Annexure - I

Study & Evaluation Scheme

of

Bachelor of Arts
(Geography)

[w.e.f Session 2020-21]

आईएफटीएम विश्वविद्यालय, मुरादाबाद, उत्तर प्रदेश

IFTM University, Moradabad, Uttar Pradesh

NAAC ACCREDITED

IFTM UNIVERSITY

N.H.-24, Lodhipur Rajput, Delhi Road, Moradabad, Uttar Pradesh-244102
E-mail Id: info@iftmuniversity.ac.in
website: www.iftmuniversity.ac.in

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Study & Evaluation Scheme Of

Bachelor of Arts (Geography)

[w.e.f Session 2020-21]

Summary

Programme:	**Bachelor of Arts (Geography)**
Course Level:	UG Degree
Duration:	Three years **(Six semesters)** Full Time
Medium of Instruction:	Hindi / English
Minimum Required Attendance:	75%

Evaluation of theory Papers:

Internal	External	Total
30	70	100

Internal Evaluation of theory:

Class Test I	Class Test II	Class Test III	Assignment(s) Based on Practical	Attendance	Total
Best two out of the three					
10	10	10	5	5	30

Evaluation of Practical:

Paper Code	Practical	Evaluation Scheme		Total
		Internal	External	
BAG151	Practical	---	20	20
BAG251	Practical	---	20	20
BAG351	Practical	---	20	20
BAG451	Practical	---	20	20
BAG551	Practical	---	20	20
BAG651	Practical	---	20	20

Duration of Examination:

Internal	External	Practical
1 hrs	3 hrs	2hrs

Programme Objectives (POs):

The 'Bachelor of Arts in Geography' programme offered by the department, aims at empowering students with knowledge and skills for spatial thinking and analysis, to navigate real world problems, and contribute to society in a meaningful way.

Programme Outcomes (POs):

At the end of the three-year (six-semester) course, students will have comprehensive knowledge about contemporary issues in geography, both physical and human.

Study and Evaluation Scheme
Programme: Bachelor of Arts (Geography)

S.N.	Paper code	Subject Title	Period			Evaluation Scheme			Credits
			L	T	P	Internal	External	Total	
		FIRST YEAR							
		SEMESTER -I							
1	BAG111	Physical Basis of Geography	3 *	--	--	30	50	80	3
2	BAG151	Practical (Geography)	--	--	4	--	20	20	1
			3	**--**	**2 ***	**30**	**70**	**100**	**4**
		SEMESTER –II							
1	BAG211	Human Geography	3	--	--	30	50	80	3
2	BAG251	Practical (Geography)	--	--	2	--	20	20	1
			3	**--**	**2**	**30**	**70**	**100**	**4**
		First Year Total				**60**	**140**	**200**	**8**
		SECOND YEAR							
		SEMESTER –III							
1	BAG311	Economic Geography	3	--	--	30	50	80	3
2	BAG351	Practical (Geography)	--	--	2	--	20	20	1
			3	**--**	**2**	**30**	**70**	**100**	**4**
		SEMESTER –IV							
1	BAG411	Geography of India	3	--	--	30	50	80	3
2	BAG451	Practical (Geography)	--	--	2	--	20	20	1
			3	**--**	**2**	**30**	**70**	**100**	**4**
		Second Year Total				**60**	**140**	**200**	**8**
		THIRD YEAR							
		SEMESTER –V							
1	BAG511	Evolution of Geographical Thought	3	--	--	30	50	80	3
2	BAG551	Practical (Geography)	--	--	2	--	20	20	1
			3	**--**	**2**	**30**	**70**	**100**	**4**
		SEMESTER –VI							
1.	BAG611	Environmental Geography	3	--	--	30	50	80	3
2.	BAG651	Practical (Geography)	--	--	2	--	20	20	1
			3	**--**	**2**	**30**	**70**	**100**	**4**
		Third Year Total				**60**	**140**	**200**	**8**
		TOTAL MARKS				**180**	**420**	**600**	**24**

*Lectures per hours

FIRST YEAR
IFTM University, Moradabad
Bachelor of Arts (Geography)
Programme
Semester - I
PaperCode: BAG111; Physical Basis of Geography

Course Objectives:-

Students will understand the concept of place and how it is connected to people's sense of belonging to the physical environment, landscape and culture, fundamental concepts of spatial interaction and diffusion, which explain how human activities are influenced by the concept of distance. Students will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards. Students will be able to read and interpret information on different types of physical features maps. Students will learn how human, physical and environmental components of the world interact.

