmeet Prakashan, Jallandhar, 2007.
8. Singh, R.I., Dutt, P. K.: *Elements of Practical Geography, Students Friends*, Allahabad, 1968.
9. Singh, R.L. and Singh P.B. Rana: *Elements of Practical Geography,* Kalyani Publishers, Ludhiana, 2009.
10. Singh, Gopal: *Map Work & Practical Geography*, Vikas Publishing House Pvt. Ltd., New Delhi, 1995.
11. Singh, L.R & Singh, Raghunandan: *Map Work and Practical Geography,* Central Book Depot, Allahabad,1993.

B.A. (HONS.) SOCIAL SCIENCES
SEMESTER-IV
SUBJECT: GEOGRAPHY
PAPER-: GEOGRAPHY OF PUNJAB
PAPER CODE: BSS-407

Total Course Credits - 03
Maximum Marks - 70 Pass Percentage - 40%
Theory - 50 Marks Time Allowed: 3 hours
Internal Assessment - 20 Marks Total Teaching Periods: 60

INSTRUCTIONS FOR THE PAPER SETTER

1. The question paper will consist of three sections/Units I, II and III. Section/Unit I and II will have four questions each from the respective Section/Unit of the syllabus and will carry 8 marks each (Total 32 Marks). The students are required to attempt any two questions from each Section/Unit. Section/Unit III will consist of 09 short answer type questions covering the entire syllabus uniformly; all the questions will be compulsory; each question will carry 02 marks (Total 18 marks).
2. The paper setter should mention that the candidates' use of outlined stencils of the world/continents/countries is allowed.

INSTRUCTIONS FOR THE CANDIDATES

1. Candidates are required to attempt two questions each from sections/Unit I and II and 09 short answer questions from section/Unit III.
2. Candidates are allowed to use outlined stencil maps of the world/continents/countries. They are also allowed to use simple calculators.
3. Credit will be given for suitable maps and diagrams.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS

a) 5 marks will be awarded on the basis of attendance and performance in class.
b) 5 marks will be awarded for submission of an assignment of 8-10 pages (Topics: Map filling exercise).
c) 10 marks will be awarded as per the performance of the student in written tests (MST). There will be two tests in each semester.

OBJECTIVES and LEARNING OUTCOMES:

1. To acquaint the students with the geography of the state of Punjab.
2. To provide a comprehensive understanding of Punjab's geographical dimensions: Political, Physical and Cultural.
3. To know about Punjab's human and economic resource base.
4. To identify the current trends and problems faced by Punjab State.

PEDAGOGY: Maximum use of regional maps of Punjab and field visits to important places.

Unit-I

1. Introduction: Geographical and Relative Location, Evolution of the state, Administrative divisions, Salient features of Punjab's Culture.
2. Relief: The Shivaliks, The Kandi, The Plains, The Bet area, The Sand Dune studded South.
3. Drainage: Main Rivers of Punjab.
4. Climate: Summer, Winter and Monsoon season.
5. Natural Vegetation: Types, Distribution and Conservation.
6. Power Resources: Distribution and production of Hydropower and Thermal power.
7. Population: Distribution, Density, Growth, Urbanization, Literacy, Sex Ratio.

Unit-II

8. Agriculture: Salient features of Punjab's agriculture, Major crops (Rice, Wheat, Cotton and Sugarcane), Problems of Punjab's agriculture, Agro-climatic Regions.
9. Industry: Industrial Concentration, Locational factors, distribution and problems faced by Cotton Textile Industry, Hosiery Industry and Sugar Industry.
10. Transport: Road, Rail, Airways.
11. Cultural Regions: Main characteristics of Majha, Doaba and Malwa.
12. Contemporary issues: Underground water table.

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. Field Work/Educational Tour.

