

**Syllabus for
Bachelor of Arts in Geography (Honours)
Under Choice Based Credit System**

**Academic Session:
w.e.f. 2020-2023**



for
All Constituent/Affiliated Colleges Under
Binod Bihari Mahto Koyalanchal University, Dhanbad

Members of Board of Studies of CBCS Under-Graduate Syllabus as per Guidelines of the Binod Bihari Mahto Koyalanchal University, Dhanbad

1. Chairman: Dr. Anil Kumar Singh
HOD, Department of Geography
B.B.M.K.U., Dhanbad
2. Invited Member: Dr. Debjani Biswas,
Dean, Social Science,
B.B.M.K.U., Dhanbad.
3. Expert members: i) Dr. O. P. Mahato,
Former Head,
Univ. Dept. of Geography,
V.B.U., Hazaribag.

ii) Dr. Pradeep Kumar Singh,
HOD, P.G. Dept. of Geography,
M.C.C., Hazaribag,
V.B.U., Hazaribag.
4. Members: i) Dr. Madhumita Debnath,
Department of Geography,
B.M.C., Bokaro.

ii) Dr. K. P. Singh
Department of Geography,
Chas, Bokaro.

CONTENTS

S.No	Topic/Title	Page No.
1.	Course Structure of B.A. Honours Geography	1-4
2	Semester I	5-10
3.	Semester II	11-17
4.	Semester III	18-24
5.	Semester IV	25-31
6.	Semester V	32-43
7.	Semester VI	44-55
8.	Format of Question Paper for End Sem. Examination of 75 Marks	56
9.	Format of Question Paper for End Sem. Examination of AECC & SEC of 50 Marks	57

BASIC COURSE STRUCTURE OF B.A. HONOURS
GEOGRAPHY

Semester	Course Code	Name of Paper	Full Marks	End Semester Marks	Mid Semester (Internal Marks)
I	GEOG-H-C-101-T (04 Credits, 60 Lectures)	Introduction to Geography	75	60	15
	GEOG-H-C-102-T (04 Credits, 60 Lectures)	Geo-Tectonics and Geomorphology	75	60	15
	GEOG-C-101-P & 102-P (02+02=04 Credits, 60x2 Lectures)	Practical	50	40	10
	GEOG-H-GE-101-T (06 Credits, 60 Lectures & 15 Tutorials) or GEOG-H-GE-101-T (04 Credits, 60 Lectures) GEOG-H-GE-101-P (02 Credits, 30 Lectures) Choice to choose from other disciplines (Annexure-2)		100 or 75 25	80 or 60 20	20 or 15 5
	GEOG-H-AECC-101-T Language (English/Hindi/NH+MB) (02 Credits, 30 Lectures)	Language (English/Hindi/NH+MB)	50	40	10
	GEOG-H-C-203-T (04 Credits, 60 Lectures)	Contemporary Issues in Geography	75	60	15
II	GEOG-H-C-204-T (04 Credits, 60 Lectures)	Climatology and Oceanography	75	60	15
	GEOG-H-C-203-P & 204-P (02+02=04 Credits, 60x2 Lectures)	Practical	50	40	10
	GEOG-H-GE-202-T (06 Credits, 60 Lectures & 15 Tutorials) or GEOG-H-GE-202-T (04 Credits, 60 Lectures) GEOG-H-GE-202-P (02 Credits, 30 Lectures) Choice to choose from other disciplines (Annexure-2)		100 or 75 25	80 or 60 20	20 or 15 5
		Rural Development Practical			

	GEOG-H-AECC-202-T Environmental Science (02 Credits, 30 Lectures)	Environmental Science	50	40	10
III	GEOG-H-C-305-T (04Credits, 60 Lectures)	Biogeography	75	60	15
	GEOG-H-C-306-T (04 Credits, 60 Lectures)	Geography of India	75	60	15
	GEOG-H-C-307-T (04 Credits, 60 Lectures)	Geography of Jharkhand	75	60	15
	GEOG-H-C-305-P & 306-P & 307-P (02+02+02=06 Credits, 60x3 Lectures)	Practical	75	60	15
	GEOG-H-GE-303-T (06 Credits, 60 Lectures & 15 Tutorials) or GEOG-H-GE-303-T (04 Credits, 60 Lectures) GEOG-H-GE-303-P (02 Credits, 30 Lectures) Choice to choose from other disciplines (Annexure-2)	Climate Change: Vulnerability and Adaptation Practical	100 75 25	80 60 20	20 15 5
	GEOG-H-SEC-301-T (Annexure-1) (02 Credits, 30 Lectures)	Environment and Public Health	50	40	10
IV	GEOG-H-C-408-T (04 Credits, 60 Lectures)	Geography of Three Northern Continents	75	60	15
	GEOG-H-C-409-T (04 Credits, 60 Lectures)	Geography of Three Southern Continents	75	60	15
	GEOG-H-C-410-T (04 Credits, 60 Lectures)	Geography of Travel and Tourism	75	60	15
	GEOG-H-C-408-P & 409-P & 410-P (02+02+02=06 Credits, 60x3 Lectures)	Practical	75	60	15
	GEOG-H-GE-404-T (06 Credits, 60 Lectures & 15 Tutorials) or GEOG-H-GE-404-T (04 Credits, 60 Lectures) GEOG-H-GE-404-P (02 Credits, 30 Lectures) Choice to choose from other disciplines (Annexure-2)	Sustainable Development Practical	100 75 25	80 60 20	20 15 5

	GEOG-H-SEC-402-T (Annexure-1) (02 Credits, 30 Lectures)	Constitution of India and Human Rights	50	40	10
V	GEOG-H-C-511-T (04 Credits, 60 Lectures)	Human Geography	75	60	15
	GEOG-H-C-512-T (04 Credits, 60 Lectures)	Economic Geography	75	60	15
	GEOG-H-C-511-P & 512-P (02+02=04 Credits, 60x2 Lectures)	Practical	50	40	10
	GEOG-H-DSE-501A-T/ GEOG-H-DSE-501B-T/ GEOG-H-DSE-501C-T (04 Credits, 60 Lectures) (Choice to choose any one paper)	Population Geography/ Settlement Geography/ Urban Geography	75	60	15
	GEOG-H-DSE-502A-T/ GEOG-H-DSE-502B-T/ GEOG-H-DSE-502C-T (04 Credits, 60 Lectures) (Choice to choose any one paper)	Agricultural Geography/ Soil Geography/ Industrial Geography	75	60	15
	GEOG-H-DSE-501 & 502-P (02+02=04 Credits, 60x2 Lectures)	Practical	50	40	10
VI	GEOG-H-C-613-T (04 Credits, 60 Lectures)	Environmental Geography	75	60	15
	GEOG-H-C-614-T (04 Credits, 60 Lectures)	Regional Development and Planning	75	60	15
	GEOG-H-C-613-P & 614-P (02+02=04 Credits, 60x2 Lectures)	Practical	50	40	10
	GEOG-H-DSE-603A-T/ GEOG-H-DSE-603B-T/ GEOG-H-DSE-603C-T (04 Credits, 60 Lectures) (Choice to choose any one paper)	Social Geography/ Cultural Geography/ Tribal Geography	75	60	15
	GEOG-H-DSE-604A-T/ GEOG-H-DSE-604B-T/ GEOG-H-DSE-604C-T (04 Credits, 60 Lectures) (Choice to choose any one paper)	Political Geography/ Resource Geography/ Applied Geography	75	60	15

	GEOG-H-DSE-603 & 604-P (02+02=04 Credits, 60x2 Lectures)	Practical	50	40	10
Total Marks			2400	1920	480

Note:

Symbol of Paper: GEOG-H-C-101-T: The first four symbols in Roman capital letters indicate the subject; the next symbol H or G indicate Honours or General course; the next symbol(s) denotes Core (C), Generic Elective (GE), Discipline Specific Elective (DSE), AECC, SEC, etc. Out of the next three digits, the first digit indicates the semester e.g. 1,2,3,4,5,6 for semester I, II, III, IV, V, VI respectively, and the next two digits indicate paper number. The last letter T or P indicates Theory or Practical.

Semester-I

Instruction to Question Setter for End Semester Examination (ESE): *There will be two groups of questions. Five Questions to be answered out of Nine Questions. Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions). Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks*

		Mid Semester			End Semester		Grand Total
		Written	Attendance	Total	Theory	Distribution of Marks	
1	Full Marks	10	05	15	60	5x12	60+15=75
2	Pass Marks	04	02	06	24	-	30

	No. of Questions to be set-			09 (Nine)
	Structure of Question	No. of Questions	Distribution of Marks	Total Marks
(A)	Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions).	1(A)- 6 1(B)- 2	1(A)- 6x1=6 1(B)- 2x3=6	12
(B)	Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks.	4	4x12	48
Total				60

GEOG-H-C-101-T	INTRODUCTION TO GEOGRAPHY	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	----------------------------------	---

Module I:

Nature and Scope of Geography; Geography as a science; Place of Geography in classification of Sciences; Concept of space and concept of landscape (regional & cultural).

Module II:

Geography in Ancient (Greek, Rome and India) and Medieval Period; Development of Geography in Modern Period (German School, French School, British School and American School), Contribution of Humboldt, Ritter, Ratzel, Blache and Hartshorne to Geography.

Module III:

Methods and Technique in Geography- Quantitative, Behavioral, Radical, Humanistic and Environmental; Remote Sensing, GIS, GPS and Computer Cartography; Trends in Geography in Renaissance Period.

Module IV:

Geographical Knowledge and People-Career in Geography; Noted Indian Geographers who contributed to Development of Geography in India; Man-Environment Relationship; Welfare Geography, Gender Geography in Modern Times in Indian context.

Books Recommended:

- Arentsen, M., Stam R. and Thuijjs R., *Post-Modern Approaches to Space*, ebook.
- Bhat, L.S., *Geography in India* (Selected Themes), Pearson.
- Bonnett, A., *What is Geography?* Sage.
- Dikshit, R. D., *Geographical Thought: A Contextual History of Ideas*, Prentice–Hall India.
- Hartshorne R., *Perspectives of Nature of Geography*, Rand MacNally and Co.
- Holt-Jensen A., *Geography: History and Its Concepts: A Students Guide*, SAGE.
- Johnston R. J., (Ed.), *Dictionary of Human Geography*, Routledge.
- Johnston R. J., *Geography and Geographers*, Anglo-American Human Geography since 1945, Arnold, London.
- Kapur A., *Indian Geography Voice of Concern*, Concept Publications.
- Martin Geoffrey J., *All Possible Worlds: A History of Geographical Ideas*, Oxford.
- Soja, Edward, *Post-modern Geographies*, Verso, London.
- Husain, Majid, *Evolution of Geographical Thought*, Rawat Publication, Delhi.
- Rawat, D. S. & Kaushik, S. D., *Geographical Thoughts and Methodology*, Rastogi Publication, Meerut.
- Maurya, S. D., *Bhaugolik Chintan Ka Itihas*, Pravalika Publications, Allahabad.