Course Contents:

Unit- I

Lithosphere: Nature and Scope of Physical Geography: Geological Time Scale, Origin of the Earth, Interior of the Earth, Origin of Continents and Oceans, Isostacy, Earthquakes and Volcanoes, Geosynclines, Mountain Building with special reference to folded mountains, Concept of Plate Tectonics.

Unit- II

Rocks-their origin, classification and characteristics, Earth movements, Folding, Faulting and Wrapping, Weathering and Erosion, Cycle of Erosion by Davis and Penk, Drainage Pattern, Evolution of Land forms by River, Wind, Glacier and Underground water.

Unit- III

Atmosphere : Composition and Structure of atmosphere :Isolation, Horizontal and Vertical distribution of temperature, Atmospheric pressure and winds, Air masses and Fronts, cyclones and anti-cyclones, Humidity, precipitation and rainfall types, Major climate types – Equatorial, Monsoon, Mediterranean and Hot Desert.

Unit- IV

Hydrosphere: Ocean Bottoms, composition of marine water –temperature and salinity, Circulation of Ocean water – Waves, Currents and Tides, Ocean deposits, Corals and atolls, oceans as storehouse of resources for the future.

Course Outcomes:

After the completion of the course, Students will be able to

Describe human-environment, and nature-society interactions as well as global human and environmental issues, Identify and explain the planet’s human and physical characteristics and processes from global to local scales, evaluate the impacts of human activities on natural environments and to apply knowledge of global issues to local circumstances to evaluate the local effects of the issues and show to an awareness and responsibility for the environment.

References:-

- Barry, R. G. and Chorley, R. J. (1998): Atmosphere, Weather and Climate. Routledge, London.
- Bryant, H. Richard (2001): Physical Geography Made Simple, Rupa and Company. New Delhi.
- Leong Goh Cheng (2003): Certificate Physical and Human Geography, Oxford University Press, New Delhi.
- Monkhouse, F.J. (1979): Physical Geography. Methuen, London.
- Singh, M.B. (2001): *Bhoutik Bhugol*, Tara Book Agency, Varanasi
- Singh, S. (2003): Physical Geography. (English and Hindi editions.). Prayag Pustak Bhawan, Allahabad.
- Strahler, A.N. and Stahler, A.M. (1992): Modern Physical Geography. John Wiley and Sons, New York.
- Trewartha, G.T., Robinson, A.H., Hammond, E.H., and Horn, A.T. (1976/1990): Fundamentals of Physical Geography, 3rd edition. MacGraw-Hill, New York.

Website Sources:-

- www.physicalgeography.net
- en.m.wikipedia.org
- www.britannica.com
- www.topper.com
- climate.ncsu.edu
- science.jrank.org

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography) Programme
Semester - I
Paper Code BAG 151; Practical (Geography)

Course Objectives: -

The objective of the course is to introduce basic concept of cartography and develop the understanding about different type of maps, scales, relief features and surveying.

(A) Lab Work

Unit-I

The nature and scope of cartography, Scales – Simple Scale, Construction ofComparative, Diagonal and Vernier scales, Enlargement andReduction of maps. Calculation of area of maps of different shapesby graphical and arithmetical methods.

Unit-II

Map Projections: General Principles: Classification, propertiesand choice of map projections- merits and demerits. Constructionof Cylindrical Equal area, Mercator's. Conical with two StandardsParallels, Bonne's, Polyconic, Gnomonic Polar Zenithal andStereographic Polar Zenithal projections.

(B) Viva-Voce & Sessional Records

Division of Marks:

Lab Work-One question from each unit with internal Choice (Duration – two Hours)- 10
Viva-Voce & sessional records - 10

Course Outcomes:

After end of this course, individuals will be able to identify, describe, create, construct and prepare different cartographic features such as maps, scales, relief and will be adept of conduct survey.