BOOKS RECOMMENDED:

1. Deshpande, C.D.: *India: A Regional Interpretation*, Indian Council of Social Science Research, New Delhi, 1992.
2. Economic and Statistical Organization of Punjab: *Statistical Abstract of Punjab,* Chandigarh, 2014.
3. Gosal, G.S. & Gopal Krishan: *Regional Disparities in Level of Socio-Economic Development in Punjab*, Vishal Publications, Kurukshetra, 1984.
4. Gupta, S.P.: *The Punjab Overview*, ESS PEE Publication, Chandigarh, 2004.
5. Mankoo, Darshan Singh: *Geography of Punjab*, Kalyani Publications, Ludhiana,2009.
6. Mavi, H.S. and Tiwana, D.S: *Geography of Punjab*, National Book Trust Delhi,1993.
7. Singh, R.L. (Ed.): India: *A Regional Geography*, National Geographical Society of India, 1990.
8. Singh, Malkit: *Geography of Punjab* (in Punjabi), Rasmeet Prakashan, Jalandhar, 2007
9. Singh, Pritam: *Punjab's Economy*: *Emerging Patterns*, Enkay Publishers, New Delhi, 1995.
10. Singh, Jaspal: *Geography of Punjab*, Twenty-First Century Publishers, Patiala, 2014.

11. Singh Pritam: *Punjab Economy: The Emerging Patterns*, Enkay Publishers, New Delhi, 1995.
12. Spate, O.H.K and A.T.A Learmouth: *India & Pakistan*: *Land, People and Economy,* Methuen, London, Latest Edition.

PAPER-B: PRACTICAL GEOGRAPHY: CARTOGRAPHY
PAPER CODE: BSS-407 (P)

Total Course Credit: 01 Pass Percentage: 40 %
Max. Marks: 30 Time Allowed: 6 Hours
Total Teaching Periods: 40

Session-I (Morning) Theory
Total Marks: 10 Time Allowed: 3 hours

Three exercises should be given; out of these, candidates are required to attempt any two. Each exercise will carry 05 marks.
The paper will be set by the Examiner at the Centre on the spot.

Session-II (Evening) Viva-Voice and Practical Record

Practical Record - 05 Marks
Field Survey and Plotting - 05 Marks
Field Visit and Travel Report - 05 Marks
Viva-Voice - 05 Marks
Total Marks - 20

Note: Use of stencils and calculator is allowed.

OBJECTIVES and LEARNING OUTCOMES:

1. To help students to understand the importance of Topographical Maps.
2. To acquaint the students with the principles of surveying, its importance and utility in geographical study.
3. To encourage geographical enquiry and higher-order thinking and learning through field visits.

PEDAGOGY: Students should learn to comprehend the topographical maps by deriving slopes and drawing profiles, and a well-equipped cartographic laboratory is necessary.

Unit-I

1. Columnar Diagrams: Simple, Multiple and Percentage Bar Diagram.
2. Graphs: Line Graph, Climograph, Hythergraph, Star Diagram and Ergograph.

Unit-II

3. Topographical Diagrams and Aerial Photographs: Significance of topographical maps in geographical studies, Study and Interpretation of topographical maps of India (two sheets: one representing a mountainous tract and the other a plain tract) and Interpretation of aerial photographs.
4. Plain Table Survey: Radial, Intersection and Open Traverse.

5. Field Visit and Travelogue Report (10-15 pages): A brief travel report based on the travel/field visits by the students to one of the following sites in north India
    1. Hill Station
    2. Water Bodies – Lakes, Waterfall, Rivers and Wetland
    3. Simple Ecosystems: Forest, Pond
    4. Sanctuaries and National Parks
    5. Forts, Capital Places
    6. Religious Tourist Centers

BOOKS RECOMMENDED:

1. Khullar, D.R.: *Essentials of Practical Geography*, New Academic Publishing Co., Jalandhar, 2009.
2. Monkhouse, F.J.: *Maps and Diagrams*, Methuen & Co., London, 1994 reprint.
3. Robinson, A.H.: *Elements of Cartography*, John Wiley, New York, 1995.
4. Singh, Gopal: *Map Work & Practical Geography*, Vikas Publishing House Pvt. Ltd., New Delhi,1995.
5. Singh, L.R & Singh, Raghunandan: *Map Work and Practical Geography,* Central Book Depot, Allahabad, 1993.
6. Singh, R.L. and Singh P.B. Rana: *Elements of Practical Geography,* Kalyani Publishers, Ludhiana, 2009.
7. Mishra, R.P., Ramesh, A.: *Fundamentals of Cartography*, Concept Publishing Company, New Delhi, 1989.
8. Singh, Malkit: *Cartography* (in Punjabi), Rasmeet Prakashan, Jallandhar, 2007.
9. Sarkar, Asish: *Practical Geography: A Systematic Approach,* 2nd Edition, Orient Black Swan, Hyderabad, 2011.

