PROPOSED SYLLABUS FOR UNDERGRADUATE SEMESTER I & II

UNIVERSITY DEPARTMENT OF GEOGRAPHY

SIDO KANHU MURMU UNIVERSITY, DUMKA

JHARKHAND

INTRODUCTORY COURSE – IRC 1

Credits: 03 **F.M. -100**

THEORY- 75

PRACTICAL- 25

INTRODUCTION OF GEOGRAPHY

UNIT I

Introduction: - The Nature of Geography-its objective and relevance, Place of Geography in Classification of Science, Branches of Geography.

UNIT II

Geography as the Study of Environment, Man Environment Relationship, Ecology and Ecosystem, Environmental Degradation, and management.

UNIT III

Debate in geography: Environmentalism and Possibilism; Systematic and Regional

UNIT IV

Recent trends in geography with special reference to India, Applied Geography, Major themes and sub themes in geography.

UNIT V

Disaster and its management, Climate Change, Sustainable Development: Concept and SDGs.

PRACTICAL – IRC 1

F.M – 25 **Time – 3 hours**

UNIT I

History of Cartography, Types of Maps, Principles of Map Design - 10 marks

UNIT II

Scale Simple, Compound, Diagonal; Maps Enlargement and Reduction - 10 marks

Practical record and Viva-voce - 5 marks

REFERENCES

1. Ahmad. E. 1990, *Geomorphology,* Kalyani Pub. New Delhi.

2. Singh. S. 2000, *Geomorphology*, Prayag Pustak Bhavan, Allahabad.

3. Mishra R.P. Ramesh. A 2000, *Fundamentals of Cartography.* Concept Publishing Company, New Delhi.

4. Dikshit. R.D. (eds) 1994, *The Art and Science of Geography: Selected Readings.* Prentice Hall India. New Delhi.

5. Adhikari S. 1992, *Geographical Thought.* Chaitanya Pub. House. Allahabad.

6. Sharma P.D. 1996, *Ecology and Environment,* 7th edition, Rastogi Publications, Mirat.

INTRODUCTORY COURSE (Vocational Studies) IVS-1A

Credits: 03 **F.M. -100**

THEORY- 75

PRACTICAL- 25

GEOGRAPHY OF TOURISM

UNIT 1

Scope and Nature: Concepts and Issues, Tourism, Recreation and Leisure Inter-Relations; Geographical Parameters of Tourism by Robinson.

UNIT 2

Trends and Patterns: Nature Tourism, Cultural Tourism, Medical Tourism, Pilgrimage, Geotourism.

UNIT 3

Recent Trends of Tourism: International and Regional; Domestic (India); Eco-Tourism, Sustainable Tourism, Meetings Incentives Conventions and Exhibitions

UNIT 4

Impact of Tourism: Economy; Environment; Society

UNIT 5

Tourism in India: Tourism Infrastructure; Case Studies of Himalaya, Desert and Coastal Areas; India's World Heritage Sites and National Geological Monuments National Tourism Policy

PRACTICAL IVS-1A **F. M. - 25**

Field tour report - 20 marks

Viva-voce - 5 marks

REFERENCES:

1. Alan, A. Lew, (2017): *New Research Paradigms in Tourism Geography*, Routledge.

2. Dhar, P.N., (2006): *International Tourism: Emerging Challenges and Future Prospects,* Kanishka, New Delhi.

3. Hall, M., and Stephen, P., (2006): *Geography of Tourism and Recreation – Environment, Place and Space*, Routledge, London.

4. Kamra, K. K., and Chand, M., (2007): *Basics of Tourism: Theory, Operation and Practise*, Kanishka Publishers, Pune.

5. Milton, D., (1993): *Geography of World Tourism,* Prentice. Hall, New York.

6. Nelson, V., (2017): *An Introduction to the Geography of Tourism*, Rowman & Littlefield,

7. Page, S. J., (2011): *Tourism Management: An Introduction*, Butterworth-Heinemann-USA.

8. Raj, R. and Nigel, D., (2007): *Morpeth Religious Tourism and Pilgrimage Festivals Management: An International perspective by CABI*, Cambridge, USA.

9. Robinson, H. A., (1996): *Geography of Tourism,* Macdonald and Evans, London,

10. Singh, Jagbir., (2014): "*Eco-Tourism*", I.K. International Pvt. Ltd. New Delhi, India.

11. Tourism Recreation and Research Journal, Centre for Tourism Research and Development, Lucknow.

MAJOR COURSE (MJ 1)

Credits-6 **F.M. -100**

THEORY- 75

PRACTICAL- 25

GEOMORPHOLOGY

UNIT I

Nature and Scope of Geomorphology, Geological Time Scale, Origin of the Continents and Oceans: Wegner's theory; Plate tectonics and Earth surface configuration, Interior Structure of the Earth.