References:-

- Bhagwathi, V. and Pillai, R.S.N. (2003): Practical Statistics, Sultan Chand and Company, New Delhi.
- Ebdon, D. (1977): Statistics in Geography: A Practical Approach, Blackwell Publishers Inc., Massachusetts.
- Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, London.
- Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5th edition.
- Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Longman, Kolkata.
- Sharma, J. P. (2001): Prayogik Bhugol, Rastogi Publication, Meerut 3rd. edition.

- Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad.
- Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography, (Hindi and English editions), Kalyani Publishers, New Delhi.

Website Sources:-

- researchgate.net
- en.m.wikipedia.org
- www.ncert.nic.in
- www.topper.com
- gisgeography.com

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography)
Programme
Semester - II
Paper Code: BAG211; Human Geography

Course Objectives:-

Students will develop a solid understanding of the concepts of space, place and region and their importance in explaining world affairs. Students will understand general demographic principles and their patterns at regional and global scales. Students will be able to locate on a map major physical features, cultural regions, and individual states and urban centers. Students will understand global and regional patterns of cultural, political and economic institutions, and their effects on the preservation, use and exploitation of natural resources and landscapes.

Course content:

Unit -I

Concept and Nature: Meaning, Scope and Development of Human Geography, Man and Environment relationship- Determinism, Possibilism, Neo-determinism, Probabilism, Basic principles – Principle of Activity or Change, Principle of Terrestrial Unity or whole.

Unit -II

Habitation (Population and Settlement) Distribution of population and world pattern, global migration –causes and consequences, concept of over population and under population.

Human Settlements – Origin, types (Rural-Urban) characteristics, size and distribution. House types and their distribution with special reference to India.

Unit –III

Evolution of Human Economy: Sequences of human occupance, Primitive Economics – Food gathering, Hunting, Pastoral herding, Fishing, Lumbering and Primitive agriculture. Later major innovations and their impact.

Unit -IV

Society and Culture: Evolution of man (Australopithecus, Homo Erectus, Homosapiens. Cultural Diffusion, Cultural realms, World Human Races – Classification, Characteristics and Distribution.

Population Tribes: Some typical modes of life of world Tribes-Eskimos, Kirghiz, Bushman and Masai. Habitat, Economy and Society of Indian Tribes – Bhotias, Gaddis, Tharus, Bhil, Gond, Santhal, Nagas.

Course Outcomes: -

Students will acquire an understanding of and appreciation for the relationship between geography and culture. Students will read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective. Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including

settlement and economic activities and networks, and human impacts on the physical environment. Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.

References:

- Chisholm, M. (1985): Human Geography, 2nd edition, Penguin Books, London.
- DeBlij, H.J. (1996): Human Geography: Culture, Society and Space,. 2nd edition. John Wiley and Sons, New York.
- Hussain, M. (1994): Human Geography, Rawat Publications, Jaipur.
- Johnston, R. J., Gregory, D., Pratt, G. and Watts, M. (2009): The Dictionary of Human Geography, 5th edition, Basil Blackwell Publishers, Oxford.
- Kaushik, S.D. and Sharma, A.K. (1996): Principles of Human Geography (in Hindi), Rastogi Publication, Meerut.
- Norton, W. (2008): Human Geography, Oxford University Press, New York. 5th ed.
- Singh, K. N. and Singh, J. (2001): *Manav Bhugol*. Gyanodaya Prakashan, Gorakhpur. 2nd edition.
- Singh, L.R. (2005): Fundamentals of Human Geography, Sharda Pustak Bhawan, Allahabad
- Smith, D. M.(1977): Human Geography- A Welfare Approach, Edward Arnold (Publishers) Ltd., London.

Website Sources:

- www.reseachgate.net
- www.ncert.nic.in
- www.newscientist.com

Note: Latest editions of all the suggested reading must be used.