- Kaushik, S. D., *Bhaugolik Vichardharaen evam Vidhi Tantra*, Rastogi Publications, Meerut.

GEOG-H-C- 102-T	GEO-TECTONICS AND GEOMORPHOLOGY	(04 Credits, 60 Lectures) FM: 75 (60+15)
----------------------------	--	---

Module I:

Origin of the Earth with particular reference to Big Bang Theory; Geological time scale and related topographic and structural evolution; Isostasy: Airy and Pratt; Folds and Faults—origin, types and their topographic expressions; Plate Tectonics: plate tectonic processes—sea floor spreading, subduction, orogenesis, earthquake and vulcanicity.

Module II:

General Degradational Processes: Processes of rock weathering and their effects on landform; Fluvial processes and landforms; Glacial processes and landforms; Fluvio-glacial landforms; Aeolian processes and landforms; Fluvio-aeolian processes.

Module III:

Basic concepts of Geomorphology; Landforms on granite and basalt; Landforms on limestone; Development of river network and landforms on uniclinal and folded structures.

Module IV:

Normal cycle of erosion by W. M. Davis; Views of W. Penck on normal cycle of erosion; Cycle of Pediplanation by L. C. King; Dynamic Equilibrium theory by J.T. Hack.

Books Recommended:

- Bloom A. L., *Geomorphology: A Systematic Analysis of Late Cenozoic Landforms*, Prentice-Hall of India, New Delhi.
- Bridges E. M., *World Geomorphology*, Cambridge University Press, Cambridge.
- Christopherson, Robert W., *Geosystems: An Introduction to Physical Geography*, Ed., Macmillan Publishing Company.
- Kale V. S. and Gupta A., *Introduction to Geomorphology*, Orient Longman, Hyderabad.

- Knighton A. D., *Fluvial Forms and Processes*, Edward Arnold Publishers, London. Richards K. S., *Rivers: Form and Processes in Alluvial Channels*, Methuen, London.
- Selby, M.J., *Earth's Changing Surface*, Indian Edition, OUP.
- Skinner, Brian J. and Stephen C. Porter, *The Dynamic Earth: An Introduction to Physical Geology*, 4th Edition, John Wiley and Sons.
- Thornbury W. D., *Principles of Geomorphology*, Wiley.
- Gautam, A., *Bhautik Bhugol*, Rastogi Publications, Meerut.
- Tikkaa, R N., *Bhautik Bhugol ka Swaroop*, Kedarnath Ram Nath, Meerut.
- Singh, S., *Bhautik Bhugol ka Swaroop*, Prayag Pustak, Allahabad.
- Tiwary Ram Kumar, *Bhautik Bhugol*, Rajasthan Hindi Granth Academy, Jaipur.

GEOG-H-C- 101&102-P	PRACTICAL	(04 Credits, 120 Lectures) FM: 50 (40+10)
------------------------------------	------------------	--

- A) Construction of scale: Simple, Diagonal and Comparative. 10 Marks**
- B) Isopleth (Contours, Isotherms, Isobars, and Isohyets), Slope analysis-Smith, Drainage density, Drainage hierarchy. 10 Marks**
- C) Bloc diagram, Sinusity index, River profile, Interpretation of topographical maps (relief, drainage, relation between relief and drainage). 10 Marks**
- D) Village Survey with the help of village map allotted by HOD. 10 Marks**
- E) PNB+ Viva-Voce. 10 Marks**

Books Recommended:

- Singh, L. R., *Fundamentals of Practical Geography*, Sharda Pushtak Bhawan, Allahabad.
- Sharma, J. P., *Prayogik Bhugol*, Rastogi Prakashan, Meerut.
- Singh, L. R., *Prayogik Bhugol Ke Mool Siddhant*, Sharda Pustak Bhawan, Allahabad.

- Singh and Singh, *Elements of Practical Geography*, Kalyani Publishers, New Delhi.
- Chauhan, R. P., *Ramsurat, Prayogatmak Bhugol Ki Rooprekha*, Vasundhara Prakashan, Gorakhpur.
- Sinha evam Bala, *Uchh Cartography*, Sharda Pustak Bhawan, Allahabad.
- Sarkar, Ashish, *A Practical Geography*, Orient Blackswan Private Limited, New Delhi.
- Saha, P., *Advanced Practical Geography*, Orient Blackswan Private Limited, New Delhi.

GEOG-H-GE-101-T	DISASTER MANAGEMENT	(04 Credits, 60 Lectures) FM: 75 (60+15)
Choice to choose from other disciplines (Annexure 2)		

Module I:

Disasters: Definition and Concepts: Hazards, Disasters; Risk and Vulnerability; Classification.

Module II:

Disaster in India: (a) Flood: Causes, Impact, Distribution and Mapping; Landslide: Causes, Impact, Distribution and Mapping; Drought: Causes, Impact, Distribution and Mapping.

Module III:

Disaster in India: (b) Earthquake and Tsunami: Causes, Impact, Distribution and Mapping; Cyclone: Causes, Impact, Distribution and Mapping; Manmade disasters: Causes, Impact, Distribution and Mapping.

Module IV:

Response and Mitigation to Disasters: Mitigation and Preparedness, NDMA and NIDM; Indigenous Knowledge and Community-Based Disaster Management; Do's and Don'ts during disasters.

Books Recommended:

- Kapur, A., *Vulnerable India: A Geographical Study of Disasters*, Sage Publication, New Delhi.
- Modh, S., *Managing Natural Disaster: Hydrological, Marine and Geological Disasters*, Macmillan, Delhi.
- Singh, R.B., *Risk Assessment and Vulnerability Analysis*, IGNOU, New Delhi. Chapter 1, 2 and 3
- Singh, R. B. (ed.), *Natural Hazards and Disaster Management: Vulnerability and Mitigation*, Rawat Publications, New Delhi.
- Singh, Savindra, *Aapda Prabandan*, Pravalika Publications, Allahabad.

GEOG-H-GE-101-P	PRACTICAL	(02 Credits, 30 Lectures) FM: 25 (20+05)
------------------------	------------------	---

Project Work/Report on relevant topics pertaining to Disaster Management, preferably on any major disaster in India/Jharkhand (Natural or Man Made).

15 Marks

Project File & Viva-Voce -

10 Marks

GEOG-H-AECC-101-T	LANGUAGE- (English/Hindi/NH+MB)	(02 Credits, 30 Lectures) FM: 50 (40+10)
--------------------------	--	---

Semester-II

Instruction to Question Setter for End Semester Examination (ESE): *There will be two groups of questions. Five Questions to be answered out of Nine Questions. Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions). Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks*

		Mid Semester			End Semester		Grand Total
		Written	Attendance	Total	Theory	Distribution of Marks	
1	Full Marks	10	05	15	60	5x12	60+15=75
2	Pass Marks	04	02	06	24	-	30

	No. of Questions to be set- 09 (Nine)			
	Structure of Question	No. of Questions	Distribution of Marks	Total Marks
(A)	Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions).	1(A)- 6 1(B)- 2	1(A)- 6x1=6 1(B)- 2x3=6	12
(B)	Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks.	4	4x12	48
Total				60

GEOG-H-C-203-T	CONTEMPORARY ISSUES IN GEOGRAPHY	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	---	---

Module I:

Introduction to Contemporary issues in Geography: Meaning and definition of contemporary issues; Nature of contemporary issues in Geography; Importance of study of contemporary issues in Geography.

Module II:

Physical (Geomorphic/Climatic/Oceanic/Biological) issues: Causes and effects of -

- a. Landslides; Weathering; Earthquakes;
- b. Floods; Droughts; Cyclones; Ozone depletion; Global warming and climate change
- c. Tsunamis; El Nino and La Nina; Marine pollution
- d. Deforestation; Forest fire; Epidemics; Watershed Management

Module III:

Human (Population/Economic/Social/Political): Causes and effects of-

- a. Over population; Migration; Energy crisis; Urbanization
- b. Poverty; Globalization and Liberalization; Regional disparity; Exploitation of resources
- c. Terrorism; Conflicts due to race, religion and caste; HIV/AIDS; Unemployment
- d. Wars and Extremists Activity; Infiltration in India; Oil Politics; Water politics; Nuclear weapons

Module IV:

Modern themes in Geography:

- a. Applied Geography, Sustainable Development and Globalisation
- b. Climate Change, Global Warming and International Efforts and Responses
- c. Basic indicators of human and gender development; Social inequality as constraint of development
- d. Population growth, Malnutrition, Food security and Hunger, Morbidity and Mortality.

Books Recommended:

- *Citizens' Report*, Centre of Science and Environment, New Delhi, Published Annually.
- Garg, H. S., *Bhugol mey Samkalin Muddey*, SBPD Publications, Agra.
- *Disaster Report*, Centre for Development Studies, Trivandrum, Published Annually.
- *World Development Report: World Bank*, Oxford University Press, Published Annually.

- *Human Development Report*, Published Annually by Oxford University Press.
- *Natural Human Development Report*, 2001- Govt. of India, Planning Commission, 2002 Oxford University Press.

GEOG-H-C- 204-T	CLIMATOLOGY AND OCEANOGRAPHY	(04 Credits, 60 Lectures) FM: 75 (60+15)
----------------------------	---	---

Module I:

Atmosphere- Structure, Composition; Insolation, Heat balance, Inversion of temperature, Factors affecting the horizontal distribution of temperature- Horizontal distribution of temperature. Atmospheric pressure- Vertical and Horizontal distribution- Thermal and dynamic origins pressure gradient, Monsoon

Module II:

Wind-General circulation, planetary winds, Seasonal winds, Local winds, Seasonal changes in circulation-El Nino- La Nina-SO. Air Masses- Lapse Rates, Fronts. Jet Stream. Koppen's Climatic Classification, Factors of climate change, Extreme weather- Cold and Heat wave, classification of world climate

Module III:

General distribution of land & sea, Hypsographic curve, zones of ocean bottom accounting to depth, Continental shelf, Continental slope, Deep sea plain & Ocean deeps. Bottom relief of Atlantic & Indian oceans, Horizontal & Vertical distribution of temperature in oceans. Oceanic Routes, Planktons.

