

SYLLABUS
FOR
B.A. Semester I-VI

Subject: Geography
Session: 2021-22



KHALSA COLLEGE AMRITSAR
(AN AUTONOMOUS COLLEGE)

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(ii) Subject to change in the syllabi at any time.

PROGRAMME SPECIFIC OUTCOMES:

PSO-1. To explore the fundamental concepts of the Atmosphere, Oceans and Earth's surface.

PSO-2. To familiarize the students with the basic map making and reading techniques.

PSO-3. To make them understand aspects of regional development and planning.

PSO-4. To give the students general view and importance of man and environment relationship.

PSO-5. To make the students aware about the physiographic divisions and economic resources of India.

PSO-6. To reinforce the theoretical knowledge of the students of what, where and why in geography through field survey.

PSO-7. To motivate students to understand the disaster risk and to take actions appropriately against such risk with their own will

(Session-2021-22)
SEMESTER-I
GEOGRAPHY
PHYSICAL GEOGRAPHY-I
GEOMORPHOLOGY
(Theory)

Time: 3 Hours

Credit hours (per week): 4
Total hours: 60
Max. Marks: 100
Theory Marks: 45
Practical Marks: 30
Internal Assessment: 25

Instructions for the Paper Setters:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt any 5 questions in about 20–30 words each.
Each question will carry 1marks (Total 5 marks).
2. The whole syllabus will be divided into 4 units. Eight questions will be set out of the whole syllabus, 2 from each unit. The students will be required to attempt one question from each unit. Each question carrying 10 marks. These will be in addition to the compulsory question at serial number 1 (Total 40 marks).
3. Special credit will be given to suitable use of maps and diagrams.

Course objectives:

To understand the process that shape landforms around us. To apply geomorphological concepts to problems of slope instability and try to identify the factors responsible for landslides occurrence in various environment.

UNIT-I

Definition: Geography, geomorphology, climatology, oceanography

Theories of the Origin of the Earth: Kant, Laplace and Jeans & Jeffreys

Major Landforms: Mountains, plateaus and plains in the world

UNIT-II

Movements of earth: Folding and faulting

Continental drift theory: with special reference to Wegener's theory and Plate Tectonics.

UNIT-III

Rocks: Their origin, classification and characteristics.

Earthquake and volcanoes: Causes, effects, types and Distributions.

UNIT-IV

Geomorphological landscapes: Fluvial, Glacial, Aeolian, coastal.

Books recommended

1. Chawla, I.N.: Bhautik Bhugol (in Punjabi), Bharat Prakashan, Jalandhar.
2. Dayal, P.: A Text Book of Geomorphology, Rajesh Publications New Delhi, 2007.
3. Dury, G.H.: The Face of the Earth Penguin, Middlesex, England, 1977.
4. Gass, I.G.: Understanding the Earth, The Artemrs Press, Sussex, 1973.
5. Holmes Arthur: Principles of Physical Geology, Thomas Nelson & Sons, Ltd., New York, Latest Edition, 1993.
6. Kale, V. and Gupta A.: Elements of Geomorphology, OxfordUniversity Press, Calcutta, 2001.
7. Kaur Dhian: The Earth, Edited by R.C. Chandna, KalyaniPublishers, Ludhiana, Delhi, 2000.
8. Nizamuddin: An Introduction to Physical Geography, Concept, New Delhi, 2002.
9. Mamoria, C.P. and Niati, J.L.: Bhautik Bhugol Ke Tatwa (in HindiAgra, 1976.
10. Monkhouse, F.J.: Principles of PhysicalGeography, Orient Longman, New Delhi, LatestEdition, 1975.
11. R.N. Tikha: Physical Geography, New Academic Publishing Co., Jalandhar.
12. Singh, Pritam &Bhatia S., Bhautik Bhugol De Adhaar, PunjabiUniversityPublication, Patiala.
13. Singh, Savinder: Physical Geography, Pravalika Publications, Allahabad, 2015.
14. Sparks, B.W.: Geomorphology, Longman, London, 1986.
15. Strahler, A.N. & Strahler A.H.: Modern Physical Geography, John Wiley, New York, 1992.
16. Thornbury, W.D.: Principles ofGeomorphology, Second Edition, Wiley Eastern Ltd., New Delhi, 1993.
17. Singh Malkiat:Principles of Physical Geography, Rasmeet Parkashan, Jalandhar, 2005, Reprint 2015.