IFTM UNIVERSITY, MORADABAD
DEPARTMENT OF EDUCATION
B.A.-B.Ed. Integrated Programme
SEMESTER- II

Paper Code: BAG251: PRACTICAL (GEOGRAPHY)

Course Objectives:-

The objectives of this course are to make students familiar with different types of map, their uses and also educate them about spatial measurements and representation data generated through surveying.

(A) Lab Work

Unit-I

Methods of showing relief: Hachures, shading, contours & layertints; representation of different landforms by contours, drawing of profiles – cross & long profiles, super imposed, Composite & projected profiles. Slopes & gradients.

Unit-II

Topographical Maps: Introduction: Expansion and Indexing: Coverage, Scale. Interpretation of Toposheets, Study and Interpretation of One Inch/1:50,000 Survey of India Toposheets – representing Plain, Plateau and Mountain are as under the following heads – Relief, Drainage Characteristics, Land-use, Settlement types and patterns, and means of Transport and communication with special reference to recognition of Landforms based on contours and profiles drawn on them.

(B) Viva-Voce & Sessional Records

Division of Marks:

Lab Work-One question from each unit with internal, Choice (Duration – two Hours)- 10
Viva-Voce & sessional records –10

Course Outcomes: -

At the end of this course, students are expected to understand different types of cartographic tools and techniques such as maps, graphs, charts and able to do field survey.

References:-

- Bhagwathi, V. and Pillai, R.S.N. (2003): Practical Statistics, Sultan Chand and Company, New Delhi.
- Ebdon, D. (1977): Statistics in Geography: A Practical Approach, Blackwell Publishers Inc., Massachusetts.
- Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, London.
- Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5th edition.
- Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Longman, Kolkata.

- Sharma, J. P. (2001): *Prayogik Bhugol.*, Rastogi Publication, Meerut 3rd edition.
- Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad.
- Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi.

Website Sources:

- www.reseachgate.net
- www.ncert.nic.in
- www.nationalgeography.com

Note: Latest editions of all the suggested reading must be used.

SECOND YEAR

IFTM University, Moradabad

Bachelor of Arts (Geography)
Programme
Semester – III
Paper Code: BAG311; Economic Geography

Course Objectives:-

This course offers an introduction to the ways in which economic activities are organized over the earth's surface. We all are witnessed to rapidly increasing integration of state economies. The economic processes operating at different geographical scales are depending on the complex economic-political-social interactions that are framed at the global level. The course explores the processes of globalization.

Course contents:-

Unit –I

Nature, Scope and development of Economic Geography. Major concepts – Economic landscape, Stages of economic development, typology of economic activities (Primary, secondary, tertiary, quaternary) Resource – concept and classification.

Unit- 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 cropsrice, wheat, sugarcane, cotton, tea, coffee and rubber, Agricultural regions of the world by Whittlesey.

Unit- III

Marine resources and Aquarculture – Major, Fishing Areas, their production and trade. Nature of Occurrence, distribution, production and trade of minerals-iron ore, Manganese, Bauxite, Copper, Mica and Gold, Power Resources - Production and utilization of coal, Petroleum, Hydroelectricity and atomic energy.

Unit -IV

Locational 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, Textile, Sugar, Paper and chemicals.

Means and modes of transport-major trans continental railways, International Air and Sea routes; inland water ways (Panama and Suez Canals); Changing pattern of international Trades.

Course Outcomes:

After the completion of the course, Students will be able to recognize the significance of geographic concepts for understanding socio-economic processes and outcomes. Appraise the different ways in which time and space interact and constrain each other with regards to economic activities and articulate how economic processes can be broken down into changes over time and variations across space. Assess how society and economic actors

organize themselves in space, the factors driving these complex spatial patterns, and the implications these spatial configurations have for the socioeconomic well-being of affected groups and societies. Appreciate the complexity of economic development processes taking place across the world and how these are influenced by space. Relate course content to current economic, social, and political events, and identify some of the geographical trends in economic processes and likely outcomes for societies.