Module IV:

Composition of sea water- salinity-Horizontal distribution in open ocean, Enclosed & partially enclosed sea. Oceanic circulation, factors controlling Oceanic circulation in Atlantic & Indian oceans. Waves & Tides; Tide producing forces, types of tide, Deposits on ocean floor; Terrigenous & Pelagic deposits, Distribution; Coral reefs.

Books Recommended:

- Gautam, Alka, *Jalvayu evam Samudra Vigyan*, Rastogi Publication, Meerut.

- Barry R. G. and Carleton A. M., *Synoptic and Dynamic Climatology*, Routledge, U.K.
- Barry R. G. and Corley R. J., *Atmosphere, Weather and Climate*, Routledge, New York.
- Critchfield H. J., *General Climatology*, Prentice-Hall of India, New Delhi.
- Lutgens F. K., Tarbuck E. J. and Tasa D., *The Atmosphere: An Introduction to Meteorology*, PrenticeHall, Englewood Cliffs, New Jersey.
- Oliver J. E. and Hidore J. J., *Climatology: An Atmospheric Science*, Pearson Education, New Delhi.
- Trewartha G. T. and Horne L. H., *An Introduction to Climate*, McGraw-Hill.
- Gupta L. S., *Jalvayu Vigyan*, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi.
- Lal, D. S., *Jalvayu Vigyan*, Prayag Pustak Bhavan, Allahabad.
- Vatal, M., *Bhautik Bhugol*, Central Book Depot, Allahabad.
- Singh, S., *Jalvayu Vigyan*, Prayag Pustak Bhawan, Allahabad.
- Andrew. D. Ward and Stanley, *Environmental Hydrology*, 2nd edition, Lewis Publishers, CRC Press.
- Karanth, K.R., *Ground Water: Exploration, Assessment and Development*, Tata-McGraw Hill, New Delhi.
- Ramaswamy, C., *Review of floods in India during the past 75 years: A Perspective*. Indian National Science Academy, New Delhi.
- Rao, K.L., *India's Water Wealth* 2nd edition, Orient Longman, Delhi.
- Singh, Vijay P., *Environmental Hydrology*, Kluwar Academic Publications, The Netherlands.
- Garrison T., *Oceanography*, Wordsworth Company, Belmont
- Kershaw S., *Oceanography: An Earth Science Perspective*, Stanley Thornes, UK.
- Sharma R. C. and Vatal M., *Oceanography for Geographers*, Chaitanya Publishing House, Allahabad.
- Sverdrup K. A. and Armbrust, E. V., *An Introduction to the World Ocean*, McGraw Hill, Boston.
- Singh, M., Singh, R.B. and Hassan, M.I. (Eds.), *Landscape Ecology and Water Management*, Proceedings of IGU Rohtak Conference, Volume 2.

GEOG-H-C- 203&204-P	PRACTICAL (CONTEMPORARY TECHNIQUES IN GEOGRAPHY)	(04 Credits, 120 Lectures) FM: 50 (40+10)
------------------------------------	---	--

A) Natural Hazards and their Management in the Indian Sub-continent.

20 Marks

A 1: Preparation and interpretation of Ombrothermic charts or Rainfall Dispersion Diagram (based on IMD data).

A 2: Preparation of Station models for different meteorological stations of India with the help of synoptic chart, preparation and interpretation of Hythergraph and Climograph.

A 3: Preparation and interpretation of Rating curves, Hydrographs and Unit hydrographs of rivers flowing through the Indian sub-continent.

A 4: Hazard Mapping: Identification and zoning of the following hazards, collation of maps and their interpretation: i) Meteorological drought ii) Flood iii) River bank erosion.

B) Economic and Human Development in Third World. 20 Marks

B 1: Computation of Human and Gender Development Index and ranking of countries/states/districts based on HDI and GDI, preparation and interpretation of Pyramid Diagram in reference of age and sex structure.

B 2: Preparation of Questionnaire and Survey schedule for assessment of development and for perception study.

B 3: Measures of spatial and size class distribution: i) Rank size rule ii) Lorenz curve

C) Practical note book and Viva Voce. 5+5=10 Marks

Books Recommended:

- Sharma, J. P., *Prayogik Bhugol*, Rastogi Prakashan, Meerut.
- Singh, L. R., *Prayogik Bhugol Ke Mool Siddhant*, Sharda Pustak Bhawan, Allahabad.
- Singh and Singh, *Elements of Practical Geography*, Kalyani Publishers, New Delhi.

- Chauhan, R. P., *Ramsurat, Prayogatmak Bhugol Ki Rooprekha*, Vasundhara Prakashan, Gorakhpur.
- Sinha evam Bala, *Uchh Cartography*, Sharda Pustak Bhawan, Allahabad.
- Sarkar, Ashish, *A Practical Geography*, Orient Blackswan Private Limited, New Delhi.
- Saha, P., *Advanced Practical Geography*, Orient Blackswan Private Limited, New Delhi

GEOG-H-GE-202-T	RURAL DEVELOPMENT	(04 Credits, 60 Lectures) FM: 75 (60+15)
Choice to choose from other disciplines (Annexure 2)		

Module I:

Defining Development: Inter-Dependence of Urban and Rural Sectors of the Economy; Need for Rural Development, Gandhian Concept of Rural Development.

Module II:

Rural Economic Base: Agriculture and Allied Sectors, Seasonality and Need for Expanding Non-Farm Activities.

Module III:

Area Based Approach to Rural Development: Drought Prone Area Programmes, PMGSY.

Module IV:

Target Group Approach to Rural Development: SGSY (Integrated Rural Development Programme). Provision of Services – Physical and Socio-Economic Access to Elementary Education and Primary Health Care and Micro credit.

Books Recommended:

- Krishnamurthy, J., *Rural Development - Problems and Prospects*, Rawat Publs., Jaipur.
- Lee D. A. and Chaudhri D. P. (eds.), *Rural Development and State*, Methuen, London.
- Misra R. P. and Sundaram, K. V. (eds.), *Rural Area Development: Perspectives and Approaches*, Sterling, New Delhi.
- Misra, R. P. (ed.), *Rural Development: Capitalist and Socialist Paths*, Vol. 1, Concept, New Delhi.
- Palione M., *Rural Geography*, Harper and Row, London.
- Ramachandran H. and Guimaraes J.P.C., *Integrated Rural Development in Asia – Learning from Recent Experience*, Concept Publishing, New Delhi.
- UNAPDI 1986, *Local Level Planning and Rural Development: Alternative Strategies*. (United Nations Asian & Pacific Development Institute, Bangkok), Concept Publs. Co., New Delhi.
- Yugandhar, B. N. and Mukherjee, Neela (eds.), *Studies in Village India: Issues in Rural Development*, Concept Publs. Co., New Delhi.

GEOG-H-GE-202-P	PRACTICAL	(02 Credits, 30 Lectures) FM: 50 (40+10)
------------------------	------------------	---

Project Work/Report on relevant topics pertaining to Rural Development in India, preferably on any Flagship Programme of the Government of India or the State Government (Jharkhand). **15 Marks**

Project File & Viva-Voce. **10 Marks**

GEOG-H-AECC-202-T	ENVIRONMENTAL SCIENCE	(02 Credits, 30 Lectures) FM: 50 (40+10)
--------------------------	------------------------------	---

Semester-III

Instruction to Question Setter for End Semester Examination (ESE): *There will be two groups of questions. Five Questions to be answered out of Nine Questions. Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions). Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks*

		Mid Semester			End Semester		Grand Total
		Written	Attendance	Total	Theory	Distribution of Marks	
1	Full Marks	10	05	15	60	5x12	60+15=75
2	Pass Marks	04	02	06	24	-	30

	No. of Questions to be set-			09 (Nine)
	Structure of Question	No. of Questions	Distribution of Marks	Total Marks
(A)	Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions).	1(A)- 6 1(B)- 2	1(A)- 6x1=6 1(B)- 2x3=6	12
(B)	Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks.	4	4x12	48
Total				60

GEOG-H-C-305-T	BIOGEOGRAPHY	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	---------------------	---

Module I:

Definition, scope & importance of Bio- Geography, Relation with other sciences, Development of Bio Geography- views of different Geographers; Hydrological cycle.

Module II:

Ecology and Ecosystem; Energy Flow in Ecosystem: Ecological factors of the land and their effect on plants animals; Dispersal of Plant and Animals; Bio-geo-chemical cycles.

Module III:

Concept of Biomes, Ecotone and Community; Forests Biomes, Grassland Biomes, Desert Biomes; National Parks and Sanctuaries in India and Jharkhand.

Module IV:

Climate as determinant of Bio- Resources; Biodiversity-degradation and Sustainable conservation; factors of soil formation, factors of soil erosion and its conservation, present status of soil in India, Development and management of barren lands in India.

Books Recommended:

- Bhattacharyya, N. N., *Biogeography*, Rajesh Publications, New Delhi.
- Garg, H. S., *Jai Bhugol*, SBPD Publications, Agra.
- Anderson, *Ecology for Environmental Science*.
- Chapman, J.L. and Reiss, M.J., *Ecology Principles and Applications*, Cambridge University Press, Cambridge.
- Joy, T. et al, *Human Impact on The Ecosystem*, Oliver and Boyd, London.
- Kendeigh, S.C., *Ecology with Special Reference to Man and animals*, Prentice Hall, New York.
- Simmons, I.G., *Bio-geographical Processes*, George Allen and Unwin, London.

GEOG-H-C-306-T	GEOGRAPHY OF INDIA	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	---------------------------	---

Module I:

India: Structure and Physiography, Drainage (Peninsular and Extra Peninsular), Climate and Climatic Regions. Edaphic and Biotic regions of India; Indian Forests and their Economic importance.

Module II:

Agriculture systems in India, cropping patterns in India, divide India into agricultural regions (as per ICAR); Green revolution and its consequences. Industries: Cotton, Sugar, Mineral based; Iron and steel, granite industries in Jharkhand. Transport: Surface, water & Air-Foreign Trade.

Module III:

Minerals: Distribution of Iron ore, Bauxite, Manganese, Atomic Minerals. Power Resources- Coal, Petroleum, Wind Energy in India. Regions of Geography: Middle Ganga Plain, Lower Ganga Plain, and Chhotanagpur Plateau.

Module IV:

Studies of Geographical Problems: Problems of unreliability of rainfall; Problems of soil salinity and its mitigation; Problems of development (Land Acquisition), displacement and rehabilitation; Problems of slum and urban rehabilitation in India.

