

KOLHAN UNIVERSITY, CHAIBASA

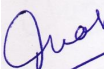
P.G Department of Geography

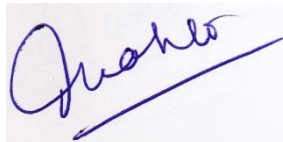


B.A.-1, B.A.,-II & B.A.-III (Hons.) GE/DSC & Compulsory Papers based on CBCS Pattern

2020

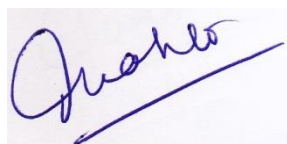
MEMBERS OF BOARD OF STUDIES

1. Dr. Prabha Xalxo, Head & Dean, University Department of Geography and Faculty of Social Sciences, Kolhan University, Chaibasa.
2. Dr. O.P. Mahto, Head, University Depth of Geography, Vinoba Bhave University, Hazaribag, Subject Expert. 
3. Dr. Emline Minz, Ex Head, University Department of Geography, Kolhan University, Chaibasa.
4. Dr. P.K. Achariya, Ex - H.O.D., Depth of Geography, Jamshedpur Worker's College, Jsr.
5. Dr. Aaley Ali, Head, Department of Geography, Karim City College, Jamshedpur.
6. Dr. Md. Reyaz, Department of Geography, Karim City College, Jamshedpur.



SCHEME FOR CBCS IN B.A. (HONS)
PROGRAMME GEOGRAPHY

Semester	Course	Paper	Marks (Credit)
	CC-1	Introduction to Geography	70 (4)
	CC-2	Geo-Tectonic & Geomorphology	70 (4)
	CC (P)-1	Practical	60 (4)
	AECC-1	English Communication/ MIL Communication	50
	CC-3	Contemporary Issues in Geography	70 (4)
	CC-4	Human Geography	70 (4)
	CC (P) -2	Practical	60 (4)
	AECC-2	Environmental Science	50
	CC-5	Climatology and Oceanography	70 (4)
	CC-6	Geography of India	70 (4)
	CC-7	Geography of Jharkhand	70 (4)
	CC (P)-3	Practical	90 (6)
	SEC-1	Emerging Trends in Geography	35 (2)
	SEC-1	Internal Assessment/Practical	15 =50
	CC-8	Economic Geography	70 (4)
	CC-9	Environmental Geography	70 (4)
	CC-10	Geography of Travel & Tourism	70 (4)
	CC (P) -4	Practical	90 (6)
	SEC-2	Field Work in Geographical Study	35 (2)
	SEC-2	Internal Assessment/Practical	15 =50
	CC- 11	Geography of Asia	70 (4)
	CC-12	Northern Continents	70 (4)
	CC (P) -5	Practical	70 (4)
	DSE-1	Disaster Management	70 (4)
	DSE- (P)-1	Practical	30 (2)
	DSE- 2	Rural Development	70 (4)
	CC-13	Bio-Geography	70 (4)
	CC-14	Southern Continents	70 (4)
	CC (P) -6	Practical	60 (4)
	DSE-3	Scientific Research in Geography	70 (4)
	DSE (P) - 3	Practical	30 (2)
	DSE - 4	Project, Viva - Voce	70+30 =100 (6)



SCHEME FOR CBCS IN B.A. (HONS) PROGRAMME (GEOGRAPHY)
FIRST SEMESTER – TOTAL 20 CREDITS
CORE COURSE – 1 (CC-1)

CORE -1 (Theory)

Introduction to Geography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. : 70

Module – 1 :

Nature and scope of Geography : Geography as a science; place of Geography in the classification of Sciences, concept of space and concept of landscape (Regional cultural).

Module – 2 :

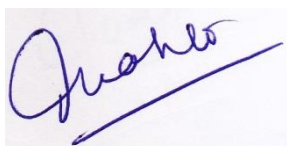
Geography in Ancient (Greek, Rome and India) and Medieval period; Development of Geography in Modern Period (German School, French School) Contribution of Humboldt, Ritter, Ratzel, Blache and Hartshorne to Geography.

Module – 3 :

Methods and Technique in Geography : Quantitative, Behavioral, Radical, Humanistic and Environmental ; Remote Sensing, GIS, GPS and computer cartography, Trends in Renaissance period.

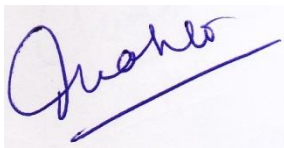
Module – 4 :

Geographical knowledge and people : Career in Geography, noted Indian Geographers who contributed to development of India, Man-environment Relationship.



Books Recommended :-

1. Maurya S.D. (2007) : Bhoogol Parichay, Sharda Pustak Bhawan, Allahabad.
2. Adhikari Sudeepta (2001) : Fundamentals of Geographical thought, Chaitanya Publishing House, Allahabad.
3. Jain M.M. (2012) : Bhowgolik Chintan Evam Vidhitantra, Sahitya Bhawan Publications, Agra.
4. Dixit Shrikant (2005) : Bhoogol Ki Prastavna, Vasundhara Prakashan, Gorakhpur.
5. Dixit Ramesh Dutt (2007) : Bhoogolik Chintan Ka Vikas Ek Aitehasik Samiksha, Prentis Hall of India Private Ltd., New Delhi.
6. Singh D.P. (2013) : Bhowgolik Chintan Ki Samiksha, Sharda Pustak Bhawan, Allahabad.
7. Hussain Majid : Evolution of Geographical thought, Rawat Publications, Jaipur.
8. Shrivastava V.K. (2007) : Bhowgolik Chintan Ke Adhar, Vasundhara Prakashan, Gorakhpur.