References:

- Alexander, J. W. (1988): Economic Geography. Prentice-Hall, New Delhi.
- Coe, N. (2007): Economic Geography: A Contemporary Introduction. Blackwell Publishers, Inc., Massachusetts.
- Gautam, A. (2006): *Aarthik Bhugol Ke Mool Tattava*, Sharda Pustak Bhawan, Allahabad.
- Guha, J. S. and Chattoraj, P.R. (2002): A New Approach to Economic Geography: A Study of Resources. The World Press Private Limited, Kolkata.
- Hartshorne, T. A. and Alexander, J. W. (1988): Economic Geography (3rd revised edition) Englewood Cliff , New Jersey, Prentice Hall.
- Hudson, R. (2005): Economic Geographies: Circuits, Flows and Spaces. Sage Publications, London.
- Knowles, R, Wareing, J. (2000): Economic and Social Geography Made Simple, Rupa and Company, New Delhi.
- Sokal, Martin 2011. Economic Geographics of Globalisation: A short Introduction. Cheltenham.

Website Sources:

- www.nature.com
- www.ncert.nic.in
- www.amu.ac.in
- en.m.wikipidia.org
- www.fao.org

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography)
Programme
Semester – III

Paper Code: BAG 351; Practical (Geography)

Course Objectives:-

The objectives of this course are to make students familiar with different types of map, their uses and also educate them about spatial measurements and representation data generated through surveying.

(A) Lab Work

Unit-I

Statistical Analysis:

(i) Measures of Central Tendency – Mean, Median, Mode, Measure of Dispersion –Quartile range, Standard Deviation, Variance and Co-efficient of variation. Correlation and Co-efficient of correlation.

(ii) Graphical Representation of Statistical Data-Histogram, Polygon, Frequency Curve, Scatter Diagram.

Unit-II

Cartographic Representation of Statistical Data:

(i) Graphs: Band graph, Hythergraph, Climograph.

(ii) Diagrams: Compound Bar, Wheel.

(iii) Distribution Maps: Using Dots, Isopleth and Choropleth method.

(B) Viva-Voce & Sessional Records

Division of Marks:

Lab Work-One question from each unit with internal. Choice (Duration – two Hours)- 10
Viva-Voce & sessional records –10

Course Outcomes:

At the end of this course, students are expected to understand different types of cartographic tools and techniques such as maps, graphs, charts and able to do field survey.

References:-

- Gregory, S., Statistical Method and the Geographer.
- HiraLal, Prayogatmak Bhoogol KeAdhar (Hindi).
- Lal, Hira, Matratmak Bhoogol (Hindi)
- Monkhouse, F.J. Maps & Diagrams.
- Robinson, A.H., Elements of Cartography.

- Sharma, J.P., Prayogatmak Bhoogol Ki Rooprekha (Hindi)
- Singh, J. et. al. Bhaumikiyamanchitro ki Rooprekha (Hindi)
- Singh, L.R. & Singh, R.N. Map work and practical Geography (Eng./Hindi)
- Singh, R.L., Elements of Practical Geography.
- Smith, H.T.V., Aerial Photographs and their Applications.
- Tiwari, R.C. and Tiwari, Sadha, Abhinav Prayogic Bhoogol

Website Sources:

- www.nature.com
- www.ncert.nic.in
- www.amu.ac.in
- en.m.wikipidia.org
- www.fao.org

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography) Programme
Semester – IV
Paper Code: BAG411; Geography of India

Course Objectives:

Students will get an introduction to the main regions of the India in terms of both their uniqueness and similarities. Students will be exposed to historical, economic, cultural, social and physical characteristics of India. Students will learn the relationships between the global, the regional and the local, particularly how places are inserted in regional and global processes. In addition to the ability of understanding and reading maps, students will develop cartography skills and will be able to create maps on their own. Students will be introduced to demographic, social and cultural attributes such as migration, social relations and cultural identity.

Course contents:

Unit –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 characteristics, effect of El Nino, climatic division, Soil types and conservation.

Unit –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. River Valley Projects; Tehri dam & Narmada Valley.

Unit –III

Indian Economy: Agriculture – main characteristics 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.

Unit –IV

Population- growth, distribution and density, demographic and occupational structure, Literacy and Population problems.