Books Recommended:

- Deshpande C. D., *India: A Regional Interpretation*, ICSSR, New Delhi.
- Johnson, B. L. C., ed., *Geographical Dictionary of India*, Vision Books, New Delhi. Mandal R. B. (ed.), *Patterns of Regional Geography – An International Perspective*, Vol. 3, Indian Perspective.
- Sdyasuk Galina and P Sengupta, *Economic Regionalisation of India*, Census of India.
- Sharma, T. C., *India - Economic and Commercial Geography*, Vikas Publ., New Delhi.
- Singh R. L., *India: A Regional Geography*, National Geographical Society of India. Singh, Jagdish, *India - A Comprehensive & Systematic Geography*, Gyanodaya Prakashan, Gorakhpur.
- Chauhan, Birendra Singh, & Gautam, Alka, *Bharatvarsha Ka Vistrit Bhugol*, Rastogi Publications, Meerut.

GEOG-H-C-		(04 Credits, 60
------------------	--	------------------------

307-T	GEOGRAPHY OF JHARKHAND	Lectures) FM: 75 (60+15)
--------------	-------------------------------	-------------------------------------

Module I:

Physiography and Relief, Drainage Pattern, Forest Resource and its Economic importance.

Module II:

Agriculture: Irrigation- Types and distribution, Major corps- Food Crops; Population growth and distribution; Population composition- Sex, Age, Religion.

Module III:

Resources: Natural resources- Soil, Water, Mineral resources; Coal and Uranium- Distribution & development; Conventional and Non-conventional energy resources; Major Hydel Power Projects-Thermal Power Plants. Industries: Location factors- Distribution of Iron and steel, cement.

Module IV:

Educational development and structure of education in Jharkhand. House types of Munda villages in south Chhotanagpur. Transport: Roads and railways and development of tourism, eco-tourism in Jharkhand. Economy and habitats of Santhals, Oraons; Social, Economic and Environmental Problems of Jharkhand.

Books Recommended:

- Tiwari Ram Kumar, *Jharkhand ka Bhugol*, Rajesh Publication New Delhi.
- Sdyasuk Galina and P Sengupta, *Economic Regionalisation of India*, Census of India.
- Tiwari Ram Kumar, *Jharkhand ki Rooprekha*, Shivangan Publication Ranchi.
- Singh R. L., *India: A Regional Geography*, National Geographical Society of India. Singh, Jagdish, *India - A Comprehensive & Systematic Geography*, Gyanodaya Prakashan, Gorakhpur.
- Spate O. H. K. and Learmonth A. T. A., *India and Pakistan: A General and Regional Geography*, Methuen.
- Tirtha, Ranjit, *Geography of India*, Rawat Pubs., Jaipur & New Delhi.

- Pathak, C. R., *Spatial Structure and Processes of Development in India*. Regional Science Assoc., Kolkata.
- Tiwari, R.C., *Geography of India*. Prayag Pustak Bhawan, Allahabad.
- Singh, Saroj Kumar, *Jharkhand Pradesh ki Bhaugolik Vyakhya*, Rajesh Publication, New Delhi.

GEOG-H-C-305, 306 & 307-P	PRACTICAL	(06 Credits, 180 Lectures) FM: 75 (60+15)
--------------------------------------	------------------	--

- A) Instrumental Survey-** I. Plain Table Survey- Radiation and Intersection. II. Prismatic Compass Survey – Open Traverse and Closed Traverse Survey, Allotted area in Jharkhand region. **20 Marks**
- B) Population Projection of Jharkhand, Ring Diagram for Urban Population, Cube Diagram. 15 Marks**
- C) Sources of data; Classification and tabulation of data. Measures of Central Tendency: mean, median, mode, and quartile. 15 Marks**
- D) Geological Sheet (Minimum 6 sheets). 15 Marks**
- E) PNB+ Viva-Voce. 10 Marks**

Books Recommended:

- Sharma, J. P., *Prayogik Bhugol*, Rastogi Prakashan, Meerut.
- Singh, L. R., *Prayogik Bhugol Ke Mool Siddhant*, Sharda Pustak Bhawan, Allahabad.
- Singh and Singh, *Elements of Practical Geography*, Kalyani Publishers, New Delhi.
- Chauhan, R. P., *Ramsurat, Prayogatmak Bhugol Ki Rooprekha*, Vasundhara Prakashan, Gorakhpur.
- Sinha evam Bala, *Uchh Cartography*, Sharda Pustak Bhawan, Allahabad.

- Sarkar, Ashish, *A Practical Geography*, Orient Blackswan Private Limited, New Delhi.
- Saha, P., *Advanced Practical Geography*, Orient Blackswan Private Limited, New Delhi.

GEOG-H-GE-303-T	CLIMATE CHANGE: VULNERABILITY AND ADAPTATION	(04 Credits, 60 Lectures) FM: 75 (60+15)
Choice to choose from other disciplines (Annexure 2)		

Module I:

Science of Climate Change: Understanding Climate Change; Green House Gases and Global Warming; Global Climatic Assessment- IPCC.

Module II:

Climate Change and Vulnerability: Physical Vulnerability; Economic Vulnerability; Social Vulnerability.

Module III:

Impact of Climate Change: Agriculture and Water; Flora and Fauna; Human Health.

Module IV:

Adaptation and Mitigation: Global Initiatives with Particular Reference to South Asia; National Action Plan on Climate Change; Local Institutions (Urban Local Bodies, Panchayats).

Books Recommended:

- Singh, Savindra, *Environmental Geography*, Paryag Pustak Bhawan, Allahabad.
- Sharma, P. D., *Ecology and Environment*, Rastogi Publication, Meerut.
- Gautam, Alka, *Geography of Resources: Exploitation, Conservation and Management*, Rastogi Publication, Meerut.
- Gautam, Alka, *Environmental Geography*, Rastogi Publication, Meerut.
- Kaushik, S. D. and Garg, Kuldip, *Sansadhan evam Paryawaran Bhugol*, Rastogi Prakashan, Meerut.

- Prasad and Nautiyal, *Paryavaran Bhugol*, Sharda Pustak Bhawan, Allahabad.
- Singh, Savindra, *Paryavaran Bhugol Ka Swaroop*, Prawalika Prakashan, Allahabad.
- Gautam, Alka, *Sansadhan evam Paryavaran*, Sharda Pustak Bhawan, Allahabad.
- Srivastav, Lokesh, *Paryavaran adhyayan evam Prabandh*, Sharda Pustak Bhawan, Allahabad.
- Singh, Savindra, *Jaiv Bhugol*, Sharda Pustak Bhawan, Allahabad.
- Bhattacharya, N.N., *Biogeography*, Rajesh Publication, New Delhi.
- Negi, P. S., *Paristhitiki evam Paryavaran Bhugol*, Rastogi Prakashan, Meerut.

GEOG-H-GE-303-P	PRACTICAL	(02 Credits, 30 Lectures) FM: 50 (40+10)
------------------------	------------------	---

Project Work/Report on relevant topics pertaining to Climate Change and efforts to tackle it, preferably on any Major Climate Change Issue.

15 Marks

Project File & Viva-Voce.

10 Marks

GEOG-H-SEC-301-T	ENVIRONMENT AND PUBLIC HEALTH	(02 Credits, 30 Lectures) FM: 50 (40+10)
(For course details refer to Annexure 1)		

Semester-IV

Instruction to Question Setter for End Semester Examination (ESE): *There will be two groups of questions. Five Questions to be answered out of Nine Questions. Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions). Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks*

		Mid Semester			End Semester		Grand Total
		Written	Attendance	Total	Theory	Distribution of Marks	
1	Full Marks	10	05	15	60	5x12	60+15=75
2	Pass Marks	04	02	06	24	-	30

	No. of Questions to be set- 09 (Nine)			
	Structure of Question	No. of Questions	Distribution of Marks	Total Marks
(A)	Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions).	1(A)- 6 1(B)- 2	1(A)- 6x1=6 1(B)- 2x3=6	12
(B)	Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks.	4	4x12	48
Total				60

GEOG-H-C-408-T	GEOGRAPHY OF THREE NORTHERN CONTINENTS	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	---	---

Module I:

North America: Relief of North America, Natural Vegetation, Population of North America, Cotton textile Industry and Iron- Steel Industry, Water route of great lakes and Panama route.

Module II:

Europe: Physiographic division of Europe, Climate, Demographic pattern of Europe, Industrial Development and Industrial Regions; Oceanic routes of Europe.

Module III:

Asia: Physiography, Soil, Distributional factors of population, Agriculture development; Geographical account of SAARC Nations.

Module IV:

Location of Iron and steel Industry in U.S.A and U.K, wheat belt of Columbia basin, Coal resources of Europe; Regional Study of United Kingdom, British Island, Japan and USA.

Books Recommended:

- Mamoriya, Chaturbhuji, *Vishwa Ka Pradeshik Bhugol*, Sahitya Bhawan Publications, Agra.
- Maurya, S. D., *Asia Ka Kramwadha evam Pradeshik Bhugol*, Pravalika Publications, Agra.

GEOG-H-C-409-T	GEOGRAPHY OF THREE SOUTHERN CONTINENTS	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	---	---

Module I:

South America: Physiography, Agriculture and demographic set-up; Regional study of Brazil.

Module II:

Australia and New Zealand: General account of the physiography, Dairy farming and demographic set-up; Regional study of New Zealand.

Module III:

Africa: Physiography, Agriculture, grasslands (Savanna) and desert environment; Regional Account of Nigeria and Egypt.

Module IV:

Geographical account of Argentina, South Africa, Zimbabwe; Social and cultural aspect of Bushman, Hotentot, Maori and Bora.

Books Recommended:

- Mamoriya, Chaturbhuj, *Vishwa Ka Pradeshik Bhugol*, Sahitya Bhawan Publications, Agra.
- Bharadwaj, O. P., *Three Southern Continents*, Premier publishing Company, New Delhi.
- Yadav, G. P. and Ram, Suresh, *Teen Dakshini Mahadweep*, Kitab Ghar, Kanpur.
- Singh, Jagdeesh, Rao, Baccha Prasad, and Singh Ram Bali, *Teen Dakshini Mahadweep*, Vasundhara Prakashan, Gorakhpur.

GEOG-H-C-410-T	GEOGRAPHY OF TRAVEL AND TOURISM	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	--	---

Module I:

Nature and Scope: Definition and Nature; Scope and Extent; Concept of tourism, Factors affecting tourism development- Physical & Cultural.