CORE COURSE – 2 (CC-2)

CORE-2 (Theory) GEO-TECTONIC AND GEOMORPHOLOGY

4 Credits (Teaching 4 hours per week and minimum 48 Teaching Hours)

F.M. : 70

Module 1 : Geo – Tectonics

Theories of origin of the earth ; Geological time scale and related topographic and structural evolution; Isostasy : theories of Airy and Pratt; folds and faults : origin, types and their topographic expressions; plate tectonics, earthquake and vulcanicity.

Module – 2 : Geomorphology

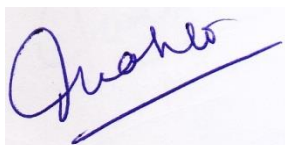
General degradation processes : processes of rock weathering and their effects on landform; fluvial processes and land forms; Glacial processes and landforms; fluvio-glacial landforms : Aeolian processes and landforms.

Module – 3 Geomorphology and structure

Basic concepts of geomorphology : landforms on granite and basalt; land forms on limestone; development of river network and land forms on uniclinal and folded structures.

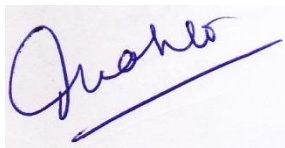
Module – 4 : Theories of geomorphology

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

1. Singh Savindra ((1998) : Geomorphology, Prayag Pustak Bhawan, Allahabad.
2. Singh Savindra (2012-13) : Bhoo-Akriti Vigyan, Vasundhara Prakashan Gorakhpur.
3. Ahmad Enayat (2004) : Geomorphology, Kalyani Publishers, New Delhi.
4. Dayal P. (2000) : A Text Book of Geomorphology, Shukla Book Depot, Patna.
5. Gautam Alka (2009) : Geomorphology, Sharda Pustak Bhawan, Allahabad.
6. Prasad Gayatri (2012) : Bhoo – Akriti Vigyan, Sharda Pustak Bhawan, Allahabad.
7. Sharma Hari Shankar & Kumar Pramila (1997) : Bhoo-Akriti Vigyan, Madhya Pradesh Hindi Granth Academy .
8. Thornbury William D. (2002) : Principles of Geomorphology, CBS Publishers & Distributors, New Delhi.



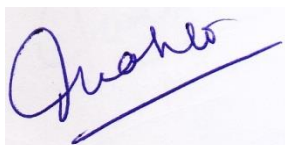
CORE COURSE (P) -1 [CC (P)-1]

PRACTICAL

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

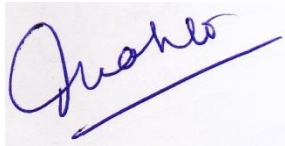
F.M. 60

- | | | |
|----|--|------|
| 1) | Hythergraph and climograph and their interpretation | [10] |
| 2) | Weather maps of India (Published by the Indian Meteorological Department for July and January), Interpretation of weather map. | [10] |
| 3) | Methods of Data Collection & Sampling. | [10] |
| 4) | Statistical Methods : Mean, Median and Mode. | [10] |
| 5) | Note Book + Regularity. | [10] |
| 6) | Viva – Voce | [10] |



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
2. Singh R.L., Singh Rana P.B. (2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
3. Mamoriya Chaturbhuj & Jain Sheshmal: Man-Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.
4. Sarkar Ashish (2015) : Practical Geography, A. Systematic Approach, Orient Black Swan Private Ltd., New Delhi.
5. Singh R.L. & Singh Rana P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatwa, Kalyani Publishers, New Delhi.
6. Chauhan P.R. & Surat Ram (1998); Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.

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SECOND SEMESTER – TOTAL 20 CREDITS

CORE COURSE -3 [CC-3]

CORE – 3 (Theory)

Contemporary Issues in Geography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 70

Module 1 :

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 2 :

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

- a) Landslides; Weathering; earthquakes;
- b) Floods; draughts; cyclones; ozone depletion;
- c) Tsunamis ; El Nino and La Nina; marine Pollution;
- d) Deforestation; forest fire; epidemics ; watershed management.

Module 3 :

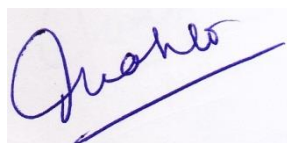
Human (Population/Economic /Social)
Causes and effects of

- a) Over population ; migration ; Energy Crisis;
- b) Poverty; Regional disparity; Exploitation of resources;
- c) Terrorism; Conflicts due to race, religion and caste; HIV/AIDS; Unemployment.

Module 4 :

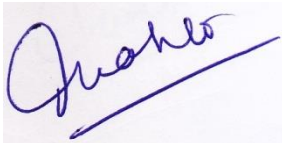
Modern theme in Geography :

- a) Applied geography, sustainable development.
- b) Climate change, global warming – international efforts and response.
- 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 :-

1. Hanks Revel R. (1993) : Contemporary Issues in Geography, Oklahoma State University, US.
2. Hegi P.S. (2010-2011) : Paristhitiki Evam Peryavaran Bhoogol, Rustogi Publications, Meerut.
3. Dhaliwal G.S. Sangha G.S., Ralhan P.K. (1998) : Fundamentals of Environmental Science, Kalyani Publishers, New Delhi.
4. Garg H.S. : Contemporary Issues in Geography (भुगोल में समकालीन मुद्दे) SB PD Publications.
5. Melvin Album : Geography and Contemporary Issues : Studies of relevant problems.
6. Singh Savindra (2003) : Environmental Geography (Peryavaran Bhoogol in Hindi) Prayag Pustak Bhawan, Allahabad.
7. Gautam Alka (2015) : Sansadhan Evam Peryavaran, Sharda Pustak Bhawan, Allahabad.