Transport and Trade- Development of Transport Net-work, railway zones, road development and air routes; foreign trade-salient features, Major ports. Major issues and planning of some problem areas – Flood prone areas, Drought prone areas and Tribal areas. Detailed geographical study of Gangetic Plain with special reference to Rohilkhand Region.

Course Outcomes:

After the completion of the course, Students will be able to Identify and explain the Indian Geographical Environment, from global to local scales, Apply geographical knowledge to everyday living and knowledge of global issues to a unique scientific problem, Show an

awareness and responsibility for the environment and India and Evaluate the impacts of human activities on natural environments special reference to India.

References:

- Chauhan, P.R. and Prasad, M. (2003): *Bharat Ka Vrihad Bhugol*, Vasundhara Prakashan, Gorakhpur.
- Gautam, A. (2006): Advanced Geography of India, Sharda Pustak Bhawan, Allahabad
- Khullar, D.R. (2007): India: A Comprehensive Geography, Kalyani Publishers, New Delhi
- Nag P. and Gupta, S. S. (1992): Geography of India, Concept Publishing Company, New Delhi.
- Rao, B.P. (2007): *Bharat kee Bhaugolik Sameeksha*, Vasundhara Prakashan, Gorakhpur.
- Sharma, T.C. and Coutinho, O. (2003): Economic and Commercial Geography of India, Vikas Publishing House Private Ltd. New Delhi.
- Singh, J. (2001): *Bharat: Bhougolik Aadhar AvamAyam*, Gyanodaya Prakashan, Gorakhpur.
- Singh, J. (2003): India: A Comprehensive Systematic Geography. Gyanodaya Prakashan, Gorakhpur.
- Singh, R.L. (ed.) (1971): India: A Regional Geography. National Geographical Society of India, Varanasi.

Website Sources:

- www.cambridge.org
- www.ncert.nic.in
- researchgate.net
- en.m.wikipidia.org
- www.fao.org

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography) Programme
Semester - IV
Paper Code: BAG451; Practical (Geography)

Course Objectives:

The aim of this course is to apprise the students to various aspects of Aerial photographs. Also introduce about Remote Sensing and GIS. It will be teach about the important elements of the Geospatial technology. This course introduce about the earth revolutionary and rotation system. It gives the technical knowledge of satellite system.

(A) Lab Work

Unit-I

Weather Maps: Use of weather instruments and weather symbols (India) Study and Interpretation of Indian daily Weather maps/reports especially of January, March, July and October, Weather forecasting. Geological Maps: Identification of rock-outcrops, bedding planes, drawing of cross-section and determination of dip and bed thickness- simple and folded.

Unit-II

Aerial Photogrammetry and Remote Sensing: Terminology, meaning and scope of Remote Sensing. Types and characteristics of aerial photographs, Chief elements of Photo Interpretation –Tone, Shadow size, Pattern and their indemnification.

(B) Viva-Voce & Sessional Records

Division of Marks:

Lab Work-One question from each unit with internal Choice (Duration – two Hours)- 10
Viva-Voce & sessional records –10

Course Outcomes: -

After the completion of the course, Students will be able to demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and use the tools and methods of GIS. Students will demonstrate their knowledge of physical geography and the methods and techniques for observing, measuring, recording and reporting on geographic phenomena. Students will demonstrate their competence to work individually and as a team to develop and present a client-driven GIS solution. Student will be familiar with modern techniques in Geography. Students will be prepared to apply their skills in professional careers.

References:-

- Gregory, S., Statistical Method and the Geographer.

- HiraLal, Prayogatmak Bhoogol Ke Adhar (Hindi).
- Lal, Hira, Matratmak Bhoogol (Hindi).
- Monkhouse, F.J. Maps & Diagrams.
- Robinson, A.H., Elements of Cartography.
- Sharma, J.P., Prayogatmak Bhoogol Ki Rooprekha (Hindi)
- Singh, J. et. al. Bhaumikiyamanchitro ki Rooprekha (Hindi)
- Singh, L.R. & Singh, R.N. Map work and practical Geography (Eng./Hindi)
- Singh, R.L., Elements of Practical Geography.
- Smith, H.T.V., Aerial Photographs and their Applications.
- Tiwari, R.C. and Tiwari, Sadha, Abhinav Prayogic Bhoogol.