Module II:

Classification of tourists:

- (A) Nationality- International, Domestic.
- (B) Time of Travel- Long haul, short haul, holiday tourists, day trippers.
- (C) Travel Distance- Global, continental, regional and local.
- (D) Number of Tourists- Individual and groups.
- (E) Purpose- Recreation, Heritage, Nature, Religious, Health, Sports.

Role of Accommodation in Tourism:

Accommodation Types- 1) Hotels, Motels, Inn, Saraies, Dharmashalas. 2) Govt. Accommodation, Tourist homes. 3) Youth Hostels, Cottages, Tents, Caravans. 4) Rail Yatri Bhavan, House Boats 5) Private accommodations and unrecognized accommodations.

Module III:

Role of Transportation in Tourism:

Mode of Transportation- Air, Rail, Road and Water Ways.

Agencies and Guides:

1) World Organizations, National Organisations 2) Private Agencies- National, International 3) Role of guides in tourism. 4) Licensing and recognition of guides. 5) Training Programme for Guides.

Impact of Tourism:

1) Economic impact 2) Physical and Environmental impacts 3) Socio-cultural impacts.

Module IV:

Development and Planning:

(A) Levels of Planning-International level planning, National level planning, Regional and Local planning.

(B) Tourism Planning in India- a). Development of tourism in India and Jharkhand b). Tourism policies of India and Jharkhand.

Evaluation of Potentials and Tourism: Potentials and Tourism Assessment of region's ability to attract tourists- a) Physical factors b) Cultural factors c) Social factors d) Economic factors e) Political factors.

Case studies of Major Tourist Centers of Jharkhand (at least four major tourist centre's).

Books Recommended:

- Dhar, P.N., *International Tourism: Emerging Challenges and Future Prospects*. Kanishka, New Delhi.
- Hall, M. and Stephen, P., *Geography of Tourism and Recreation – Environment, Place and Space*, Routledge, London.
- Kamra, K. K. and Chand, M., *Basics of Tourism: Theory, Operation and Practise*, Kanishka Publishers, Pune.
- Singh Jagbir, *“Eco-Tourism”*, I.K. International Pvt. Ltd. S25, Green Park Extension, Uphaar Cinema Market, New Delhi, India.
- Prasad, Kamla, *Tourism in Jharkhand*, Rajesh Publications, New Delhi.

GEOG-H-C-408, 409 & 410-P	PRACTICAL	(06 Credits, 180 Lectures) FM: 75 (60+15)
--------------------------------------	------------------	--

- A) Projection- Polar Zenithal Equidistant, Polar Zenithal Equal Area and Gnomonic Polar Zenithal Projection. **20 Marks**
- B) Conical Projection- Conical Projection with one standard parallel, Conical projection with two standard parallels and Polyconic Projection. **20 Marks**
- C) Weather symbols and representation of atmospheric features. **10 Marks**
- D) Interpretation of Indian Daily Weather Maps (July, October, and January). **15 Marks**
- E) PNB+ Viva-Voce. **10 Marks**

Books Recommended:

- Sharma, J. P., *Prayogik Bhugol*, Rastogi Prakashan, Meerut.
- Singh, L. R., *Prayogik Bhugol Ke Mool Siddhant*, Sharda Pustak Bhawan, Allahabad.
- Singh and Singh, *Elements of Practical Geography*, Kalyani Publishers, New Delhi.
- Chauhan, R. P., *Ramsurat, Prayogatmak Bhugol Ki Rooprekha*, Vasundhara Prakashan, Gorakhpur.
- Sinha evam Bala, *Uchh Cartography*, Sharda Pustak Bhawan, Allahabad.
- Sarkar, Ashish, *A Practical Geography*, Orient Blackswan Private Limited, New Delhi.
- Saha, P., *Advanced Practical Geography*, Orient Blackswan Private Limited, New Delhi.

GEOG-H-GE-404-T	SUSTAINABLE DEVELOPMENT	(04 Credits, 60 Lectures) FM: 75 (60+15)
Choice to choose from other disciplines (Annexure 2)		

Module I:

Sustainable Development: Definition, Components, Historical Background and Scope; The role of higher education in sustainable development.

Module II:

The Millennium Development Goals: National Strategies and International Experiences.

Module-III:

Sustainable Regional Development: Need and examples from Cities and Mountains; The human right to health; Poverty and disease; The Challenges of Health Coverage in High-Income Countries.

Module IV:

Inclusive Development: Education, Health; Climate Change: Policies and Global Cooperation for Climate Change; Sustainable Development Policies and Programmes: The proposal for SDGs at Rio+20; Illustrative SDGs; Goal-Based Development; Financing for Sustainable Development; Principles of Good Governance; National Environmental Policy.

Books Recommended:

- Ayers, Jessica and David Dodman, “Climate change adaptation and development I: The state of the debate”, in *Progress in Development Studies* 10 (2): 161-168.
- Baker, Susan, *Sustainable Development*, Milton Park, Abingdon, Oxon; New York, N.Y.: Routledge.
- Brosius, Peter, “Endangered forest, endangered people: Environmentalist representations of indigenous knowledge”, *Human Ecology* 25: 47-69.
- Lohman, Larry, “Re-imagining the population debate”. Corner House Briefing 28.

- Martínez-Alier, Joan et al., “*Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm*” Ecological Economics 69: 1741-1747.
- Merchant, Carolyn (Ed.), *Ecology. Atlantic Highlands*, N.J: Humanities Press. (Introduction, pp 1-25.)
- Osorio, Leonardo et al., “*Debates on sustainable development: towards a holistic view of reality*”. Environment, Development and Sustainability 7: 501-518.
- 9. Robbins, Paul, *Political Ecology: A Critical Introduction*. Blackwell Publishing.
- Singh, Savindra, *AApda Prabandhan*, Pravalika Publications, Allahabad.

GEOG-H-GE-404-P	PRACTICAL	(02 Credits, 30 Lectures) FM: 50 (40+10)
------------------------	------------------	---

Project Work/Report on relevant topics pertaining to Sustainable Development, preferably on any Sustainable Development Goals/Policies & Programmes/Efforts made at National/International Forum. **15 Marks**

Project File & Viva-Voce. **10 Marks**

GEOG-H-SEC-401-T	CONSTITUTION OF INDIA AND HUMAN RIGHTS	(02 Credits, 30 Lectures) FM: 50 (40+10)
(For course details refer to Annexure 1)		

Semester-V

Instruction to Question Setter for End Semester Examination (ESE): *There will be two groups of questions. Five Questions to be answered out of Nine Questions. Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions). Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks*

		Mid Semester			End Semester		Grand Total
		Written	Attendance	Total	Theory	Distribution of Marks	
1	Full Marks	10	05	15	60	5x12	60+15=75
2	Pass Marks	04	02	06	24	-	30

	No. of Questions to be set- 09 (Nine)			
	Structure of Question	No. of Questions	Distribution of Marks	Total Marks
(A)	Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions).	1(A)- 6 1(B)- 2	1(A)- 6x1=6 1(B)- 2x3=6	12
(B)	Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks.	4	4x12	48
Total				60

GEOG-H-C-511-T	HUMAN GEOGRAPHY	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	------------------------	---

Module I:

Meaning, nature and scope of Human Geography; Concepts of Human Geography; Man- Environment relationships: determinism, possibilism, probabilmism, and environmentalism.

Module II:

Evolution of man; Classification of races; Characteristics of races and their broad distribution; Human adaptation to environment: Eskimo, Masai and Bushman; Primitive people of Jharkhand: Santal, Oraon and Birhor.

Module III:

Growth of population; Distribution of population; Major human agglomerations; Types of Migration; Trends of Urbanization.

Module IV:

Rural settlements: characteristics, types and regional pattern; Urban settlements: evolution and classification; Rural houses in India: types, classification and regional pattern.

Books Recommended:

- Johnston R; Gregory D, Pratt G. et al. *The Dictionary of Human Geography*, Blackwell Publication.
- Kaushik, S.D., *Manav Bhugol*, Rastogi Publication, Meerut.
- Maurya, S.D., *Manav Bhugol*, Sharda Pustak Bhawan. Allahabad.
- Hussain, Majid, *Manav Bhugol*, Rawat Publications, Jaipur.
- Garg, H. S., *Manav Bhugol*, Rajesh Publications, New Delhi.
- Chandna, R.C., *Population Geography*, Kalyani Publisher.
- Hassan, M.I., *Population Geography*, Rawat Publications, Jaipur
- Daniel, P.A. and Hopkinson, M.F., *The Geography of Settlement*, Oliver & Boyd, London.

GEOG-H-C-512-T	ECONOMIC GEOGRAPHY	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	---------------------------	---

Module I:

Meaning and approaches to economic Geography; Main concepts of economic Geography; Resource: concept and classification; Resource conservation.

Module II:

Natural resources: soil, forest and water; Mineral resources: iron ore and bauxite; Power resources: coal and petroleum; Principal crops: wheat, rice and cotton.

Module III:

Agricultural regions of the world (Derwent Whittlesey); Theory of agricultural location (Von Thunen); Theory of industrial location (Weber); Major industries: iron and steel, and cotton textiles.

Module IV:

World transportation: major trans-continental railways, and sea routes; WTO and International trade: patterns and trends; Major trade blocs: EEC, ASEAN; Effect of globalization on developing countries.

Books Recommended:

- Singh, Satnam, *Aarthik Bhugol*, University Prakashan, New Deli.
- Singh, Kashi Nath, and Sing, Jagdish, *Aarthik Bhugol Ke Mool Tatva*, Gyanodaya Prakasa.
- Maurya, S. D., *Sansadhan Bhugol*, Prayag Pustak Bhawan, Allahabad.
- Gautam, Alka, and Kaushik, S. D., *Sansadhan Bhugol*, Rastogi Publications, Meerut.
- Alexander J. W., *Economic Geography*, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
- Coe N. M., Kelly P. F. and Yeung H. W., *Economic Geography: A Contemporary Introduction*, Wiley-Blackwell.
- Hodder B. W. and Lee Roger, *Economic Geography*, Taylor and Francis.
- Combes P., Mayer T. and Thisse J. F., *Economic Geography: The Integration of Regions and Nations*, Princeton University Press.
- Wheeler J. O., *Economic Geography*, Wiley.

GEOG-H-C-511 & 512-P	PRACTICAL INTERPRETATION OF TOPOGRAPHICAL SHEETS	(04 Credits, 120 Lectures) FM: 50 (40+10)
---------------------------------	---	--

A) Introduction to Survey of India (SOI) toposheets, marginal information, grid reference, conventional signs and symbols, Principles of toposheet numbering as followed by Survey of India, Reading of at least three SOI toposheets one each for plain, plateau and mountainous/hilly region, on toposheet of 1:50,000 scale.