UNIT II

Major Landforms: Mountains, Plateaus, plains: their classification and distribution; Earth's Materials: Rocks- their origin, classification, and characteristics.

UNIT III

Earth Movements: Endogenetic Processes: Eperogenetic and Orogenetic - Folds and Faults; Earthquakes- Classification and world distribution; Volcanic activity: causes, types, distribution and resultant landforms.

UNIT IV

Geomorphic agents and processes: Exogenetic Processes- Denudational agents Weathering Process: Physical, Chemical and Biological; Mass wasting; Cycle of Erosion: Davis and Penck.

UNIT V

landforms; Fluvial, Aeolian, Karst, Coastal and Glacial landforms; Recent Trends in Geomorphological Studies.

PRACTICAL – MJ 1

F.M – 25 **Time – 3 hours**

Unit - I:

Definition and Scope of Cartography; Scale: Concept and Methods of Representation; Drawing of Plain, Comparative and Diagonal Scales. - 10 marks

Unit - II:

Cartographic Techniques: Bars- Simple, multiple and compound; Wheel Diagram-simple, compound and proportional circle; Thematic Mapping: Choropleth and Isopleth. -10 marks.

Practical record and Viva-voce - 5 marks

REFERENCE:

1. Dayal, P., 2015: Text-Book of Geomorphology, Shukla Book Depot, Patna.
2. Gabler R.E, Peterson. J.F.,Trapasso, L.M. 2009. Essentials of Physical Geography Brooks/ Cole CengageLerning.
3. Kale, V. and Gupta, A., 2004. Elements of Geomorphology. Oxford University press, Calcutta.
4. Strahaler, A.H., 2013 (6th edition). Introducing Physical Geography. Wiley Pub.
5. Thornbury, W.D., 1991. Principles of Geomorphology, Wiley Eastern Ltd., New Delhi
6. Worcester, P.C. 1969. Text Book of Geomorphology. East West Press, New Delhi.
7. Savindra Singh. Fundamental Concepts in Geomorphology. PrayagPustakBhavan, Allahabad.
8. Gautam, A. 2015. Geomorphology. ShardaPustakBhawan.
9. Hugget, R.J. 2011. Fundamentals of Geomorphology. Routledge Pub.
10. Harvey, 2012. A. Introducing Geomorphology: A Guide to Landforms and Processes. Dunedin Academic Press

INTRODUCTORY COURSE (IRC 2)

Credits: 03 **F.M. -100**

THEORY- 75

PRACTICAL- 25

PHYSICAL GEOGRAPHY

UNIT I

Physical Geography – Definition and Scope, Concepts, Components of Earth System.

UNIT II

Atmosphere – Heat Balance, Global Circulation Pattern, Tropical Cyclones, Monsoon, Climatic Classification (Koppen).

UNIT III

Lithosphere – Internal Structure of Earth based on Seismic Evidence, Plate Tectonics and its Associated Features.

UNIT IV

Geomorphic Processes- Weathering, Mass Wasting, Fluvial Cycle of Erosion – Davis and Penck.

UNIT V

Hydrosphere – Salinity, Ocean Bottom Relief Features, Tides and Ocean Currents.

PRACTICAL – IRC 2

F.M – 25 **Time – 3 hours**

UNIT I

Drawing of Climograph and Hythergraph and their interpretation, Isopleth of climate - 10 marks

UNIT II

Study Topographical Map of India with respect of Relief, Drainage, Settlement &Communication Pattern. - 10 marks

Project Report & Viva- Voce - 5 marks

REFERENCES:

1. Conserva, H. T., (2004): Illustrated Dictionary of Physical Geography, Author House, New York.
2. Gabler, R. E., Petersen, J. F. and Trapasso, L. M., (2007): Essentials of Physical Geography (8th Edition), Thompson, Brooks/Cole, New York.
3. Garrett, N., (2000): Advanced Geography, Oxford University Press, Oxford.
4. Goudie, A., (1984): The Nature of the Environment: An Advanced Physical Geography, Basil Blackwell Publishers, Oxford.
5. Hamblin, W. K., (1995): Earth's Dynamic System, Prentice Hall, N.J.
6. Husain, M., (2002): Fundamentals of Physical Geography, Rawat Publications, Jaipur.
7. Monkhouse, F. J. (2009): Principles of Physical Geography, Platinum Publishers, Kolkata.
8. Singh, Savindra. (2018): Bhoutik Bhugol, Prayag Pustak Bhawan, Allahabad.
9. Strahler, A. N. and Strahler, A. H., (2008): Modern Physical Geography, John Wiley & Sons, New York.