B.A. (HONS.) SOCIAL SCIENCES
SEMESTER-V
SUBJECT: GEOGRAPHY
PAPER-A: WORLD REGIONAL GEOGRAPHY
PAPER CODE: BSS-507

Total Course Credits - 03
Maximum Marks - 70 Pass Percentage - 40%
Theory - 50 Marks Time Allowed: 3 hours
Internal Assessment - 20 Marks Total Teaching Periods: 60

INSTRUCTIONS FOR THE PAPER SETTER

1. The question paper will consist of three Units I, II and III. Unit I and II will have four questions each from the respective Unit of the syllabus and will carry 8 marks each (Total 32 Marks). Students are required to attempt any two questions from each Unit. Unit III will consist of 09 short answer type questions covering the entire syllabus uniformly; all the questions will be compulsory; each question will carry 02 marks (Total 18 marks).
2. The paper setter should mention that the use of outlined stencil maps of the world/continents/countries by the candidates are allowed.

INSTRUCTIONS FOR THE CANDIDATES

1. Candidates are required to attempt two questions each from Unit I and II and 09 short answer type questions from Unit III.
2. Candidates are allowed to use outlined stencil maps of the world/continents/countries. They are also allowed to use simple calculators.
3. Credit will be given for suitable maps and diagrams.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS

a) 5 marks will be awarded on the basis of attendance in class.
b) 5 marks will be awarded for the submission of an assignment.
c) 10 marks will be awarded as per the performance of the student in written tests (MST). There will be two tests in each semester.

OBJECTIVES and LEARNING OUTCOMES:

1. To acquire knowledge about the world regions in terms of constituent countries, location and salient physical features.
2. To understand the human resource base and its interface with economic development.
3. To analyze development problems and future prospects.
4. To prepare the students for competitive exams.

PEDAGOGY: The teacher should use detailed maps of the countries and continents and other modern teaching aids, i.e., PowerPoint presentations, Video shows, etc. Students should be encouraged to use the atlas in the classroom.

Unit- I

1. Salient features of the world's physical geography.
2. Anglo America: Introduction, Relief and Drainage system, Climate, Agriculture (with special reference to Wheat, Maize & Cotton), Minerals (Iron ore, Coal and Hydro-electricity), Population (Distribution, Growth and Urbanization), Industry (Iron & Steel Industry and Automobile Industry).
3. Latin America: Introduction, Relief and Drainage System, Natural Vegetation, Agriculture (with special reference to Coffee and Sugarcane), Minerals (Iron ore, Copper and Aluminum).

4. Unit- II

5. Europe: Introduction, Relief, Agriculture (Wheat and Dairy), Fisheries, Power resources (Coal and Hydro-electricity), Industries (Cotton Textile, Woolen Textile and Shipbuilding industry).
6. Australia: Introduction, Relief, Climate, Main Minerals, Agriculture, Population (Distribution and Density).
7. Map Filling Exercise: Map covering the entire syllabus.

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. Workshop on Google Earth.
5. PPT Presentation

Books Recommended:

1. Blij, Harm J. de Peter, O. Miller: Geography: Regions and Concepts, John Wiley, New York, 1993.
2. Baerwald, T.J and C. Fraser: *World Geography: A Global Perspective*, Prentice-Hall, New Jersy,1995.
3. Cairns, G.O.et al.: *Australia,* Macmillan Co. New York, 1962.
4. Dayal, P: *A Text Book of Geomorphology*, Shukla Book Depot, Patna,1995.
5. Don R. Hoy (Ed.): *Essentials of Geography and Development*, Macmillan, New York, 1980.
6. English, Paul Ward and James, A. Miller: World Regional Geography: A Question of Place, John Wiley, New York, 1989.
7. Gilbert, Alan: *Latin American Development: A Geographical Perspective,* Handswoodworth Penguin, Middlesex, London, 1974.