10 Marks

B) Drawing and analysis of profiles and transect chart with interpretation.

10 Marks

C) One day field excursion for orientation of toposheet, observation and identification of geographical features and preparation of a brief report.

20 Marks

D) PNB+ Viva-Voce.

5+5=10 Marks

Books Recommended:

- Sharma, J. P., *Prayogik Bhugol*, Rastogi Prakashan, Meerut.
- Singh, L. R., *Prayogik Bhugol Ke Mool Siddhant*, Sharda Pustak Bhawan, Allahabad.
- Singh and Singh, *Elements of Practical Geography*, Kalyani Publishers, New Delhi.
- Chauhan, R. P., *Ramsurat, Prayogatmak Bhugol Ki Rooprekha*, Vasundhara Prakashan, Gorakhpur.
- Sinha evam Bala, *Uchh Cartography*, Sharda Pustak Bhawan, Allahabad.
- Sarkar, Ashish, *A Practical Geography*, Orient Blackswan Private Limited, New Delhi.
- Saha, P., *Advanced Practical Geography*, Orient Blackswan Private Limited, New Delhi.

GEOG-H-DSE- 501 A/501 B/501 C-T	(501 A) POPULATION GEOGRAPHY OR (501 B) SETTLEMENT GEOGRAPHY OR (501 C) URBAN GEOGRAPHY (Choice to choose any one)	(04 Credits, 60 Lectures) FM: 75 (60+15)
--	---	---

501 A- POPULATION GEOGRAPHY

Module I:

Nature and scope of Population Geography; Sources and types of population data: census, sample survey (NSS) and vital registration system.

Module II:

World Population: growth, causes and consequences; Factors affecting population distribution; Migration: types and determinants; Urbanization: trends and pattern.

Module III:

Population dynamics: fertility and mortality, age and sex structure; Occupational structure; Malthusian Theory and Demographic Transition Theory; Human Resource Development: indicators and patterns.

Module IV:

INDIA- Population growth; Distribution of population; Density types; Population problems; Population Policy.

Books Recommended:

- Maurya, S. D., *Population Geography*, Prawalika Publication, Allahabad.
- Chandana, R. C., *Jansankhya Bhugol*, Kalyani Publishers, New Delhi.
- Tripathi, R. D., *Janshankhya Bhugol*, Vasundhara Prakashan, Gorakhpur.
- Sahoo, H. (ed.) *Population Issues*, Rawat Publication, New Delhi.
- Tiwari, Ram Kumar, *Jansankhya Bhugol*, Prawalika Publication, Allahabad.
- Unisa, S., *Population Health and Environment*, Rawat Publication, New Delhi.

- Mukherjee, *Migration in India: Urbanization, Regional Disparities*, Rawat Publication, New Delhi.

501 B- SETTLEMENT GEOGRAPHY

Module I:

Meaning, scope and significance of settlement Geography, Its relationship with other subjects. Evolution of human settlement, components of settlement sites. Spatial and temporal trends in size and growth of settlements. Distribution, pattern and types of Indian rural settlements. Rural settlement: theoretical models (Nearest neighbour and gravitational model).

Module II:

Settlements structure: Morphological structure of cities, empirical theoretical models (Burgess, Hoyt and Harris and Ullman). Functional classification of urban centers. Hierarchy of rural settlements. City region and rural – urban fringe. Contemporary urban issues. Urban renewal, Urban sprawl, Slums, Green belts garden cities.

Module III:

Functional typology of villages: social, economic, cultural factors influencing the dynamics of settlement structure. Theories of Christaller and Losch (Central place theory and their application to settlement Hierarchy. Pattern of urban settlement, factors contributing to settlement hierarchy.

Module IV:

Issues, perspectives and policies on population and human settlement. Interface between human settlement and environment. Transformation and planning of Indian villages. Hilly settlement, plateau settlement, plains settlement and sea beach settlement in India.

Books Recommended:

- Bose A., *India's Urbanization 1947-2000*, Tata Mcgraw Hill, New Delhi.
- Chisholm, M., *Rural Settlements and Landuse*, Hutchinson, London.
- Clout, R. D., *Rural Geography*, Pergamon Press, London.
- Dickenson, R. E., *City, Region and Regionalism*, Kegan Paul Trench Trubner & Co. London.

- Krishnan,G.,*Nagar Bhugol*, Punjab State University Text Book Board, Chandigarh(Punjab).
- Misra, H. N. (ed), *Rural Geography*, Heritage Publishers, New Delhi.
- Mukherji ,R. K., *Man and his Habitation*, Popular Books, Bombay.
- Singh R. L.,*Readings in Rural Settlement Geography*, Banaras Hindu University, Department of Geography, Varanasi.
- Turner Roy(ed), *India's Urban Future*, Oxford University Press, Bombay.
- Maurya, S. D. and Kumar, Praveen., *Adhivas Bhugol*, Sharda Pustak Bhawan, Allahabad.

501 C- URBAN GEOGRAPHY

Module I:

Meaning and scope of Urban Geography - Its relationship with urban settlements. Recent trends in Urban Geography. Processes and pattern of organization, geographical approaches to the study of organization. Development of urban Geography in India.

Module II:

Meaning of city, characteristics of cities in different historical period with special reference to India. Definition of urban places and their classification. Functional classification of towns. Form and development of ancient, medieval and modern period towns.

Module III:

Problems of modern towns, specialty and models: Size and spacing of cities. Rank size rule, law of primate city, nearest neighbor analysis, city region. Rural Urban fringe, central place theory of Christaller and Losch.

Module IV:

Urban issues and planning: Urban problem- environmental, urban poverty, slums, transportation, housing, crime.

Meaning, concept and components of urban planning, planned city-Delhi metropolis, master plan, new trends in Urban planning. Urban planning in India.

Books Recommended:

- Fyfe N. R. and Kenny J. T., *The Urban Geography Reader*, Routledge.
- Graham S. and Marvin S., *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*, Routledge.
- Hall T., *Urban Geography*, Taylor and Francis.
- Kaplan D. H., Wheeler J. O. and Holloway S. R., *Urban Geography*, John Wiley.
- Knox P. L. and McCarthy L., *Urbanization: An Introduction to Urban Geography*, Pearson Prentice Hall New York.
- Knox P. L. and Pinch S., *Urban Social Geography: An Introduction*, Prentice-Hall.
- Pacione M., *Urban Geography: A Global Perspective*, Taylor and Francis.
- Sassen S., *The Global City: New York, London and Tokyo*, Princeton University Press.
- Ramachandran R., *Urbanisation and Urban Systems of India*, Oxford University Press, NewDelhi
- Ramachandran, R., *The Study of Urbanisation*, Oxford University Press, Delhi
- Singh, R.B. (Eds.), *Urban Sustainability in the Context of Global Change*, Science Pub Inc., Enfield (NH), USA and Oxford & IBH Pub., New Delhi.
- Singh, R.B. (Ed.) *Urban Development, Challenges, Risks and Resilience in Asian megacities. Advances in Geographical and Environmental Studies*, Springer.

GEOG-H-DSE- 502 A/502 B/502 C-T	(502 A) AGRICULTURAL GEOGRAPHY OR (502 B) SOIL GEOGRAPHY OR (502 C) INDUATRIAL GEOGRAPY (Choice to choose any one paper)	(04 Credits, 60 Lectures) FM: 75 (60+15)
--	---	---

502 A- AGRICULTURAL GEOGRAPHY

Module I:

Meaning and scope of Agricultural Geography; Approaches to Agricultural Geography; Physical, cultural and institutional factors affecting agriculture.

Module II:

Crop concentration and crop diversification; Delineation of crop combination regions; Agricultural regions of the world; Detailed study of subsistence, plantation, commercial and mixed farming.

Module III:

Agricultural land-use and carrying capacity; Land use pattern with special reference to India; Measures of agricultural efficiency and agricultural productivity.

Module IV:

Agro-climatic regions of India, Green Revolution in India; Second generation reforms in Indian agriculture: Land and institutional reforms; Organic and contract farming; Agricultural planning and policies in India.

Books Recommended:

- Sharma, B. L. & Bharadwaj, Pallak, *Krishi Bhugol*, Rastogi Publication, Meerut.
- Husain, Majid, *Agricultural Geography*, Rawat Publications, Delhi.
- Tiwari, Ramchandra, & Singh, Brahmanand, *Krishi Bhugol*, Pravalika Publications, Allahabad.
- Basu, D.N., and Guha, G.S., *Agro-Climatic Regional Planning in India*, Vol. I & II, Concept Publication, New Delhi.
- Bryant, C.R., Johnston, T.R, *Agriculture in the City Countryside*, Belhaven Press, London.
- Mohammad, N., *New Dimension in Agriculture Geography*, Vol. I to VIII, Concept Pub., NewDelhi.
- Shafi, M., *Agricultural Geography*, Doring Kindersley India Pvt. Ltd., New Delh.i
- Singh, J., and Dhillon, S. S., *Agricultural Geography*, Tata McGraw Hill, New Delhi. Tarrant J. R., 1973: *Agricultural Geography*, David and Charles, Devon.

502 B- SOIL GEOGRAPHY

Module I:

Nature, scope and significance of Soil Geography. Soil as prime natural resource, Its relationship with agriculture and plant life. Soil forming factors: Parent material, organic, climate, topographic, spatio-temporal dimensions.

Processes of soil formation and development: physical, biotic and chemical. Type and importance of soil in India.

Module II:

Physical properties of soils: Morphology, Texture, Structure, water, air, temperature and other properties of soil; Chemical properties of soil and soil reaction; Genetic classification of soil; Taxonomic classification of soils zonal, Azonal and intra-zonal, their characteristics; Soil organism, macro-animals and plants-nematodes, protozoa, rotifers, fungi, bacteria, algae and actinomyces.

Module III:

Soil profile: Development, soil catena, pedogenic regimes, podzolization, laterization, calcification and gleization. Sources of soil pollution: Natural and Human Resources. Soil pollution: Effects and controls of soil pollution. Soil erosion, erosion problem and conservation of India.

Module IV:

Evaluation of land and soil: Parametric and non-parametric systems land capability classification, soil survey, modern techniques, field study of soil profile and their characteristics. Soil reclamation and management. Soil survey and landforms in environmental management. Integrated soil and water management.