Course outcomes:	
Sr. No.	On completing the course, the students will be able to:
CO-1	Understand the landforms in systematic way.
CO-2	Gain knowledge on the influence of various types of rocks on the development andevolution of the landforms.
CO-3	Study landforms and the related processes from the traditional concept to thecontemporary development in geography.

(Session - 2021-22)
SEMESTER – I
GEOGRAPHY
CARTOGRAPHY-1
(PRACTICAL)

Time: 3 Hours

Credit hours (per week): 1.3
Total hours: 20
Max. Marks: 30
Written Paper: 15 Marks
Practical Record (File): 08 Marks
Viva: 07 Marks

COURSE OBJECTIVES

Geography is amalgam of physical as well as social sciences and such as it is necessary for the students to go through laboratory exercises. The concept of scale is to be understood in the initial stage and also different methods of representing relief.

UNIT-I

Maps and Scale: History of Cartography and types of maps, Scales: types of scales, methods of construction of graphic scales—plain scales, diagonal scales and comparative scales— different units, time scales.

UNIT-II

Representation of Relief:

Spot heights, trigonometrically stations, Bench Marks, from Lines, Contours, Hachures, Hill– shading and Layer tints.

Note:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt 6 short answer type questions in about 25–30 words each. Each short answer type question will carry ½ marks (**Total 3 marks**).
2. The whole syllabus will be divided into 2 units. Eight questions will be set out of the whole syllabus, four from each unit. The students will be required to attempt two questions from each unit. Each question will carry 3 marks. These will be in addition to the compulsory question at serial number 1 (**Total 12 marks**)
3. Evaluation of Practical record will be done at the time of viva–voce examination. A minimum of 12 sheets are to be prepared by the students in each semester.
4. In case the candidate has applied for the improvement, he/she should be required to make a fresh practical note book.
5. For practical classes, the number of students in one group shall not exceed fifteen.

Recommended Books:-

1. Khullar, D.R.: Essentials of Practical Geography, New Academic Publishing Co., Mai Hiran Gate, Jalandhar, 2016.
2. Singh, Gopal: Mapwork and Practical Geography, Vikas Publishing House, Pvt. Ltd., New Delhi, 1995.
3. Singh L.R. & Singh, Raghunandan: Mapwork and Practical Geography, Central Book Depot, Allahabad, 1993.
4. Phyllis Dink: Mapwork, Atma Ram & Sons, 1991.

Further Readings:-

1. Mishra, R.P. & Ramesh, A.: Fundamental of Cartography, Concept Publishing Co., New Delhi, 1989.
2. Monkhouse, F.J. & Wilkinson, H.R.: Maps and Diagrams, Methuen & Co., London, Third Edition, 1976.
3. Robinson, A.H. & Randall, D. Sale: Elements of Cartography, John Wiley & Sons, New York, (Sixth Edition), 1995.

Course outcomes:	
Sr. No.	On completing the course, the students will be able to:
CO-1	Development the skills of map making and its importance
CO-2	Development of observation skills.
CO-3	Recognize basic themes of map making

(Session - 2021-22)
SEMESTER-II
GEOGRAPHY
PHYSICAL GEOGRAPHY-II
CLIMATOLOGY&OCEANOGRAPHY
(Theory)

Time: 3 Hours

Credit hours (per week): 4
Total hours: 60
Max. Marks: 100
Theory Marks: 45
Practical Marks: 30
Internal Assessment: 25

Instructions for the Paper Setters:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt any 5 questions in about 20–30 words each. Each question will carry 1marks (**Total 5 marks**).

2. The whole syllabus will be divided into 4 units. Eight questions will be set out of the whole syllabus, 2 from each unit. The students will be required to attempt one question from each unit. Each question carrying 10 marks. These will be in addition to the compulsory question at serial number 1 (**Total 40 marks**).

3. Special credit will be given to suitable use of maps and diagrams.

COURSE OBJECTIVES:

The main objective of climatology to study the unique characteristics of atmosphere in controlling the global climate, origin, types of climate, causes and processes influencing the climatic variations and elements of weather.

UNIT-I

Climatology: Definition of Climate and Weather and its element and controls.

Physical structure of the atmosphere and attributes of different layers.

Chemical composition of the atmosphere: Dust particles, vapor, particles, active gases, inert gases.

Insolation and Temperature: Factors affecting insolation, factors affecting temperature of a place. Vertical and horizontal distribution of temperature.

UNIT-II

Atmospheric Pressure belts and Planetary winds characteristics.

Atmospheric Moisture: Precipitation forms and types of rainfall. consequences and measures of control.