CORE COURSE -4 [CC-4]

CORE – 4 (Theory)

Human Geography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 70

Module 1 :

Meaning, nature and scope of Human Geography; Concept of Human Geography ; Man-Environment relationship; determinism, possibilism and neo-determinism.

Module 2 :

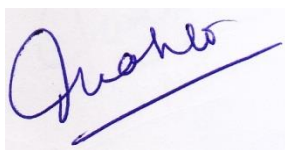
Evolution of man; Classification & characteristics of races and their broad distribution; Human adaptation to environment : Eskimo, Masai and Bushman; Primitive people of Jharkhand : Santhal, Oraon and Munda.

Module 3 :

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

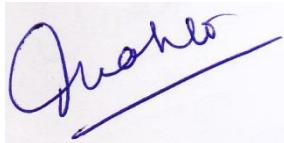
Module 4 :

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



Books Recommended :-

1. Kaushik S.D. (2005-2006) : Manav Bhoogol, Rustogi Publications, Meerut.
2. Maurya S.D. (2010) : Manav Bhoogol, Sharda Pustak Bhawan, Allahabad.
3. Singh B.N. (2006) : Manav Bhoogol, Prayag Pustak Bhawan, Allahabad.
4. Singh L.R. (2009) : Fundamentals of Human Geography, Sharda Pustak Bhawan, Allahabad.
5. Hussain Majid (2012) : Human Geography, Rawat Publications, Jaipur.
6. Negi Balbir Singh (1985-1986) : Human Geography An Ecological Approach, Kedar Nath Ram Nath, Meerut.
7. Gurjar Ramkumar & Jat B.C. (2004) : Manav Bhoogol, Panchsheel Prakashan, Jaipur.
8. Rao B.P. & Shrivastava V.K. (2007) : Manav Bhoogol, Vasundhara Prakashan, Gorakhpur.



CORE COURSE (P) -2 [CC (P)-2]

PRACTICAL

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 60

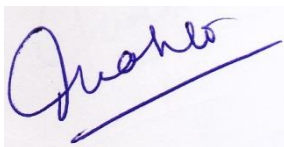
- 1) i) Construction of Scale : Simple, Diagonal and Comparative [10]
 ii) Simple Cartograms, Bar, Pie, Dot

- 2) Study of Topographical maps of India of Hilly and plain areas in [15]
 respect :
 i) Relief
 ii) Drainage
 iii) Settlement
 iv) Communication Transportation & Communication.

- 3) Climatic Diagram : [15]
 i) Simple Wind Rose Diagram
 ii) Compound Wind Rose Diagram

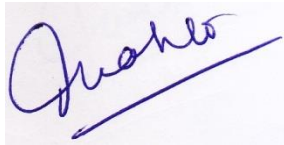
- 4) Note Book + Regularity [10]

- 5) Viva- Voce [10]



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
2. Singh R.L., Singh Rana P.B. (2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
3. Mamoriya Chaturbhuj & Jain Sheshmal: Man Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.
4. Sarkar Ashish (2015) : Practical Geography, A. Systematic Approach, Orient Black Swan Private Ltd., New Delhi.
5. Singh R.L. & Singh Rana P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
6. Chauhan P.R. & Surat Ram (1998); Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.



THIRD SEMESTER-TOTAL 26 CREDITS

CORE COURSE (P) -5 [CC -5]

CORE -5 (Theory)

Climatology and Oceanography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 70

Module – 1 :

Atmosphere – Structure, composition : Insolation, Heat Balance, inversion of temperature, Factors affecting the horizontal distribution of temperature atmospheric pressure – Vertical and horizontal distribution.

Module – 2 :

Wind – General Circulation, Planetary winds, Seasonal winds. Air masses, Fronts, jet stream, Koppen’s climatic classification, Factors of climate change.

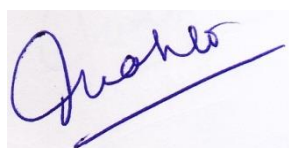
Module – 3 :

General distribution of land and sea hypsographic curve, Zones of ocean bottom accounting to depth, continental slope, deep sea plain & ocean deeps. Bottom relief of Atlantic & Indian oceans, horizontal & vertical distribution of temperature in ocean oceanic routes.

Module – 4 :

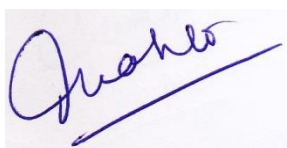
Composition of sea water – Salinity – horizontal distribution in open ocean, Enclosed & partially enclosed sea. Oceanic circulation, factors controlling oceanic circulation in Atlantic & Indian oceans.

Waves & tides : Types of waves & tides, Ocean deposits; terrigenous & pelagic deposits, distribution; coral reefs.



Books Recommended :-

1. Singh Savindra (2015) : Jalvayu Vigyan, Pravalika Publication, Allahabad.
2. Singh Savindra (2012) : Climatology, Prayag Pustak Bhawan, Allahabad.
3. Critchfield Howard J.(1995) : General Climatology, Prentice Hall of India, New Delhi.
4. Lal D.S. (2002) : Jalvayu Vigyan, Sharda Pustak Bhawan, Allahabad (Book in Hindi English both)
5. Lal D.S. (2010) : Oceanography, Sharda Pustak Bhawan, Allahabad. (Book in Hindi & English both)
6. Singh Savindra (2011) : Oceanography, Prayag Pustak Bhawan, Allahabad. (Book in Hindi & English both)
7. Siddhartha K. (2009) : Oceanography, A Brief Introduction, Kisalaya Publications Pvt. Ltd., New Delhi.
8. Sharma R.C. & Vatal M. (2009) ; Oceanography, Chaitanya Publishing House, Allahabad.