Website Sources:

- www.cambridge.org
- www.ncert.nic.in
- researchgate.net
- en.m.wikipidia.org
- www.fao.org

Note: Latest editions of all the suggested reading must be used.

THIERD YEAR

IFTM University, Moradabad

Bachelor of Arts (Geography) Programme

Semester - V

Paper Code: BAG511; Evolution of Geographical Thought

Course Objectives: -

The purpose of this course is to expose students to:

The main objectives of this course are to make students understand about historical development of geographical concepts, philosophies and approaches.

Course Contents:

Unit – I

The field of geography; its place in the classification of sciences; geography as a selected concept of geography - distributions; relationships, interactions, area differentiation and spatial organization.

Unit – II

Dualisms in geography; systematic & Regional geography; physical & human geography. Systematic geography & its relationwith systematic sciences and with regional geography. The mythand reality about dualism.

Unit – III

Geography in ancient period – Contribution of Indian, Greek &Roman geographers, Geography in middle age – Arab geographers, Renaissance period in Europe. Renowned travelers and their geographical discoveries.

Unit – IV

German school of thought – Kant, Humboldt, Ritter, Richthofen, Ratzel, Hettner, French school of thought – Contribution of Blache & Brunhes. Soviet geographers, American school – Contribution of Davis, Sample, Hunthington & carl sauer, British school – Contribution of Mackinder, Herbertson & L.D. Stamp.

Course Objectives: -

After completing the course students will be able to:

Students will be able to comprehend, correlate and connect geographical ideas and concepts with historical as well as contemporary context.

References: -

- Ali, S.M. (1960): Arab Geography, Institute of Islamic Studies, Aligarh Muslim University, Aligarh, First Edition.
- Diddee, J. (ed.) (1990): Indian Geography, Institute of Indian Geographers, Pune, first edition.
- Dikshit, R. D. (2003): Geographical Thought. A Critical History of Ideas. Prentice-Hall of India, New Delhi. (in English and Hindi).
- Dube, B. (1967): Geographical Concepts in Ancient India, National Geographical Society of India, Varanasi.

- Hartshorne, R. (1959): Perspective on the Nature of Geography, John Murray, London
- Harvey, D. (1969): Explanations in Geography. Arnold, London.
- Holt-Jensen, A. (1980): Geography: Its History and Concepts. Harper and Row Publishers, London.
- Husain, Majid. (2002): Evolution of Geographical Thought, Rawat Publications, Jaipur.

Website Sources:

- www.cambridge.org
- www.ncert.nic.in
- researchgate.net
- en.m.wikipidia.org
- www.amu.ac.in

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography)
Programme

Semester - V

Paper Code: BAG551; Practical (Geography)

Course Objective: -

The objective of this course is to introduce basic concept of cartography and develop the understanding about different type of maps, scales, relief features and surveying.

Course Content:

(A) Lab Work

Plane table Surveying; Radiation, Inter section & Resection method with three Points problem.

Surveying by Prismatic Compass, open traverse, Close traverse, Elimination of error. Bowditch Method.

Use of Sextant; measurement of height-accessible and inaccessible method.

OR

Indian clinometers: Measurement of height-accessible and inaccessible method..

(B) Viva-Voce & Sessional Records

Division of Marks:

Lab Work-One question from each unit with internal. Choice (Duration – Three Hours)- 10
Viva-Voce & sessional records –10

Course Outcomes: -

After the completion of the course, Students will be able to identify, describe, create, construct and prepare different cartographic features such as maps, scales, relief and will be adept of conduct survey.

References:-

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

Website Sources:

- www.vpcivil.co.in
- www.ncert.nic.in
- www.ce.cet.ac.in
- en.m.wikipidia.org
- www.fao.org

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography) Programme
Semester - VI
Paper Code: BAG611; Environmental Geography

Course Objectives:

The objective of this course is to make students aware about different types of environment, ecological setting and their issues and challenges.

Course Contents:

Unit – I

Geography as a study of Environment - concepts & components of environment, Development of environment 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, soil exhaustion, Desertification, Air pollution, water pollution, Disposal of solid waste, Population pressure.