UNIT–III

Oceanography: Definition of oceanography

Topography of the ocean basins; continental shelf, continental slope, deep sea plain and oceanic deep. **Features:** Trench, trough, oceanic ridge, guyots, seamount

Salinity of ocean water.

UNIT–IV

Movements of Oceanic Waters:

Surface currents of the oceans: Pacific, Atlantic, Indian

Recommended Books:-

1. Bhutani, Smita: Our Atmosphere, Edited by R.C. Chandna, Kalyani Publishers, Ludhiana, Delhi, 2002.
2. Critchfield, H.J.: General Climatology, Prentice Hall of India, Private Ltd., New Delhi, 1983.
3. Gross, Grant, M.: Oceanography: A View of the Earth, Prentice Hall, New Jersey, 1995.
4. Lal, D.S.: Climatology, Sharda Pustak Bhawan, Allahabad, 2011.
5. Mathew, J.R.: Climatology, McGraw Hill, New Latest Edition.
6. Monkhouse, F.J.: The Principles of Physical Geography, University of London Press, London Latest Edition, 1975.
7. Pattersen, S.: Introduction to Meteorology, McGraw Hill Book Co., London, Latest Edition.
8. Stringer, E.T.: Foundations of Climatology. Subject Publications, Delhi, 1982.
9. Trewartha, G.T.: An Introduction to Climate, McGraw Hill Book Co., New Delhi, International Student Edition, 1980.
10. Khan, N.: An Introduction to Physical Geography. Concept New Delhi, 2002.
11. King, C.A.M.: Beaches and Coasts, E. Arnold, London, 1959.
12. King, C.A.M.: Oceanography, E. Arnold, London, Latest Edition.
13. Sharma, R.C. & M. Vatel: Oceanography for Geographers, Chetyna, Allahabad 1970.
14. Shepar, F.P. : Submarine Geology, Harper & Sons, New York, 1948.
15. Sverdrup, H.U. et.al. : The Oceans. Prentice Hall, New Jersey, U.S.A. 1959.
16. Singh, Savinder: Physical Geography, Pravalika Publications, Allahabad, 2015.

Course outcomes	
Sr. No.	On completing the course, the students will be able to:
CO-1	Greater understanding of the nature scope of climatology.
CO-2	Acquire clear concepts of climatology.
CO-3	3 Interaction between the earth s atmosphere and the earth s surface and how atmospheric moisture works.
CO-4	4 Ability to analyze physical and chemical properties of sea water, bottom relief and distribution of oceanic resources.

(Session - 2021-22)
SEMESTER – II
GEOGRAPHY
CARTOGRAPHY–II
(PRACTICAL)

Time: 3 Hours

Credit hours (per week): 1.3
Total hours: 20
Max. Marks: 30
Written Paper: 15 Marks
Practical Record (File): 08 Marks
Viva: 07 Marks

COURSE OBJECTIVES:

Particularly to show directions and bearing and different methods of representing relief knowledge of directions and bearings is essential and an introduction to weather maps is also required.

UNIT-I

Bearing, Enlargement and reduction:

Direction and bearing: Plotting of a course, true north, magnetic north, finding true north with the pole star, watch method and a rod method and its conversion.

Enlargement and Reduction: Graphic method- Square and triangle

UNIT–II

Weather Maps:

General Introduction to the study of weather maps, the scheme of weather symbols including Beaufort's scale employed in Indian daily weather maps; weather in India: summer season (period of summer monsoon), winter season, forecasting of weather through the study of weather maps and recent advances in weather forecasting.

Note:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt 6 short answer type questions in about 25–30 words each. Each short answer type question will carry ½ mark (**Total 3 marks**).
2. The whole syllabus will be divided into 2 units. Eight questions will be set out of the whole syllabus, four from each unit. The students will be required to attempt two questions from each unit. Each question will carry 3 marks. These will be in addition to the compulsory question at serial number one. (**Total 12 marks**)
3. Evaluation of Practical record will be done at the time of viva–voce examination. A minimum of 12 sheets are to be prepared by the students in each semester.
4. In case the candidate has applied for the improvement, he/she should be required to make a fresh practical note book.

Recommended Books:-

1. Khullar, D.R.: Essentials of Practical Geography, New Academic Publishing Co., Mai Hiran Gate, Jalandhar, 2016.
2. Singh, Gopal: Mapwork and Practical Geography, Vikas Publishing House, Pvt. Ltd., New Delhi, 1995.
3. Singh L.R. & Singh, Raghunandan: Mapwork and Practical Geography, Central Book Depot, Allahabad, 1993.
4. Phyllis Dink: Mapwork, Atma Ram & Sons, 1991.