CORE COURSE – 6 (CC-6)

CORE -6 (Theory)

Geography of India

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 70

Module – 1 :

India ; structure and physiography, drainage (peninsular and extra peninsular), Origin of Monsoon and climatic regions. Edaphic and biotic regions of India; Indian forests and their economics importance.

Module – 2 :

Agriculture system in India, cropping pattern, divide India into intensive agricultural regions (as per ICAR); green revolution and its consequences industries : cotton, sugar, mineral based: iron and steel, cement, industries, transport; surface, water and air.

Module – 3 :

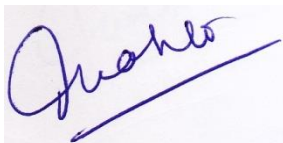
Minerals : distribution of iron ore, bauxite, manganese, atomic minerals, power resource – coal, petroleum, wind energy in India.

Region of geography : Middle Ganga plain, Lower Ganga plain, Chhotanagpur plateau.

Module – 4 :

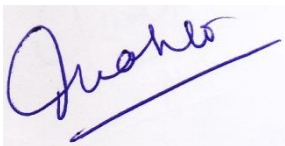
Studies of Geographical problems

Problems of unreliability or rainfall; problem of soil erosion and its mitigation; problems of development (land acquisition), displacement and rehabilitation; problem of slum and urban rehabilitation in India.



Books Recommended :-

1. Mamoria Chaturbhuj Evam Mahato Bhoopal Kumar (2010) : Bharat Ka Bhoogol, Jharkhand Ka Pradeshik Bhoogol Sahitiya Publications, Agra.
2. Chauhan V.S. & Gautam Alka (2003-2004) : Bharat, Bharatvarsh Ka Vistrit Bhoogol, Rustogi Publication, Meerut.
3. Khullar D.R. (2006) : India, A comprehensive Geography, Kalyani Publishers, New Delhi (In Hindi & English both)
4. Gautam Alka (2013) : Bharat Ka Brihad Bhoogol , Sharda Pustak Bhawan, Allahabad.
5. Sharma T.C. (2013) : Economic Geography of India, Rawat Publications, Jaipur.
6. Singh Gopal (2007) : Bharat Ka Bhoogol (Geography of India), Atmaram and Sons, Delhi (In Hindi & English both)
7. Mamoria C.B. : Economic & Commercial Geography of India, Shivalal Agarwal & Company, Agra.
8. Tiwari R.C. (2012) : Bharat Ka Bhoogol, Prayag Pustak Bhawan, Allahabad.



CORE COURSE – 7 (CC-7)

CORE -7 (Theory)

Geography of Jharkhand

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 70

Module – 1 :

Structural and Relief, drainage pattern, forest resources and its economic importance.

Module – 2 :

Agriculture : irrigation, types and distribution, major crops ;

Population : growth, distribution & density;

Population composition : age & Sex ratio, rural-urban.

Module – 3 :

Resources : natural resource : soil, water, mineral resources : (Coal, uranium)

Distribution and development, conventional and non-conventional energy resources, major hydel power projects – thermal power plants.

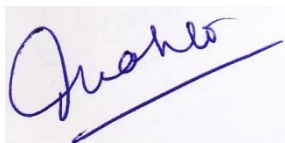
Module – 4 :

Educational development and structure of education in Jharkhand. House types of tribal villages in south Chhotanagpur.

Transport : Roads and Railways and development of tourism, eco-tourism in Jharkhand.

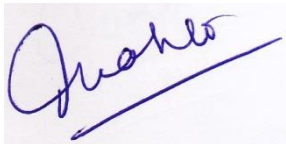
Economy and habitats of Santhal, Oraons & Munda.

Social, economic and environmental problems of Jharkhand.



Books Recommended :

1. Singh Sunil Kumar (2014) : Jharkhand Paridrishya, Crown Publications, Ranchi.
2. Singh Sunil Kumar (2005) : Inside Jharkhand, Crown Publications, Ranchi.
3. Tiwari Ram Kumar (2009) : Jharkhand Ka Bhoogol, Rajesh Publications, New Delhi.
4. Kumar Shyam (2004) : Jharkhand : Ek Vistrit Adhyayan, Safal Prakashan, New Delhi.
5. Sinha V.N.P. & Singh L.K.P. (2003) : Jharkhand Land and People, Rajesh Publications, New Delhi.
6. Oraon Prakash Chandra (2003) : Land and people of Jharkand, Jharkhand Tribal Welfare Research Institute, Ranchi.
7. Sharma Bimla Charan & Vikram Kirti (2006) : Jharkhand Ki Janyatiyan, Crown Publications, Ranchi.
8. Mahto Bhoopal Kumar (2005) : Jharkhand Ek Adhyayan, Sahitya Bhawan Publications, Agra.

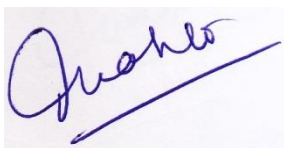


CORE COURSE (P) – 3 [CC (P)-3]

PRACTICAL

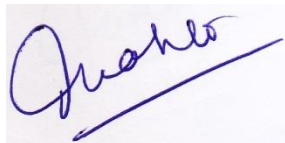
6 Credits (Teaching 6 hours per week minimum 48 teaching hours) F.M.90

- 1) History & Techniques of Cartography [10]
- 2) Map Projection : [20]
 - i) Cylindrical equal – Area and equidistance.
 - ii) Zenithal Equal – Area and Equidistance.
 - iii) Conical projection with one and two standard Parallels.
- 3) Instrumental Survey : [20]
 - i) Plane Table Survey : Radiation and intersection
 - ii) Prismatic Compass Survey : Open and Close Traverse.
- 4) Lorenz Curve, Poly Linear Graph, Triangular Diagram [20]
- 5) Note Book + Regularity [15]
- 6) Viva – Voce [15]



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogol, Rustogi Publications, Meerut.
2. Singh R.L. & Singh P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
3. Singh Gopal : Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Kanetkar T.P. & Kulkarni S.V. (1993) : Surveying and Levelling, Pune Vidyarathi Griha Prakashan, Pune.
5. Sarkar Ashis (2015) : Practical Geography a systematic approach, orient Blackswan Pvt. Ltd. , New Delhi.
6. Singh R.L. & Singh P.B.(2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
7. Chauhan P.R. & Surat Ram (1998) : Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.
8. Mamoria Chaturbhuj and Jain Shesmal; Man Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.