Books Recommended:

- Biswas, T.D. and Mukherjee, S. K., *Text book of Soil Science*, Tata McGraw Hill, new Delhi.
- Buckman, H.R. and Brady, N.C., *Nature and Properties of Soil*, McMillan, New York.
- Bunting, A., *Geography of Soil*, Hutchinson, London.
- Daji, J.A., Kadam, J.R. and Patil, N.D., *A Textbook of Soil Science*, Media Promoters and Publishers Pvt Ltd, Mumbai.
- Fitzpatrick, E.A., *Soils, Their Formation, classifications and Distribution*, ELBS/ Longman, London.
- Foth, H.D. and Schafer, J.W., *Soil Geography and Land Use*, John Wiley, New York.

- Joffe, J.S., *ABC of Soil*, Oxford Book Co., Kolkata.

502 C- INDUSTRIAL GEOGRAPHY

Module I:

Meaning and scope of Industrial Geography; Industrialization; Concept of industrial revolution with reference to Britain and India.

Module II:

Factors of industrial location; Theories of industrial location: Weber, Hoover, Lösch and Smith.

Module III:

Distribution, growth, production trends and problems of: iron and steel, cotton textile, and sugar industries; Industrial policies in India; Role of industries in regional development.

Module IV:

Concept and methods of industrial regionalization; Major industrial regions of the world; Structure of major industrial complexes: Mid -Atlantic coastal region of USA, Ruhr Industrial region, Mumbai -Ahmedabad industrial region.

Books Recommended:

- Alexanderson, C., *Geography of Manufacturing*, Prentice-Hall of India, New Delhi.
- Hoover, E. M., *Location and Space Economy*, McGraw Hill, New York.
- Lodha, R. M., *Audyogika Bhoogol*, Rajasthan Hindi Granth Academy, Jaipur.
- Miller, E., *A Geography of Manufacturing*, Prentice-Hall, Englewood Cliffs, New Jersey.
- Riley, R. C., *Industrial Geography*, Chatto and Windus Ltd. London.
- Singh, M. B., *New Perspectives in Industrial Geography*, Lotus Publication, Varanasi.
- Singh, M. B., *Industrial Geography*, Lotus Publication, Varanasi.

GEOG-H-DSE- 501 & 502 -P	PRACTICAL	(04 Credits, 120 Lectures) FM: 50 (40+10)
---	------------------	--

A) Land Use Survey allotted by HOD.

40 Marks

B) Viva-Voce.

10 Marks

Semester-VI

Instruction to Question Setter for End Semester Examination (ESE): *There will be two groups of questions. Five Questions to be answered out of Nine Questions. Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions). Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks*

		Mid Semester			End Semester		Grand Total
		Written	Attendance	Total	Theory	Distribution of Marks	
1	Full Marks	10	05	15	60	5x12	60+15=75
2	Pass Marks	04	02	06	24	-	30

	No. of Questions to be set- 09 (Nine)			
	Structure of Question	No. of Questions	Distribution of Marks	Total Marks
(A)	Group A is compulsory and will contain two questions. Question No.1 (A) will be MCQ of 1 mark each (six questions). Question No.1 (B) will be short answer type to be answered in about 50 words of 3 marks (2 Questions).	1(A)- 6 1(B)- 2	1(A)- 6x1=6 1(B)- 2x3=6	12
(B)	Group B will contain descriptive type eight questions of twelve marks each, out of which any four are to answer. Each question carries 12 marks.	4	4x12	48
Total				60

GEOG-H-C-613-T	ENVIRONMENTAL GEOGRAPHY	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	--------------------------------	---

Module I:

Definition and Scope of Environmental Geography; Meaning and Components of Environment.

Module II:

Ecology, Eco-Systems and Soil System:

- 1) Definition and Scope of Ecology.
- 2) Meaning, Types, structure/Components and Functioning of Eco-Systems.
- 3) Meaning and Components of Soil System.

Module III:

Environmental Degradation and Pollution i. Meaning and Causes of Environmental Degradation ii. Meaning, Sources and Causes of Air and Water Pollution.

Module IV:

Environmental Issues:

- 1) Depletion of Ozone Layer, Ecological Significance of Ozone, Protection of Ozone Layer.
- 2) Acid Rain- Causes and Effects.
- 3) A detailed account of the concept of- Global Warming, Environmental Programmes and Policies (Global, National and Local levels).

Books Recommended:

- Singh, Savindra, *Environmental Geography*, Prayag Pustak Bhawan, Allahabad.
- Sharma, P. D., *Ecology and Environment*, Rastogi Publication, Meerut.
- Gautam, Alka, *Geography of Resources: Exploitation, Conservation and Management*, Rastogi Publication, Meerut.
- Gautam, Alka, *Environmental Geography*, Rastogi Publication, Meerut.
- Kaushik, S. D. and Garg, Kuldip, *Sansadhan evam Paryavaran Bhugol*, Rastogi Prakashan, Meerut.
- Prasad and Nautiyal, *Paryavaran Bhugol*, Sharda Pustak Bhawan, Allahabad.
- Singh, Savindra, *Paryavaran Bhugol Ka Swaroop*, Prawalika Prakashan, Allahabad.
- Gautam, Alka, *Sansadhan evam Paryavaran*, Sharda Pustak Bhawan, Allahabad.
- Srivastav, Lokesh, *Paryavaran adhyayan evam Prabandh*, Sharda Pustak Bhawan, Allahabad.

- Singh, Savindra, *Jaiv Bhugol*, Sharda Pustak Bhawan, Allahabad.
- Bhattacharya, N.N., *Biogeography*, Rajesh Publication, New Delhi.
- Negi, P. S., *Paristhitiki evam Paryavaran Bhugol*, Rastogi Prakashan, Meerut.

GEOG-H-C-614-T	REGIONAL DEVELOPMENT AND PLANNING	(04 Credits, 60 Lectures) FM: 75 (60+15)
-----------------------	--	---

Module I:

Meaning, concepts and scope of regional development and planning; Approaches to Regional Development; Approaches to Regional Planning; Theories of regional development (Myrdal and Perroux).

Module II:

Evolution of Regional Planning in India; Concepts and types of regions; Schemes of regionalization; Macro micro planning regions of India; Multi-level planning; Participatory planning.

Module III:

Regional development in India: patterns and imbalances; Planning for regional development; Role of agriculture, industry and infrastructure (transport and power) in regional development.

Module IV:

Area development and planning: National Capital Region; Local-level planning and Panchayati Raj; Planning for Eastern Uttar Pradesh and North-East India.

Books Recommendation:

- Ray, Jayshree, *Introduction to Development and Regional Planning*, Orient Blackswan, New Delhi.
- Puri, V. K. and Chand, Mahesh, *Regional Planning in India*, Allied Publishers Ltd., New Delhi.
- Chandana, R. C., *Regional Planning and Development*.
- Chandana, R. C., *Pradeshik Niyojan evam Vikash*, Kalyani Publishers, New Delhi.

- Srivastav, Chauhan, and Sharma, *Pradeshik Niyojan evam Santulit Vikash*, Vasundhara Prakashan, Gorakhpur.
- Aggrawal and Nath, *Regional Development and Planning in India*, Concept Publishing Company, New Delhi.
- Shukla, J., *Regional Development and Planning*, Disha Publication, New Delhi.

GEOG-H-C-613 & 614-P	PRACTICAL	(04 Credits, 120 Lectures) FM: 50 (40+10)
---------------------------------	------------------	--

- A) Dumpy Level Survey, Clinometer, Sextant. **10 Marks**
- B) Cylindrical Projection- Equidistant Projection, Equal Area Projection, and Mercator's Projection for world map. **15 Marks**
- C) Geographical Excursion of any part of India and prepare environmental report of visited area. **15 Marks**
- D) PNB+ Viva-Voce. **10 Marks**

Books Recommended:

- Sharma, J. P., *Prayogik Bhugol*, Rastogi Prakashan, Meerut.
- Singh, L. R., *Prayogik Bhugol Ke Mool Siddhant*, Sharda Pustak Bhawan, Allahabad.
- Singh and Singh, *Elements of Practical Geography*, Kalyani Publishers, New Delhi.
- Chauhan, R. P., *Ramsurat, Prayogatmak Bhugol Ki Rooprekha*, Vasundhara Prakashan, Gorakhpur.
- Sinha evam Bala, *Uchh Cartography*, Sharda Pustak Bhawan, Allahabad.
- Sarkar, Ashish, *A Practical Geography*, Orient Blackswan Private Limited, New Delhi.

- Saha, P., *Advanced Practical Geography*, Orient Blackswan Private Limited, New Delhi.

GEOG-H-DSE- 603 A/603 B/603 C-T	(603 A) SOCIAL GEOGRAPHY OR (603 B) CULTURAL GEOGRAPHY OR (603 C) TRIBAL GEOGRAPHY (Choice to choose any one paper)	(04 Credits, 60 Lectures) FM: 75 (60+15)
--	--	---

603 A- SOCIAL GEOGRAPY

Module I:

Meaning and scope of Social Geography; Concept of social space; Social differentiation and stratification; Social morphology.

Module II:

Social differentiation and region formation: Bases of social region formation; Evolution of sociocultural regions of India; Role of race, caste, tribe, religion and languages; India — unity in diversity

Module III:

Concept of social wellbeing; Physical quality of life; Human development: concept and measurements; Rural-urban interfaces in India: health care, education and shelter; Gender issues in India

Module IV:

Public policy and social planning in India; Appraisal of Five-Year Plans and social policies in India; Social policy and planning for drought and flood prone areas; Social impact assessment of development projects.

Books Recommended:

- Maurya, S. D., *Samajik Bhugol*, Sharda Pustak Bhawan.
- Singh, B. A. N., *Samajik Bhugol*, Prayag Pustak Bhawan.
- Ahmed, A., *Social Geography*, Rawat Publication, New Delhi
- Jones, E. and Eyles, J., *An Introduction to Social Geography*, Oxford University Press, Oxford.
- Ahmed A., *Social Geography*, Rawat Publications, Delhi.

- Casino V. J. D., Jr., *Social Geography: A Critical Introduction*, Wiley Blackwell.
- Cater J. and Jones T., *Social Geography: An Introduction to Contemporary Issues*, Hodder Arnold.
- Panelli R., *Social Geographies: From Difference to Action*, Sage Publications.
- Smith D. M., *Geography and Social Justice*, Blackwell, Oxford.
- Smith S. J., Pain R., Marston S. A., Jones J. P., *The SAGE Handbook of Social Geographies*, Sage Publications.

603 B- CULTURAL GEOGRAPHY

Module I:

Meaning, nature and scope of Cultural Geography; Historical development of cultural geography; Cultural region and types; Phases of cultural development; Acculturation.