Further Readings:-

1. Mishra, R.P. & Ramesh, A.: Fundamental of Cartography, Concept Publishing Co., New Delhi, 1989.
2. Monkhouse, F.J. & Wilkinson, H.R.: Maps and Diagrams, Methuen & Co., London, Third Edition, 1976.
3. Robinson, A.H. & Randall, D. Sale: Elements of Cartography, John Wiley & Sons, New York, (Sixth Edition), 1995.

COURSE OUTCOMES	
S.NO.	On completing the course, the students will be able to:
CO-1	Understand the symbols of weather maps.
CO-2	Understand the conventional symbols.
CO-3	Students will gain in depth knowledge of all directions

(Session - 2021-22)

SEMESTER-III

GEOGRAPHY

Resources and environment: World patterns

(Theory)

Time: 3 Hours

Credit hours (per week):04

Total hours: 60

Max. Marks: 100

Theory Marks: 45

Practical Marks: 30

Internal Assessment: 25

Instructions for the Paper Setters:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt any 5 questions in about 20–30 words each. Each question will carry 1marks (**Total 5 marks**).
2. The whole syllabus will be divided into 4 units. Eight questions will be set out of the whole syllabus, 2 from each unit. The students will be required to attempt one question from each unit. Each question carrying 10 marks. These will be in addition to the compulsory question at serial number 1 (**Total 40 marks**).
3. Special credit will be given to suitable use of maps and diagrams.

COURSE OBJECTIVES:

Students will learn concept of resources and their interface with environment. To examine use and misuse of various resources and analyze future prospectus. To understand the quantitative and qualitative aspects of human resources in spatial perspective and the associated environmental problems.

Course Contents:

UNIT - I

Environment and Resources:

Biotic abiotic, Exhaustible and inexhaustible, Potential and Developed Agricultural and Pastoral, Mineral and Industrial.

Distribution availability, utilization and conservation of water and Energy resources: Coal, Petroleum, natural Gas

UNIT - II

Types and distribution of forests—their economic and environmental significance and Conservation.

Types and distribution of fisheries—their economic and environmental significance and Conservation.

Major soil types and their distribution; problems of soil erosion and soil conservation.

UNIT-III

Human Resources: Marx theory. Population growth

UNIT-IV

Environmental Issues: Air Pollution; food security; deforestation; conservation of wild life.

Books recommended

1. Agarwal, A. et.al: The Citizen's Fifth Report, Centre for Science and Environment, NewDelhi, 1999.
2. Chandna, R.C.: A Geography of Population, Kalyani Publishers, Ludhiana, 2014.
3. Chawla, I.N.: Geography of Resources, Bharat Prakashan, Jalandhar, latest edition.
4. Hartshorne Truman A and W. Alexander: Economic Geography, Prentice Hall, 1988, 3rd John Edition.
5. Kates, R.W. & Burton, I (Eds.): Geography, Resources and Environment, Vol. I & II, University of Chicago Press, Chicago, 1986.
6. Naresh Kumar: Environmental Studies, Sharma Publishers, Jalandhar 2009.
7. Trewartha, G.T.: A Geography of Ppopulation— World Patterns. John Wiley and Sons, New York, 1969.
8. Zelinsky, Wilbur: A Prologue to Population Geography, Prentice Hall, New Jersey, 1966.
9. Zimmerman E.W.: World Resources and Industries, Harpar, New York.
10. Chandna, R.C.: Environmental Geography Kalyani Publishers, Ludhiana, 2014.
11. Chawla. I.N.,: Resources & Environmental Bharat Publishers, Jalandhar.
12. Singh, J.S. & Singh, S.P. & Gupta S.R. (Eds.): Ecology Environment andResources Conservation, Anamaya Publishers, New Delhi, 20

COURSE OUTCOMES

COURSE OUTCOMES	
Sr.No.	On completing the course, the students will be able to:
CO-1	Understand the importance of resources and environment.
CO-2	Understand how man induced changes in environment.
CO-3	Understand how to conservation and management of environment and resources

(Session - 2021-22)
SEMESTER – III
GEOGRAPHY
CARTOGRAPHY
PRACTICAL

Time: 3 Hours

Credit hours (per week): 1.3 Total hours: 20

Max. Marks: 30

Written Paper: 15 Marks

Practical Record (File): 08 Marks

Viva: 07 Marks

COURSE OBJECTIVES:

Students will come to know the uses of graphs and its types. To apprise the students with symbolization of different types of geographical data and depiction of various spatial data.