THIRD SEMESTER

SEC-1

EMERGING TRENDS IN GEOGRAPHY

F.M. : 35

Module -1 :

Progress in physical Geography : Progress in Geomorphology, recent advances in meteorology and Climatology.

Module – 2 :

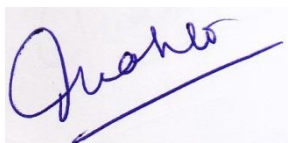
Progress in Human Geography : Recent advances in Population Geography, Rural Settlements and development, Progress in transport Geography.

Module – 3 :

Health Pathology and well being : Definition, Linkages with environment, Diseases and their regional pattern, Health hazards and Biotic treatments.

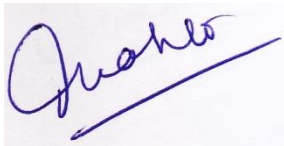
Internal Assessment/ Practical

1. Project work/Report on a relevant topic from the prescribed syllabus allotted by the HOD. [10]
2. Viva – Voce based on project work. [05]



Books Recommended :-

1. Deo Sunil (2011) : Bhoo-Akriti Vigyan, Vishva Bharti Publications, New Delhi.
2. Maurya S.D. (2010) : Manav Bhoogol, Sharda Pustak Bhawan, Allahabad.
3. Maurya S.D. (2013) : Jansankhya Bhoogol, Sharda Pustak Bhawan, Allahabad.
4. Dixit Ramesh Dutt (2007) : Bhowgolik Chintan Ka Vikas, Prentis Hall of India Pvt. Ltd., New Delhi.
5. Smch Michael, Elisabeth D.R. and Margaret Carrel (2017) : The Guilford Press, New Yark London.
6. Ojha N.N. & Singh Sanjay Kumar : Vaikalpik Bhoogal, Cronikal Publications (Pra) Ltd.



FOURTH SEMESTER – TOTAL 26 CREDITS

CORE COURSE – 8 (CC-8)

CORE – 8 (Theory)

Economic Geography

6 Credits (Teaching 6 hours per week minimum 48 teaching hours) F.M.70

Module – 1 :

Meaning and approach to Economic geography ; main concept of Economic Geography; Resources : Concept and Classification; resource conservation.

Module – 2 :

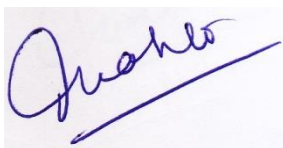
Natural resources : soil, forest and water; mineral resources : iron ore and bauxite : power resources : Coal and petroleum; principal crops : wheat, rice and cotton.

Module – 3 :

Agricultural regions of the world (whittlesey) ; theory of agriculture location (Von thunen); Theory of industrial location (weber); major industries : iron and steel, and cotton textiles.

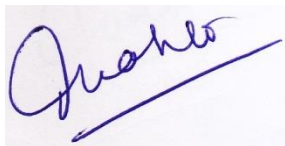
Module – 4 :

World transportation : Major trans-continental railways and sea routes; WTO and International trades; patterns and trends; major trade blocks : ECC, ASEAN; Effect of Globalization on development of countries.



Books Recommended :-

1. Gautam Alka (2017) : Aarthik Bhoogol Ke Mool Tatva, Sharda Pustak Bhawan, Allahabad.
2. Guha J.K. & Chattoraj P.R. (2001) : A new approach to Economic Geography, the World Press Pvt.Ltd. (Cacutta) Kolkata.
3. Mamoria Chaturbhuj & Sharma B.L. (2012) : Aarthik Bhoogol , Sahitya Bhawan Publications, Agra.
4. Saxena H.M. (2013) : Economic Geography, Rawat Publications, Jaipur.
5. Roy Prithwish *2017) : Economic Geography, A Study of Resources, New Central Book Agency (P) Ltd.,London.
6. Hartshorn Truman A. & Alexander John W. (2005) Economic Geography , Prentice Hall of India Pvt. Ltd., New Delhi.
7. Jain P. : Aarthik Bhoogol Ki Samiksha, Rustogi Publications, Meerut.
8. Singh Kashi Nath & Siddiqui A.R. (2012) : Economics Geography, Prayag Pustak Bhawan, Allahabad.



CORE COURSE – 9 (CC-9)

CORE – 9 (Theory)

Environmental Geography

4 Credits (teaching 4 hour per week and minimum 49 teaching hours) F.M.70

Module : 1

Definition and scope of Environmental geography; meaning and components of environment.

Module : 2

Ecology, Eco-System and soil system:

- i) Definition and scope of ecology
- ii) Meaning, types, structure, component and functioning of eco-system.
- iii) Meaning and components of soil system.

Module : 3

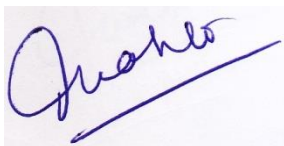
Environmental degradation and pollution

- i) Meaning and causes of environmental degradation.
- ii) Meaning, sources and causes of air and water pollution.