8. Gottman, Jean: *A Geography of Europe,* Harper & Co. London, 1969.
9. Hussain, Majid: *World Regional Geography*, Rawat Publications, Jaipur, 2009.
10. Husain, Majid: *Bharat Evam Vishwa ka Bhugol* | 5th Edition, McGraw Hill, 2020.
11. Hussain, Majid: *Vishv Bhugol,* Rawat Publications, 2010.
12. Husain, Majid: *World Geography for Civil Services Main Examination,* Access Publishing, 2016.
13. Jackson, Richard H. and Lloyd, E. Hudman: World Regional Geography: Issues for Today, John Wiley, New York 1991.
14. Kromm, D. E.: *World Regional Geography,* Saunders Publishing, New York, 1980.
15. Mankoo, Darshan. Singh: A Regional Geography of the World, Kalyani Publishers, Ludhiana; 2006.
16. Ojha, S.K.: *Vishwa ka Bhugol (World Geography)*, Pariksha Vani, 2021.
17. Singh, Malkit: *World Regional Geography* (in Punjabi), Rasmeet Prakashan, Jalandhar, 2007.
18. Spate, O.H.K and Learmonth, A.T.A: *India and Pakistan, Land, People and Economy,* Methuen, London, Latest Edition.
19. Siddarth, K., Mukherjee, S.: *Manchitron Dwara Bhugol*, Kitab Mahal, 2018.
20. Tikkha, R.N., Bali, P.K. and Sekhon, M.S.: *World Regional Geography*, New Academic Publishers, 2007.
21. National Geographic Concise Atlas of the World, 4th Edition, National Geographic, 2016.

PAPER -PRACTICAL GEOGRAPHY: MAP PROJECTIONS
PAPER CODE: BSS-507 (P)

Total Course Credits: 01 Pass Percentage: 40%
Max. Marks: 30 Time Allowed: 6 Hours
Total Teaching Periods: 40

Session-I (Morning) Theory
Total Marks: 12 Time Allowed: 3 hours

Three exercises should be given; out of these, candidates is required to attempt any two. Each exercise will carry 6 marks.
The Examiners will set the paper at the Centre on the spot.

Session-II (Evening) Viva-Voice and Practical Record
Practical Record -10 Marks
Viva-Voice - 08 Marks
Total Marks - 18
Note: Use of stencils and calculator is allowed.

OBJECTIVES and LEARNING OUTCOMES:
The students will be able to attain the following objectives:

1. To understand the importance and construction of map projections.
2. To enable the students to use various projections.

PEDAGOGY:
Fundamentals of map projections are introduced by demonstration of construction exercises in class.

Unit- I

1. General introduction and classification of map projections, General principles of identification, Choice of projections.
2. Cylindrical Projections: Construction, properties and limitations of Plate Caree, Equal Area, and Mercator's projection.
3. Conical Projections: Construction, properties and limitations of: One Standard Parallel Conical, Two Standard Parallel Conical, Bonne's Projection.

Unit- II

4. Zenithal Projections (Polar cases only): Construction, properties and limitations of: Gnomonic, Stereographic, Orthographic.
5. Conventional Projections (Normal cases only): Sinusoidal, Molleweide's.

Books Recommended:

1. Archer, J.E. & Dalton, T.H.: *Fieldwork in Geography*, E.T. Bastford Ltd., London, 1968.
2. Hudson, F. S.: *A Geography of Settlements*, Macdonald, London, 1970.
3. Jones, P.A.: Fieldwork In Geography, Longman, London, 1968.
4. Khullar D.R.: *Practical Geography* (in Hindi and English), Kalyani Publishers, 2015.
5. Richardus, P., Kazimierz, Adler, R.K.: *Map Projections for Geodesists, Cartographers and Geographers,* Elsevier Science Publishing, 1972.
6. Singh, Gopal: Map Work & Practical Geography, Surjeet Book Depot, Delhi, 1993.
7. Singh, L.R. And Singh, Raghunandan: Map Work & Practical Geography, Central Book Depot, Allahabad, 1993, Reprint.
8. Steers, J.A: *Map Projections*, University of London Press, London.
9. Singh, Malkit: Cartography (In Punjabi), Rasmeet Prakashan, Jallandhar, 2007.
10. Steers, J.A.: *Introduction to the study of map projections,* London, Univ. Pr., 1950.