Course Contents:

UNIT—I

Symbolization of Geographical Data:

- a) **Point Symbols: Dot**, circle, sphere.
- b) **Line Symbols: Isopleths** and flow lines.
- c) **Areas Symbols: Choropleth.**

UNIT—II

Construction and Significance of the following:

- a) Columnar diagrams: Simple, superimposed, composite.
- b) Graphs: Line graphs, climograph, hythergraph, erograph, wind rose.

Note:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt 6 short answer type questions in about 25–30 words each. Each short answer type question will carry ½ mark (**Total 3 marks**).
2. The whole syllabus will be divided into 2 units. Eight questions will be set out of the whole syllabus, four from each unit. The students will be required to attempt two questions from each unit. Each question will carry 3 marks. These will be in addition to the compulsory question at serial number 1. (**Total 12 marks**).
3. Evaluation of Practical Record will be done at the time of viva-voice examination.
4. A minimum of 16 sheet are to be prepared by each student.
5. In case, the candidate has applied for improvement, he/she should be required to make a fresh practical note book.
6. For practical classes, the number of students in one group shall not exceed fifteen.

Recommended Books:-

1. Khullar, D.R.: Essentials of Practical Geography, New Academic Publishing Co., Mai Hiran Gate, Jalandhar, 2016.
2. Singh, Gopal: Mapwork and Practical Geography, Vikas Publishing House, Pvt. Ltd., New Delhi, 1995.
3. Singh L.R. & Singh, Raghunandan: Mapwork and Practical Geography, Central Book Depot, Allahabad, 1993.
4. Phyllis Dink: Mapwork, Atma Ram & Sons, 1991.

Further readings

1. Mishra, R.P. & Ramesh, A.: Fundamental of Cartography, Concept Publishing Co., New Delhi, 1989.
2. Monkhouse, F.J. & Wilkinson, H.R.: Maps and Diagrams, Methuen & Co., London, Third Edition, 1976.
3. Robinson, A.H. & Randall, D. Sale: Elements of Cartography, John Wiley & Sons, New York, (Sixth Edition), 1995.

Course outcomes	
Sr. No.	On completing the course, the students will be able to:
CO-1	Understand skill of drawing maps.
CO-2	Learning the interpretation of topographic maps.
CO-3	Understand the cartographic symbols

(Session-2021-22)

SEMESTER-IV

GEOGRAPHY OF PUNJAB

(Theory)

Time: 3 Hours

Credit hours (per week): 04

Total hours: 60

Max. Marks: 100

Theory Marks: 45

Practical Marks: 30

Internal Assessment: 25

Instructions for the Paper Setters:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt any 5 questions in about 20–30 words each. Each question will carry 1marks (**Total 5 marks**).
2. The whole syllabus will be divided into 4 units. Eight questions will be set out of the whole syllabus, 2 from each unit. The students will be required to attempt one question from each unit. Each question carrying 10 marks. These will be in addition to the compulsory question at serial number 1 (**Total 40 marks**).
3. Special credit will be given to suitable use of maps and diagrams.

COURSE OBJECTIVES:

1. To understand the regional setting of Punjab state in detail through physical and political maps.
2. To examine the pattern of select population characteristics.
3. To study the distribution of major crops, industries and transport links.
4. To understand the intraregional variations in the select aspects.

UNIT—I

Location, evolution of the state, administrative divisions. Relief, drainage, climate, soils, vegetation, mineral and power resources.

UNIT—II

Population: Numbers, distribution, density, growth (birth rate, death rate and migration), religious composition, urbanization.

Agriculture: Main characteristics including green revolution, irrigation, main crops (wheat, rice, cotton, sugarcane) and their distribution, livestock and dairying, problems of agriculture.

UNIT—III

Industries: Main characteristics, distribution pattern of major industries (cotton textile, sugar, hosiery, engineering, problems of industrialization.

Transport and Trade: Road, rail and their transport

UNIT—IV

Regional Geography of Majha, Doaba, Malwa and major characteristics of each region.

Books Recommended:

1. Mankoo, Darshan S.: Geography of Punjab, Kalyani Publication, Ludhiana, 2009.
2. Mavi, H.S. & Tiwana, D.S.: Geography of Punjab, National Book Trust, Delhi, 1993.
3. Singh, Malkit: Geography of Punjab, Reshmeet. Publications, Jalandhar, 2010.