Module : 4

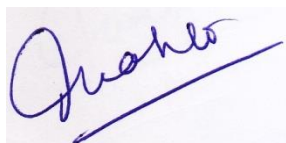
Environmental issues

- i) Depletion of ozone layer, ecological significance of ozone, protection of ozone layer.
- ii) Acid rain – causes and effects.
- iii) A detailed account of the concept of global warming, environmental programmes and policies – global, national and local levels.



Books Recommended :-

1. Singh Savindra (2003) : Environmental Geography Prayag Pustak Bhawan, Allahabad, (In Hindi & English both) (In Hindi Paryavaran Bhoogal)
2. Daliwal G.S. ; Sangha G.S. & Ralhan P.K. (1998) : Fundamentals of Environmental Science, Kalyani Publishers, New Delhi.
3. Negi P.S. (2010-2011) : Paristhitiki Evam Paryavaran Bhoogol, Rustogi Publications, Meerut.
4. Saxena H.M. (2004) : Environmental Geography, Rawat Publications, Jaipur.
5. Prasad Gayatri & Nowtiyal Rajesh (2012) : Paryavaran Bhoogol, Sharda Pustak Bhawan, Allahabad.
6. Chandna R.C. (2006) : Environmental Geography, Kalyani Publishers, New Delhi.
7. Tiwari Ram Kumar : Paryavaran Adhyayan, Laxmi Publications (Pra.) Limited, Ranchi.
8. Siddhartha K. (2013) : Ecology & Environment, Kisalaya Publications Pvt. Ltd., New Delhi.



CORE COURSE – 10 (CC-10)

CORE – 10 (Theory)

Geography of Travel and Tourism

4 Credits (teaching 4 hour per week and minimum 49 teaching hours) F.M.70

Module : 1

Nature and scope: definition and nature ; scope and extent; concept of tourism – factors affecting tourism development- physical & cultural.

Module : 2

Classification of tourism :

- (A) National, International, Domestic
- (B) Time of travel – long haul, holiday tourists, day trippers.
- (C) Travel distance : Global, continental, regional and local.
- (D) Number of tourists – individual, groups.
- (E) Purpose – Recreation, heritage, nature, religious, health, sports.

Role of Accommodation in tourism :

Accommodation types

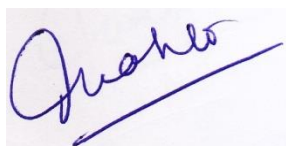
- 1. Hotels, motels, inn, Saraies, dharamshala.
- 2. Govt. accommodation, tourism homes.
- 3. Youth hostels, cottages, tents, caravans
- 4. Rail Yatribhavan, House Boats.
- 5. Private accommodation and unrecognized accommodations.

Module – 3

Role of transportation in tourism

- (A) Mode of transportation – Air, Road, Rail, Waterways.
- (B) Agencies and Guides –
 - 1) World organization, national organizations.
 - 2) Private agencies – national, international
 - 3) Role of guides in tourism.
 - 4) Licensing and re-organization of guides.
 - 5) Training programme of guides.

Impact of tourism : (A) economic impact (B) physical and environmental impacts (C) socio-culture impacts.



Module – 4

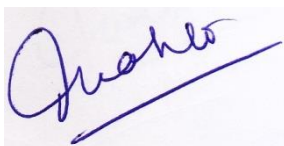
Development and planning :

- (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.

Case studies of major tourist centers of Jharkhand (at least four major tourist Centers)

Books recommended :-

- (1) Kapur Bimal Kumar (2012) : Prayatan Bhoogol, Vishwa Bharti Publications, New Delhi.
- (2) Prasad Kamla & Sraban Prasenjit, Tourism in Jharkhand, Rajesh Publications, New Delhi.
- (3) Pathan A.M. Thigale S.S. (2000) : Contributions to Enviornmental Geo-Science, Aravali Books International (P) Ltd., New Delhi.
- (4) Srivastava V.K. & Rao B.P. (2010) Paryavaran Aur Paristhitiki, Vasundhara, Gorakhpur.
- (5) Mamoria Chaturbhuaj & Singh Komal; Paryatan Ka Bhoogol, SBPD Publications, Agra.
- (6) Mamoria Chaturbhuaj & Singh Komal : Yatra Evam Paryatan Ka Bhoogol SBPD Publications, Agra.
- (7) Baghla Sunil : Tourism Geography.



CORE COURSE (P) – 4 [CC (P) – 4]

PRACTICAL

6 Credits (Teaching 6 hours per week minimum 48 teaching hours) F.M. :90

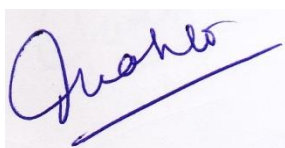
- 1) Types of Cartographic symbols and their uses : [15]
 - i) Points (dots, proportional, circles and spheres diagram).
 - ii) Line - Isopleths
 - iii) Area – Choropleth Representing population, agriculture, industry and transport data representing of population (distribution, density, growth); land use and cropping pattern.

- 2) Statistical Method : [15]
 - i) Quartiles, Deciles, Percentiles
 - ii) Measures of dispersion or variation : Mean deviation, Standard deviation.