Module II:

Environmental and culture: culture areas and cultural realms of the world and relationship with environment; Elements of cultural expressions; Folk & its revival; Cultural adaptation and environmental perception

Module III:

Spatial structure; Focuses on similarities and differences of various cultures with respect to racial, ethnic, religious, linguistic, demographic and organizational characteristics in Indian context.

Module IV:

Origin and Evolution of Human races and classification; Habitat, Economy and Society of tribal groups. Racial elements in India's population; Tribes of India and Jharkhand (Bhil, Gond, Toda, Nago, Oraon, Munda and Santhal), Tribes of world (Eskimo, Pigmy, Bushman) Pattern of popular culture and cultural fusion.

Books Recommended:

- Crang, Mike, *Cultural Geography*, Routledge, London.
- Cresswell, Tim, *In Place / Out of Place: Geography, Ideology and Transgression*, University of Minnesota press, Minneapolis.

- Donald, James, *Imagining the Modern City*, Athlone Press, London.
- Duncan, James and Duncan, N, “(Re) Reading the landscape”, *Environment and Planning, Society and Space*, 6, 117-26.
- Glenn, Jordon, *Cultural Politics*, Blackwell Oxford (UK) and Cambridge (USA).
- Highmore, Ben, *Everyday Life and Cultural Theory*, Routledge, London and New York.
- Baker Alan and C, Biger, Eds. *Ideology and Landscape in Historical Perspective*, Cambridge University Press, Cambridge.
- Blunt, Alison and C. McEwan, *Post-Colonial Geographies*, Continuum, London.
- 3. Castells, Manuel, *The Network Society*, Blackwell, Oxford

4. Cavallaro Davi (2001) *Critical and Cultural Theory: Thematic Variations*, Athlone Press, London and New Brunswick, NJ.

5. Cosgrove Denis (1984) *Social Transformation and Symbolic Landscape*, Croom Helen, London.

603 C- TRIBAL GEOGRAPHY

Module I:

Meaning and scope and function of Tribal Geography, Evolution of man, Evolution of culture, Races of the world – classification of races, Criteria of Racial classification, Classification of races in India, Distribution of major races.

Module II:

Habitat Economy and society of following tribe of the world –Bushman, Hottentots, Eskimos and Polynesian

Module III:

Habitat Economy and society of following tribe of India and Jharkhand – Gond, Bhils, Oraon, Munda and Santhals

Module IV:

Tribal villages, Tribal arts and culture, tribal policy and movement (Birsa, Tana and Siddhu-Kanu in Jharkhand), Changing nature of Tribal in Jharkhand (180-1825), Impact of urbanization and industrialization on tribes of Jharkhand. Forest ecology and Tribes and tribal development Programme.

Books Recommended:

- Bose, N.K., *Culture & Society in India*, Asia Publishing House.
- Dube S.C., *Tribal Heritage of India*, Vikas Publications New Delhi.
- Haimendrof, C. V., *Tribes of India: The struggle for survival*, Oxford University Press.
- Hasnain N., *Tribes in India*, Harnam Publications, New Delhi.
- Rao M.S.A., *Social Movement in India*, Manohar, Delhi.
- Singh K.S., *Tribal Situation in India*, Indian Institute of Advance Study.
- Singh K.S., *Tribal Society*, Manohar, Delhi.
- Singh K.S., *Tribal Movements in India*, Vol-18 II, Manohar, New Delhi.
- Kaushik, S.D., *Manav Bhugol*, Rastogi Publication, Meerut.
- Maurya, S.D., *Manav Bhugol*, Sharda Pustak Bhawan. Allahabad.
- Hussain, Majid, *Manav Bhugol*, Rawat Publications, Jaipur.
- Garg, H. S., *Manav Bhugol*, Rajesh Publications, New Delhi.

GEOG-H-DSE- 604 A/604 B/604 C-T	(604 A) POLITICAL GEOGRAPHY OR (604 B) RESOURCE GEOGRAPHY OR (604 C) APPLIED GEOGRAPHY (Choice to choose any one paper)	(04 Credits, 60 Lectures) FM: 75 (60+15)
--	--	---

604 A- POLITICAL GEOGRAPHY

Module I:

Introduction: Introduction, Nature, Scope and Geopolitics. State, Nation and Nation State – Concept of Nation and State, Attributes of State – Frontiers, Borders, Shape, Size, Territory and Sovereignty, Concept of Nation State.

Module II:

Electoral Geography – Geography of Voting, Geographic Influences on Voting pattern, Geography of Representation, Gerrymandering.

Module III:

Political Geography of Resource Conflicts – Water Sharing Disputes, Disputes and Conflicts Related to Forest Rights and Minerals, issues of land locked states in Asia and Africa

Module IV:

Politics of Displacement: Issues of relief, compensation and rehabilitation: with reference to Dams and Special Economic Zones.

Books Recommended:

- Agnew J., *Making Political Geography*, Arnold.
- Agnew J., Mitchell K. and Toal G., *A Companion to Political Geography*, Blackwell.
- Cox K. R., Low M. and Robinson J., *The Sage Handbook of Political Geography*, Sage Publications.
- Mathur H M and M M Cernea (eds.) *Development, Displacement and Resettlement – Focus on Asian Experience*, Vikas, Delhi.
- Verma, M. K., *Development, Displacement and Resettlement*, Rawat Publications, Delhi.
- Dwiwedi, R. L., *Fundamentals of Political Geography*.
- Adhikari, Sudepta, *Political Geography*.
- Dikshit, Ramesh Dutta, *Political Geography: The Discipline and its Dimensions*.
- Dikshit, Ramesh Dutta, *Rajneetik Bhugol: Samsamayik Paridrishti*.

604 B- RESOURCE GEOGRAPY

Module I:

Meaning and scope of Resource Geography, its relationship with economic activities. Resource: Concept and classification. Resource ecology. planning for conservation of resource.

Module II:

Distribution, utilization, problem and management of land and water resource. Concept of sustainable resources use and sustainable development.

Economic and inter- linkages – mineral resources of India. Environment and resource interface.

Module III:

Mineral: Distribution and production of Coal, Iron – ore, Mica and Bauxite in India. Distribution, factors affecting and conservation of forest resource. Hydroelectricity, petroleum in India. Importance of minerals and water resource.

Module IV:

Foreign trade of minerals. Effects of exploitation of natural resources. Conservation of resources in India. Human resource. Formation and properties of soil, classification and problems of soils. Ownership and control of resources (property rights) resource cycle dynamics, resource markets, rural- urban markets, resource peripheries.

Books Recommended:

- Cutter S. N., Renwich H. L. and Renwick W., *Exploitation, Conservation, Preservation: A Geographical Perspective on Natural Resources Use*, John Wiley and Sons, New York.
- 2. Gadgil M. and Guha R., *The Use and Abuse of Nature: Incorporating This Fissured Land: An Ecological History of India and Ecology and Equity*, Oxford University Press. USA.
- 3. Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., *Natural Resources: Ecology, Economics and Policy*, Prentice Hall, New Jersey.
- 4. Jones G. and Hollier G., *Resources, Society and Environmental Management*, Paul Chapman, London.
- Kaushik, S. D. and Gautam, Alka, *Sansadhan Bhugol*, Rastogi Publications, Meerut.

604 C- APPLIED GEOGRAPHY

Module I:

Meaning, nature and scope of Applied Geography; Contents of Applied Geography; Definition and Characteristics of Global cities; Contemporary world's urbanization with special reference to India.

Module II:

Issues related to variation in Physical Geography; Variation in land quality affecting agricultural productivity; Environment management of Deforested and Urban areas, Importance of applied Geography.

Module III:

Environmental Degradation; Environmental Disaster and Environment Management; Issues related to Human Resources; Carrying capacity of earth; Principal, Method and Applications of Land and Terrain Evaluation.

Module IV:

Spatial inequality: Causes and Consequences; Environment and Sustainable development with special focus on Man-Environment relationship, Landslides with special reference to Darjeeling, Sikkim Himalaya-Physical and Spatial characteristics of river floods.

Books Recommended:

- Hails, John R., *Applied Geomorphology*.
- Morgan, R.P.C. *Soil erosion and conservation*.
- Cooke, R. U. and Doornkamp, J. C., *Geomorphology in Environmental Management: A New Introduction*, Oxford University Press, New York, 2nd Edition.
- Sinha, B. N., Verma, R. S. & Paul, D. K., *Landslides in Darjeeling district (W.B.) and Adjacent Areas*, Bul. G.S.I. B (36)1-45.
- Singh, Savindra, *Aapda Prabandhan*, Pravalika Publication, Allahabad.

GEOG-H-DSE- 603 & 604 -P	PRACTICAL	(04 Credits, 120 Lectures) FM: 50 (40+10)
---	------------------	--

- A) Field Work:** Meaning, types and objectives of field work methods and techniques; Importance of fieldwork in geography; Socio-economic field survey allotted by HOD. **40 Marks**
- B) Viva-Voce.** **10 Marks**



Binod Bihari Mahto Koyalanchal University, Dhanbad

End-Semester Examination xxxx (Session: xxxx-xx)

Subject/Code:

Full Marks: 60

Pass

Marks:

24

Time: 3Hours

General Instructions:

Candidates are required to give their answers in their own words as far as practicable.

The Questions are of equal value.

Answer any five questions of the following in which Q.1 is compulsory.

Group A

1. (A) Multiple Choice Questions

(1x6=06)

- (i)
- (ii)
- (iii)
- (iv)
- (v)
- (vi)

(B)

Short answer type questions

(3x2=06)

- (a)
- (b)

Group B

(Long answer type questions)

Answer any four of the following.

(12x4=48)

- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

Short notes type questions (6x2=12)

- 9. (a)
- (b)
- (c)
- (d)



Binod Bihari Mahto Koyalanchal University, Dhanbad

End-Semester Examination xxxx (Session: xxxx-xx)

Subject/Code:

Full Marks: 40

Pass

Marks:

16

Time: 2Hours

General Instructions:

Candidates are required to give their answers in their own words as far as practicable.

The Questions are of equal value.

Answer any five questions of the following in which Q.1 is compulsory.

Group A

1. (A) Multiple Choice Questions

(1x4=04)

- (i)
- (ii)
- (iii)
- (iv)

(B)

Short answer type questions

(2x2=04)

- (a)
- (b)

Group B

(Long answer type questions)

Answer any four of the following.

(8x4=32)

- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

9. Short notes type questions (4x2=8)

- (a)
- (b)
- (c)
- (d)

X