Further Readings:

1. Census of India: Punjab: Census Atlas, Vol. XIII, No. IX, 1996.
2. Deshpande, C.D.: India: A Regional Interpretation, Northern Book Centre, New Delhi, 1992.
3. Gosal G.S. & Gopal Krishan: Regional Disparities in Levels of Socio-Economic Development in Punjab, Vishal Publications, Kurukshetra, 1984.
4. Gupta, S.P.: The Punjab: An Overview, Ess Pee Publications, Chandigarh, 2005.
5. Singh, Pritam: Punjab Economy: The Emerging Pattern, Enkay Publishers, New Delhi, 1995.
6. Singh, R.L., (Ed.): India: A Regional Geography, National Geographical Society of India, 1990, reprint.
7. Spate O.H.K. & Learmonth, A.T.A.: India and Pakistan: A General and Regional Geography. Methuen, London, Latest Edition.

Course outcomes	
Sr. No.	On completing the course, the students will be able to:
CO-1	Understand the geographical background and natural resources.
CO-2	Understand the irrigation and agricultural development in Punjab.
CO-3	Evaluate the transportation and population distribution in Punjab.

(Session- 2021-22)

SEMESTER-IV

GEOGRAPHY

CARTOGRAPHY

PRACTICAL

Time: 3 Hours

Credit hours (per week): 1.3

Total hours:20 Total marks: 30

Written paper: 15 Practical record File: 08

Viva: 07

COURSE OBJECTIVES:

To apprise the students with symbolization of different types of geographical data depiction of various spatial data. To provide training in application of various geographical methods of depicting geographical data. To train the students to interpret the topographical sheets at different scales course content.

UNIT—I

- a) Cartographic Representation of Population data (distribution, density, growth, migration and literacy)
- b) Agriculture data (land utilization, distribution of crops, percentage of cropped area and irrigated areas).
- c) Industrial data (distribution, employment and production)
- d) Transport data (traffic flow).

UNIT—II

Topographical Maps: Significance of topographical maps in geographical studies. Study and Interpretation of topographical Maps of India (two sheets: one representing a hilly/mountainous tract and the other a plain tract).

Basic Introduction to Remote Sensing and GIS (Geographical Information System).

Note:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt 6 short answer type questions in about 25–30 words each. Each short answer type question will carry ½ Mark (**Total 3 marks**).
2. The whole syllabus will be divided into 2 units. Eight questions will be set out of the whole syllabus, four from each unit. The students will be required to attempt two questions from each unit. Each question will carry 3 marks. These will be in addition to the compulsory question at serial number 1. (**Total 12 marks**)

Recommended Books:-

1. Khullar, D.R.: Essentials of Practical Geography, NewAcademic Publishing Co., Mai Hiran Gate, Jalandhar, 2016.
2. Singh, Gopal: Mapwork and Practical Geography, Vikas Publishing House, Pvt. Ltd., New Delhi, 1995.

3. Singh L.R. & Singh, Raghunandan: Mapwork and Practical Geography, Central Book Depot, Allahabad, 1993.
4. Phyllis Dink: Mapwork, Atma Ram & Sons, 1991.

Further Readings:-

1. Mishra, R.P. & Ramesh, A.: Fundamental of Cartography, Concept Publishing Co., New Delhi, 1989.
2. Monkhouse, F.J. & Wilkinson, H.R.: Maps and Diagrams, Methuen & Co., London, Third Edition, 1976.
3. Robinson, A.H. & Randall, D. Sale: Elements of Cartography, John Wiley & Sons, New York, (Sixth Edition), 1995.

Course outcomes	
Sr. No.	On completing the course, the students will be able to:
CO-1	Understand the skill of drawing maps.
CO-2	Learning the interpretation of topographical maps.
CO-3	Understand the cartographic symbols.
CO-4	Introduce about Remote sensing and GIS

(Session -2021-22)
SEMESTER – V
GEOGRAPHY
World Geography
(Theory)

Time: 3 Hours

Credit hours (per week):04
Total hours: 60
Max. Marks: 100
Theory Marks: 45
Practical Marks: 30
Internal Assessment: 25

Instructions for the Paper Setters:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt any 5 questions in about 20–30 words each. Each question will carry 1 mark (**Total 5 marks**).
2. The whole syllabus will be divided into 4 units. Eight questions will be set out of the whole syllabus, 2 from each unit. The students will be required to attempt one question from each unit. Each question carrying 10 marks. These will be in addition to the compulsory question at Serial Number 1 (**Total 40 marks**).
3. Special credit will be given to suitable use of maps and diagrams.