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 – Ganga Action Plan, Tiger project, Tehri dam & Narmada Valley project. Emerging environmental issues; population explosion, food security, global warming, bio-diversity and its conservation, sustainable development

Course Outcomes: -

The expected learning outcome of this course would be; make them understand and take role in environmental conservation and management.

Refrences:

- B. Narayan, Disaster Management; Super Book Distributor, New Delhi.
- G.P. Yadav & Ram Suresh, Paryavaran Adhyayan.
- Griffith Taylor, Environmental race and migration.
- I. Mohan, Environmental Problems in 21st Century, Anmol Publication Pvt, Ltd. New Delhi.
- P.C Sinha; Introduction to Disaster managements; Anmol Publication Pvt. Ltd., New Delhi.
- P.S. Negi. Eco-Development and Environmental Geography (Hindi).
- Savindra Singh, (2000): Environmental Geography. Prayag Pustak Bhavan, Allahabad.
- Sharma, H.S. and Chattopadhyay, S. K. Sustainable Development-concepts and issues, concept, New Delhi – 2000.

- Singh R.B. & Mishra S. (1996) Environmental Laws in India, Issues &Responses, Rawat Publication, New Delhi.
- Singh, Savinder, Paryavaran Bhoogol/ Environmental Geography.
- V.K. Srivastava, Environmental and Ecology (Hindi).
-

Website Sources:

- www.vpcivil.co.in
- www.ncert.nic.in
- www.ce.cet.ac.in
- en.m.wikipidia.org
- www.fao.org

Note: Latest editions of all the suggested reading must be used.

IFTM University, Moradabad
Bachelor of Arts (Geography) Programme
Semester - VI
Paper Code: BAG651; Practical (Geography)

Course Objectives: -

The objective of this course is to learn the significance of field work in geographical studies, understand the meaning of field, identify the case study, know about different types of field techniques and develop an idea about research problems.

Course Content: -

Field Study and Tour Report:

Garhwal Himalaya, Kumaon Himalaya. Vindhyan plateau, Thar Desert, Coastal Geomorphology or any Area of Ganga Plain; Preparation of Field Work Report for Submission in Practical Examination.

Fieldwork:

Meaning, Types & Objectives of Fieldwork; Fieldwork Methods & Techniques; Importance of Fieldwork in Geography; Fieldwork Based Report Writing

Or in Special Case

Field Study in Local Environment:

Preparation of Field Report through Fieldwork on any One of the following Areas: A Locality of Moradabad City; A Village or Slum near IFTM University; A River Course near Moradabad City.(on the Recommendation of HoD).

Note: -

1. T.A./D.A. and related expenses of Teachers and Supporting Staff on Tour Duty shall be met by the university.
2. Normally for a batch of 20 students, one teacher and an attendant would accompany the tour to guide students.

(B) Viva-Voce & Sessional Records

DIVISION OF MARKS:

(A). Field Study, Tour and Report. 10 Marks
(B). Viva-Voce & sessional records 10 Marks

Course Objectives: -

The expected learning outcome of this course would belearn the significance of field work in geographical studies. Understand the meaning of field and identifying the case study. Know about different types of field techniques. Develop an idea about research problems.

References:

- Archer, J. E. and Dalton, T.H. (1968): Field Work in Geography, William Clowes and Sons Ltd. London and Beccles.
- Bolton, T. and Bewbury, P.A. (1968): Geography through Fieldwork, bland ford Press, London.
- Jones, P.A. (1968): Field work in Geography, Longmans, Green and Company Ltd., London and Harlow.
- Lousenbury, J.F. and Aldrich, F.T. (1986): Introduction to Geography Field Methods and Techniques, Charles E. Merrill Publishing. Company, Colombus.
- Pugh, J.C. (1975): Surveying for field Scientists, Methuen and Company Ltd. London.

Website Sources:

- www.vpcivil.co.in
- www.ncert.nic.in
- www.ce.cet.ac.in
- en.m.wikipidia.org
- www.fao.org

Note: Latest editions of all the suggested reading must be used.