INTRODUCTORY COURSE (Vocational Studies) IVS-1B

Credits: 03 **F.M. -100**

THEORY- 75

PRACTICAL- 25

GEOGRAPHICAL INFORMATION SYSTEM

UNIT I

Geographical Information System (GIS): Definition and Components.

UNIT II

Global Positioning System (GPS): Principles and Uses.

UNIT III

GIS Data Structures: Types (spatial and non-spatial), Raster and Vector Data Structure.

UNIT IV

GIS Data Analysis: Input; Geo-Referencing; Editing, Output and Query; Overlays.

UNIT V

Application of GIS: Land Use Mapping; Urban Sprawl Analysis; Forests Monitoring natural disasters.

PRACTICAL: IVS-1B F. M. - 25

Interpretation of GIS map: Land use, Forest, Water bodies, Transportation, Settlement – 20 marks.

Practical record and Viva-voce - 5 marks.

REFERENCES:

1. Bhatta, B., (2010): *Analysis of Urban Growth and Sprawl from Remote Sensing*, Springer, Berlin Heidelberg.41
2. Burrough, P.A., and McDonnell, R.A. (2000): *Principles of Geographical Information SystemSpatial Information System and Geo-statistics*. Oxford University Press
3. Chauniyal, D.D. (2010): *Sudur Samvedan evam Bhogolik Suchana Pranali,* Sharda Pustak Bhawan, Allahabad
4. Gomarasca, M. A. (2009) *Basics of Geomatics,* Springer Science, New York
5. Heywoods, I., Cornelius, S and Carver, S., (2006): *An Introduction to Geographical Information system.* Prentice Hall.
6. Jha, M.M. and Singh, R.B., (2008) *Land Use: Reflection on Spatial Informatics Agriculture and Development,* New Delhi: Concept.
7. Kumar, Dilip, Singh, R.B. and Kaur, Ranjeet (2019): *Spatial Information Technology for Sustainable Development Goals,* Springer.
8. Nag, P. (2008) *Introduction to GIS,* Concept India, New Delhi.
9. Sarkar, A. (2015) *Practical geography: A systematic approach*. Orient Black Swan Private Ltd., New Delhi
10. Singh, R.B. and Murai, S. (1998) *Space Informatics for Sustainable Development*, Oxford and IBH, New Delhi.

MAJOR COURSE (MJ 2)

Credits-6

F.M. -100

THEORY- 75

PRACTICAL- 25

CLIMATOLOGY

UNIT I

Introduction to Climatology; Climatology and Meteorology; Atmosphere: Origin, Composition and Structure

UNIT II

Weather and Climate: Elements and Controlling Factors; Temperature: Horizontal and vertical Distribution; Insolation; Heat balance of earth

UNIT III

General circulation in the atmosphere; Atmospheric Pressure and pressure belts; Winds: planetary, periodic, and local; Monsoon

UNIT IV

Moisture in the Atmosphere: Humidity, Evaporation and Condensation, Precipitation, Air Masses and Fronts: origin classification and characteristics; Atmospheric disturbances: Cyclones: Tropical and Temperate; Anti Cyclones

UNIT V

Climatic classification by Koppen and Thornwaite ; Global warming; Climate change; Thunderstorm.

PRACTICAL – MJ 2

F.M – 25 **Time – 3 hours**

Interpretation of weather maps, Rainfall- temperature graph - 10 marks.

Climograph, Hythergraph, Wind rose diagram - 10 marks.

Practical record and Viva- voce - 5 marks.

REFERENCES

1. Barry, R. G., and Chorley, R. J., (2009): *Atmosphere, Weather and Climate(9_{th} Edition)*,Routledge, New York.

2.Singh, S., (2009): *Jalvayu Vigyan (Hindi),*, Prayag Pustak Bhawan, Allahabad

3. Bhutani, S., (2000): *Our Atmosphere*, Kalyani Publishers, Ludhina.

4. Critchfield, H. J., (1987): *General Climatology*, Prentice-Hall of India, New Delhi.

5. Gupta, L.S., (2000): *JalvayuVigyan(Hindi),*MadhyamKaryanvayNidishalya, Delhi VishwaVidhyalaya, Delhi.

6. Das, P.K. 2011(3rd edition). The Monsoons. National Book Trust, New Delhi

7. Lal, D. S., (2006): *JalvayuVigyan(Hindi),*, PrayagPustakBhavan, Allahabad.

8. Lutgens, F. K., Tarbuck E. J. and Tasa D., (2009): *The Atmosphere: An Introduction to Meteorology*, Prentice-Hall, Englewood Cliffs, New Jersey.

9. Oliver, J. E., and Hidore J. J., (2002): *Climatology: An Atmospheric Science*, Pearson Education, New Delhi.

10. Strahler, A.N., (1987) *Modern Physical Geography*, John Wiley and Sons, New York, Singapore.