COURSE OBJECTIVES:

Students will understand global and regional pattern of cultural, political and economic institutions. To know salient problem and prospect of developing and developed countries. To understand the human resources development and its distribution.

Course Contents:

Study of the following regions of the World in terms of the aspects mentioned in each unit.

UNIT-I

ANGLO AMERICA

Location, physiographic divisions, Drainage and climate. Natural Vegetation. Agricultural crops, Demographic characteristics

UNIT-II

AUSTRALIA

Location, physiographic divisions, Drainage and climate. Natural Vegetation. Agricultural crops, Demographic characteristics.

UNIT-III

AFRICA SOUTH OF SAHARA

Location, physiographic divisions, Drainage and climate. Natural Vegetation. Agricultural crops, Demographic characteristics.

UNIT-IV

EUROPE

Location, physiographic divisions, Drainage and climate. Natural Vegetation. Agricultural crops, Demographic characteristics.

Books Recommended:

1. Blij, Harm J.de Peter, O. Muller: Geography: Regions and Concepts, John Wiley, New York, 1993.
2. English, Paul Ward & James, A. Miller: World Regional Geography: A Question of Place, John Wiley, New York, 1989.
3. Jackson, Richard H. & Lloyd E. Hudman: World Regional Geography Issues for Today, John Wiley, New York, 1991.
4. Kromm, D.E.: World Regional Geography, Saunders Publishing, New York, 1980.

Further Readings:

1. Don R. Hoy (Ed.): Essentials of Geography and Development, Macmillan, New York, 1980.
2. Mankoo, Darshan Singh: A Regional Geography of the World, KalyaniPublishers, Ludhiana.
3. Singh, Malkiat : World Regional Geography, Rasmeet Prakashan, Jalandhar, (Pb.)
4. Trikha, R.N. and Bali P.K. and Sekhon, M.S.: World Regional Geography, New Academic Publishers, 2002.

Course outcomes:	
Sr.No.	On completing the course, the students will be able to:
CO-1	Understand the location, physiography, drainage and vegetation of the world.
CO-2	Understand the human resources development and distribution.
CO-3	Evaluation the natural resources and industries and its importance.

(Session - 2021-22)
SEMESTER – V
GEOGRAPHY
MAP PROJECTIONS
PRACTICAL

Time: 3 Hours

Credit hours (per week): 1.3
Total hours: 20
Max. Marks: 30
Written Paper: 15 Marks
Practical Record (File): 08 Marks
Viva:07 marks

Instructions:

1. There will be total four questions (two questions each from Unit-I and Unit-II).
2. The students are required to attempt one question each from both the units.
3. All Questions carry eight marks.

COURSE OBJECTIVES:

Students will develop the skill to draw latitudes and longitudes Compute to draw different projections. To gain knowledge about shape and size of the earth.

UNIT-I

General introduction and classification of projections, constructions, properties, limitations and use of projections, Construction, properties and limitations of following map projections: Cylindrical: Equal- Area and Mercator's.

UNIT-II

Construction, properties and limitations of following map projections:

Conical: One Standard conic, Two standard conic, Bonne`s, Polyconic

Note:

A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt 6 short answer type questions in about 25–30 words each. Each short answer type question will carry ½ mark (**Total 3 marks**).

1. The whole syllabus will be divided into 2 units. Eight questions will be set out of the whole syllabus, four from each unit. The students will be required to attempt two questions from each unit. Each question will carry 3 marks. These will be in addition to the compulsory question at serial number one. (**Total 12 marks**)
2. Evaluation of Practical record will be done at the time of viva–voce examination. A
3. minimum of 12 sheets are to be prepared by the students in each semester.
4. In case the candidate has applied for the improvement, he/she should be required to make a fresh practical note book.

Books Recommended:

1. Kellaway, George P.: Map Projections, Methue and Co., London.
2. Singh, Gopal: Mapwork and Practical Geography, Surjeet Book Depot, Delhi, 1993.
3. Singh, Malkiat: Cartography, Rasmeet Prakashan, Jalandhar, 2006.
4. Singh, L.R: Practical Geography, Chaitanya, Publishing House, Allahabad, 2006.