B.A. (HONS.) SOCIAL SCIENCES
SEMESTER-VI
SUBJECT: GEOGRAPHY
PAPER: GEOGRAPHY OF INDIA
PAPER CODE: BSS -607

Total Course Credits - 03
Maximum Marks - 70 Pass Percentage - 40 %
Theory - 50 Marks Time Allowed: 3 hours
Internal Assessment – 20 Marks Total Teaching Periods: 60

INSTRUCTIONS FOR THE PAPER SETTER

1. The question paper will consist of three sections: A, B and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 8 marks each (Total 32 Marks). The students are required to attempt any two from each section. Section C will consist of 09 compulsory short answer type questions covering the entire syllabus uniformly. The student shall attempt 09 short questions in about 20-25 words. Each short answer type question carries 2 marks (Total 18 marks).
2. The paper setter should mention that the use of outlined stencil maps of world/continents/countries by the candidates is allowed.

INSTRUCTIONS FOR THE CANDIDATES

1. Candidates are required to attempt two questions from sections A and B and 9 short answer questions from section C.
2. Candidates are required to attempt two questions each from sections A and B of the question paper and 9 short answer type questions from section C.
3. Candidates are allowed to use outlined stencil maps of the world/continents/countries. They are also allowed to use simple calculators.
4. Credit will be given for suitable maps and diagrams.

DISTRIBUTION OF INTERNAL ASSESSMENT MARKS

1. 5 marks will be awarded on the basis of attendance in class.
2. 5 marks will be awarded for the submission of an assignment.
3. 10 marks will be awarded as per the performance of the student in written tests (MST). There will be two tests in each semester.

OBJECTIVES and LEARNING OUTCOMES:

1. To acquaint the students with the geography of our country.
2. To provide a comprehensive understanding of India’s Geographical dimensions: Political and physical.
3. To know about India’s human and economic resources base.
4. To prepare the students for competitive exams.

PEDAGOGY:

Teachers should use maps and other modern pedagogic tools, video shows, etc. Students should be encouraged to use the atlas in the classroom.

Unit- I

1. A brief introduction to India: India in the context of South Asia, Asia and the World.
2. Relief: The Northern Mountains, The Great Plains, The Deccan Plateau, The Coastal Plains, The Islands.
3. Drainage System: The Himalayan Rivers, The Peninsular Rivers, Inland Drainage System.
4. Climate: Factors affecting the Climate of India, Main Seasons of India.
5. Natural Vegetation in India: Types and distribution, Importance of forests for India.
6. Soils and Agriculture: Major types of Soils, Salient features of Indian agriculture, Major Crops (Rice, Wheat, Tea, Jute),
7. Agricultural Regionalisation; Agro-climatic zones, Green Revolution, Problems of Indian Agriculture.

Unit- II

8. Minerals and Power Resources: Distribution and production of Iron ore, Mica, Coal and Mineral Oil.
9. Population: Distribution, Density, Growth, Sex Ratio, Literacy.
10. Major Industries: Locational factors, distribution and problems faced by the Iron and steel industry, Cotton textile industry and Sugar industry, Special economic zones.
11. Transport System: Railways, Roads, Waterways, Ports and Airways.
12. Map Filling Exercise: Map covering the entire syllabus.

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. Field Work/Educational Tour.
5. PPT Presentation

Books Recommended:

1. Chopra S.N.: *India: An Area Study*, Vikas Publishing House, 1977.
2. Deshpande, C.D.: *India: A Regional Interpretation*, India Council of Social Science Research, New Delhi, 1992.
3. Hussain, Majid: *Geography of India*, Tata McGraw-Hill, Delhi, 2013.
4. Hussain, Majid: *Bharat Evam Vishwa ka Bhugol* | 9th Edition, McGraw-Hill, 2020.
5. Johnson, B.L.C.: *India: Resources and Development*, Arnold Heinemann, London, 1980.
6. Johnson, B.L.C.: *South Asia*, Heinemann, London, 1981.
7. Khullar, D.R.: *India: A comprehensive Geography*, Kalyani Publishers, New Delhi, 2013
8. Kant, Surya, Rajamanickam, C., Packer, Lester, Administrative geography of India,