- 3) Geographical Excursion of any part of India & preparation of environmental report of visited area. The study should include the characteristics of land form, climate, drainage, land use, economic activities, settlements. [30]

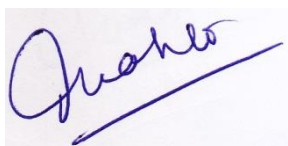
- 4) Note Book + Regularity [15]

- 5) Viva – Voce [15]



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogol, Rustogi Publications, Meerut.
2. Singh R.L. & Singh P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
3. Singh Gopal : Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Kanetkar T.P. & Kulkarni S.V. (1993) : Surveying and Levelling, Pune Vidyarthi Griha Prakashan, Pune.
5. Sarkar Ashish (2015) : Practical Geography a systematic approach, orient Blackswan Pvt. Ltd. , New Delhi.
6. Singh R.L. & Singh P.B.(2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
7. Chauhan P.R. & Surat Ram (1998) : Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.
8. Mamoria Chaturbhuj and Jain Shesmal; Man Chitrangan Evam Prayogik Bhoogol Sahitya Bhawan, Agra.



FOURTH SEMESTER

SEC -2

FIELD WORK IN GEOGRAPHICAL STUDY

F.M.: 35

Module : 1

Field work in Geographical study : Historical development of field work in Geography, Data and Ethics of field work, Defining the field and identifying the case study – Rural, Urban, Physical, Human and Environmental.

Module : 2

Field Technique : Merits, Demerits and selection of the appropriate technique observation, Questionnaire, interview , space surveying or other techniques.

Module : 3

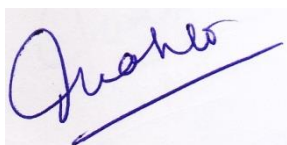
Designing the field report : Aims objectives, methodology analysis interpretation and writing the report

Internal Assessment / Practical

F.M.: 15

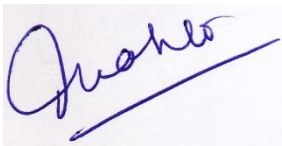
Field Survey

1. The students have to prepared a project work based on a comprehensive field survey of an area with specific problems allotted by the HOD.
2. Viva – Voce based on project work.



Books Recommended

1. Sinha M.M.P. & Bala Seema (2012) : Uchh Cartography, Sharda Pustak Bhawan, Allahabad.
2. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
3. Saha Pijushkanti & Basu Partha (2011) : Advanced Practical Geography, Books and Allied (P) Ltd., Kolkata.
4. Ray Parasnath & Ray C.P. (2012-13) : Ansandhan Parichay, Laxmi Narayan Agarwal, Agra.
5. Bajpayee S.R. (2002) : Samajik Ansandhan Tatha Servekshan, Kitab Ghar, Kanpur.
6. Fariya B.R. (2012) : Shodh Padhhatiyen, Sahitya Bhawan, Publications, Agra.



FIFTH SEMESTER – TOTAL 24 CREDITS

CORE COURSE – 11 (CC-11)

CORE – 11 (Theory)

Geography of Asia

4 Credits (Teaching 4 hours per week and minimum 48 teaching hours) F.M. 70

Module - 1 :

Significance of Geographical Location : Physiography, Climate, Drainage System; major forests type; Soil types and Classification.

Module - 2 :

Agricultural Production : Rice and Wheat, Rubber, Tea and Coffee, Sugar Cane Jute.

Mineral and Energy Resources : Iron Ore, Manganese, Tin, Bauxite , Coal, Petroleum and Natural Gas.

Module – 3 :

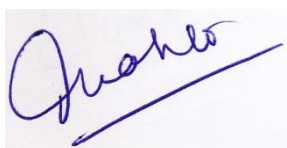
Industrial Production and Distribution : Iron and Steel, Cotton Textile and Automobile.

Transport : Major Road, Railway, Waterways, Airways and Pipeline Networks.

Module – 4 :

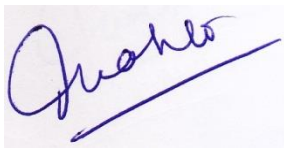
Population : Distribution, Density, Growth and Population Problem.

Functions and Importance : ASEAN, SAARC, AFTA and OPEC.



Books Recommended :

1. Mamoria Chaturbhuj (1999) : Asia Ka Bhoogol, Sahitya Bhawan Publishers, Agra.
2. Stamp L. Dudley, (1967) : Asia A Regional and Economic Geography, B.I. Publications Pvt Ltd. , New Delhi.
3. Rao B.P. & Statpathi D.P. (1997) : Asia Ki Bhowgolik Samiksha, Vasundhara Prakashan, Gorakhpur.
4. Stamp L. Dudley (1974) : Asia Ka Bhoogol, Central Book Dipo, Allahabad.
5. Rao B.P. & Sharma Nagendra Kumar (2008) : Vishva Ka Chetriya Bhoogol, Vassundhara Prakashan, Gorakhpur.
6. Mamoriya Chaturbhuj & Maheshvari Deepak (2012) : Vishva Ka Pradeshik Bhoogol, Sahitya Bhawan, Publications, Agra.
7. Manku Singh Darshan (2010) : A Regional Geography of the World, Kalyani Publishers, New Delhi.
8. Singh Devendra Prasad & Kumari Poonam (2018) : Adhunik Asia Ka Brihad Bhoogol, Sharda Pustak Bhawan, Allahabad.



CORE COURSE – 12 (CC-12)

CORE – 12 (Theory)

Northern Continents

4 Credits (Teaching 4 hours per week and minimum 48 teaching hours) F.M. 70

Module - 1 :

North America : Relief of North America, Natural Vegetation, Population of North America, Cotton Textile Industry and Iron – Steel Industry.

Module – 2

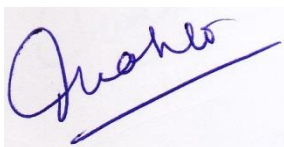
Europe : Physiographic division of Europe, Climate, Demographic pattern of Europe, Industrial Development and regions, Inland waterways of Europe.

Module - 3

Industrial region of Japan, Fruit Cultivation around Mediterranean Sea, Trans-Siberian Railway, Panama Canal Route, Suez Canal Route.