Course outcomes	
Sr. No.	On completing the course, the students will be able to:
CO-1	Development of the skill to draw projections.
CO-2	Understand the shape and size of the earth.
CO-3	Understand the concept of longitude and latitudes

(Session - 2021-22)
SEMESTER – VI
GEOGRAPHY
GEOGRAPHY OF INDIA
THEORY

Time: 3 Hours

Credit hours (per week): 4
Total hours: 60
Max. Marks: 100
Theory Marks: 45
Practical Marks: 30
Internal Assessment: 25

Instructions for the Paper Setters:

1. A compulsory question containing 10 short answer type questions will be set covering the whole syllabus. The students will attempt any 5 questions in about 20–30 words each. Each question will carry 1 mark (**Total 5 marks**).
2. The whole syllabus will be divided into 4 units. Eight questions will be set out of the whole syllabus, 2 from each unit. The students will be required to attempt one question from each unit. Each question carrying 10 marks. These will be in addition to the compulsory question at Serial Number 1 (**Total 40 marks**).
3. Special credit will be given to suitable use of maps and diagrams

COURSE OBJECTIVES:

To understand the regional setting of India in detail through physical and political maps. To examine the pattern of select population characteristics. To study the distribution of major crops, industries and transport links. To understand the intraregional variations in the select aspects.

UNIT-I

Relief, drainage, climate, vegetation, Soils.

UNIT-II

Mineral Resources: Iron-ore, copper, gold; and power resources.

Population: Numbers, distribution and density, growth, migration, urbanization.

UNIT-III

Agriculture-Characteristics of Indian agriculture; major crops (rice, wheat, sugarcane, cotton, jute, tea,) Irrigation, problems of Indian agriculture.

UNIT-IV

Industries-Distribution and localization factors of major industries (iron and steel, cotton textiles, fertilizers)

Transport: Rail, Road, airways and waterways.

Books Recommended:

1. Deshpande, C.D.: India: A Regional Interpretation, Northern Book, Centre, New Delhi.
2. Johnson, B.L.C.: South Asia, Heinemann, London, 1981.
3. Spate, O.H.K. & Learmonth, A.T.A.: India and Pakistan: A General and Regional Geography, Methuen, London, 1967.
4. Tirtha, Ranjit & Krishan, Gopal: Emerging India: A Geographical Introduction, Conoub, Ann Arber, Michigan (U.S.A.) 1992.
5. Malkiat Singh: Geography of India, Rasmeet Prakashan, Jalandhar.
6. D.S. Mankoo: Geography of India, Kalyani Publishers, Jalandhar.

Course outcomes	
Sr. No.	On completing the course, the students will be able to:
CO-1	Understand the geographical background and natural resources.
CO-2	Understand the irrigation and agricultural development in India.
CO-3	Evaluate the transportation and population distribution in India.

(Session - 2021-22)
SEMESTER – VI
GEOGRAPHY
FIELD WORK
PRACTICAL

Time: 3 Hours

Credit hours (per week): 1.3

Total hours: 20

Written Paper: 15 Marks

Practical Record (File): 08 Marks

Viva: 07 Marks

Instructions for the Paper Setters:

1. There will be total four questions (two questions each from Unit–I and Unit–II).
2. The students are required to attempt one question each from both the units.
3. All Questions carry ten marks each.

COURSE OBJECTIVES:

To provide an analytical understanding of use of common map projections. To sensitize the students about pre field work and post field work (data processing and analysis and writing of field work report)

UNIT-I

Construction, Properties and Limitations of following Map Projections: Zenithal: Gnomonic, Stereographic, Orthographic, Equi- Distant and Equal-Area (Polar cases only) Introduction to Sinusoidal and Mollweide's projections.

UNIT-II

Role of field work in geography.

Scale of study and field work methodology.

Methods of collecting Primary data (questionnaire, observation, interview and measurement) and Secondary data and parts of report.

Methods of field study of: a Farm, a Village, a Town and Physical Features of an area.

Books Recommended:

1. Jones, P.A.: Field Work in Geography, Longman, London, 1968.
2. Archer, J.E. & Dalton T.H.: Field Work in Geography, E.T. Bastford Ltd., London, 1968.
3. Singh, Gopal: Map work and Practical Geography, Surjeet Book Depot, Delhi, 1993.

Course outcomes	
Sr. No.	On completing the course, the students will be able to:
CO-1	Acquire knowledge and clear concepts of the different types of map projections.
CO-2	Physical land surveys enable the students acquire a greater understanding of the socio economic and cultural dimensions of the population.
CO-3	Application of knowledge in the reality.