9. Malkit Singh: *Geography of India*, Rasmeet Publication, Jallandhar. 2013.
10. Nag, P. Sengupta, S.: *Geography of India*, Concept Publishing Company 1992.
11. Singh, R.L (Ed.) : *India: A Regional Geography*, National Geographical Society of India, Varanasi, 1971.
12. Singh, Jagdish : *India: A Comprehensive Systematic Geography*, Gynodaya Prakashan, Gorakhpur, 1994.
13. Singh, Gopal: *A Geography of India*, Atma Ram and Sons, Delhi, 1995,
14. Sharma, T.C and Countinho, O.: *Economic and Commercial Geography of India*, Vikas, Delhi, 1991.
15. Spate, O.H.K. and Learmonth A.T.A: *India and Pakistan, land, People and Economy*, Meuthen London, latest Edition.
16. Tirtha, Ranjit and Gopal Krishan: *Emerging India*, Conpub Ann Arbour, Publishers, Michigan, 1992.
17. Tirtha, Ranjit: *Geography of India*, Rawat Publs., Jaipur & New Delhi, 2002.
18. Tiwari, R.C.: *Geography of India*, Pravalika Publications, Allahabad, 2013.
19. Team Prabhat: *Concise India & World Geography* (for competitive exams), Prabhat Prakashan, 2020.
20. Oxford School Atlas, 36th Edition, Oxford University Press, 2020.
21. Oxford Student Atlas for India, 4h Edition, Oxford University Press, 2022.

PAPER: PRACTICAL GEOGRAPHY: CARTOGRAPHY AND WEATHER MAPS
PAPER CODE: BSS -607 (P)

Total Course Credit: 01 Pass Percentage: 40 %
Max. Marks: 30 Time Allowed: 6 Hours
Total Teaching Periods: 40

Session-I (Morning) Theory

Total Marks: 12 Time Allowed: 3 hours

Three exercises should be given; out of these, candidates are required to attempt any two. Each exercise will carry six marks.

The Examiners will set the paper at the Centre on the spot.

Session-II (Evening) Viva-voce and Practical Record

Field Report -10 Marks
Viva-Voice - 08 Marks
Total Marks - 18

OBJECTIVES and LEARNING OUTCOMES:

- To prepare the students for carrying out fieldwork.
- To encourage the students for academic writing.
- To have a bird's eye view of Remote Sensing and GIS.

PEDAGOGY:

The students need to be trained to collect primary data, processing, and cartographic representation by taking up field exercises.

Unit- I

1. Brief Introduction to Remote Sensing and GIS: Definition and Meaning of Remote Sensing and GIS.
2. Field Work (Theory): Nature, Scope and Significance of Field Studies, Role of fieldwork in geography, Scale of study and fieldwork methodology, Data and its types, Methods of field study of: a farm, a village and a town.

Unit- II

3. Project Report based on a socio-economic survey (15-20 written pages): The field report will be based on primary and secondary data on problems such as:
   a) Local Market Survey
   b) The service area of School/College/Hospital
   c) Traffic flow
   d) Socio-economic characteristics of students of Village/ Mohalla
   e) Land use
   f) Environment study.
   g) Covid-19 related study.

Books Recommended:

1. Archer, J.E. & Dalton, T.H.: *Fieldwork In Geography*, E.T. Bastford Ltd., London, 1968.
2. Bhatta, Basudeb: *Remote Sensing And GIS*, Oxford, 2nd Edition, New Delhi, 2011.
3. Clifford, Nicholas, *Key methods in geography,* London, Sage, 2010.
4. Guha, P.K.: *Remote Sensing For The Beginner,* East-West Press, 3rd Edition, New Delhi, 2013.
5. Hudson, F. S.: *A Geography of Settlements*, Macdonald, London, 1970.
6. Jones, P.A.: *Fieldwork in Geography*, Longman, London, 1968.
7. Khullar D.R.: *Practical Geography* (in Hindi and English), Kalyani Publishers, 2015.
8. Singh, Gopal: *Map Work & Practical Geography*, Surjeet Book Depot, Delhi, 1993.
9. Singh, L.R. And Singh, Raghunandan: *Map Work & Practical Geography,* Central Book Depot, Allahabad, 1993, Reprint.
10. Steers, J.A: *Map Projections*, University of London Press, London.
11. Singh, Malkit: *Cartography (In Punjabi)*, Rasmeet Prakashan, Jallandhar, 2007.