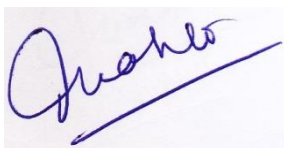
Module – 4

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 New England Region & British Isles.



Books Recommended

1. Sharma Banvari Lal & Sharma N. Kumar (1979) : Uttari America, Shivalal Agarwal and Company, Agra.
2. Mamoria Chaturbhuj & Jain S.M. (1990-) : Bharat Evam Uttari America, Sahitya Bhawan, Agra.
3. Shrivastava. V.K. & Shrivastava Kum Kum Rani (1998) : Sanyuktt Rajya America Ka Bhowgolik Swaroop, Vasundhara Prakashan, Gorakhpiur.
4. Saxena Hari Mohan, Saxena Rahul & Saxena Puja (2006-2007) : Vishva Ka Pradeshik Bhoogol, Rustogi Publicatiouns, Meerut.
5. Mamoria Chaturbhuj & Maheshwari Deepak (2012) : Vishva Ka Pradfeshik Bhoogol, Sahitya Bhawan Publications, Agra.
6. Tikka R.N., Bali P.K. & Sekhon M.S. (2005) : World Regional Geography, New Academic Publishing Co., Jalandhar.
7. Tiwari Vishvanath : Asia Ka Bhowgolik Suaroop, Shivalal Agarwal and Company, Agra.
8. Mamoria Chaturbhuj (1999) : Asia Ka Bhoogol, Sahitya Bhawan Publications, Agra.



CORE COURSE (P) – 5 [CC (P) – 5]

PRACTICAL

4 Credits (Teaching 4 hours per week minimum 48 teaching hours) F.M.60

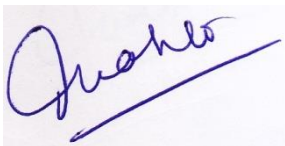
- 1) Map Projection : [20]
 - i) Sinusoidal – Simple and Interrupted
 - ii) Conical : Polyconic and Bonne's
 - iii) Cylindrical – Gall's and Mercators.

- 2) Construction of Geological Cross Section of Simple Geological maps and their Interpretation. [10]

- 3) Drawing of Profiles : Serial, Composite, Projected & superimposed [10]

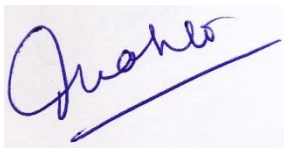
- 4) Note Book + Regularity [10]

- 5) Viva – Voce [10]



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogol, Rustogi Publications, Meerut.
2. Singh R.L. & Singh P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
3. Singh Gopal : Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Kanetkar T.P. & Kulkarni S.V. (1993) : Surveying and Levelling, Pune Vidyarathi Griha Prakashan, Pune.
5. Sarkar Ashis (2015) : Practical Geography a systematic approach, orient Blackswan Pvt. Ltd. , New Delhi.
6. Singh R.L. & Singh P.B.(2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
7. Chauhan P.R. & Surat Ram (1998) : Prayogatmak Bhoogol Vasundhara Prakashan, Gorakhpur.
8. Mamoria Chaturbhuaj and Jain Shesmal; Man Chitrangan Evam Prayogik Bhoogol Sahitya Bhawan, Agra.



DISCIPLINE SPECIFIC ELECTIVE -1 (DSE-1)

THEORY

Disaster Management

4 Credits (Teaching 4 hours per week minimum 48 teaching hours) F.M.70

Module – 1 :

Disasters : definition and concepts : hazards, disasters, risk and vulnerability; classification.

Module – 2 :

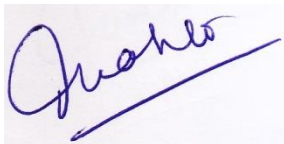
Disaster in India : (A) flood : Causes, impact, distribution and mapping; landslide : causes, impact, distribution and mapping; Drought : causes, impact, distribution and mapping.

Module – 3 :

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.

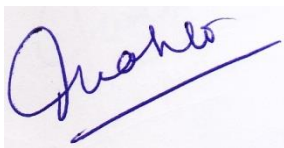
Module - 4

Responses 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 :-

1. Singh Savindra & Singh Jeetendra (2013) : Disaster Management, Pravalika Publications, Allahabad.
2. Garg H.S. (2015) : Aapda Prabandhan, S.B.P.D Publications, Aapda.
3. Mondal Debabrata & Basu Debabrata (2020) : Disaster Management Concept and Approaches, CBS Publishers and Distributors.
4. Shukl Chandra Prakash (2019) : Apada Prabandhan, Aavishkar Publishers.
5. Sharma Varun Dutt Pandey SK & Sharma Vimal Kumar : Environmental Education and Disaster Management, CBS Publishers and distributors.
6. Sharma S.C. (2018) : Disaster Management, Khanna Books Publisher.
7. Burnval Mahesh Kumar : Apapda Avam Apda Prabhandhan, Cosmos Publication.
8. Singh Savindra (2003) : Paryavaran Bhoogol, Prayag Pustak Bhawan, Allahabad.

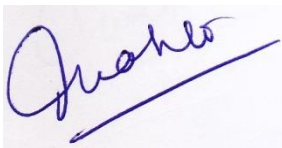


DISCIPLINE SPECIFIC ELECTIVE P-1 (DSE-P 1)

PRACTICAL

2 Credits (Teaching 4 hours per week minimum 24 teaching hours) F.M. =30

- 1) Project Work / Report on relevant topics pertaining to disaster management, Preferable on any major disaster in the world (natural or manmade) [15]
- 2) Project : File + Regularity [10]
- 3) Viva – Voce [05]



DISCIPLINE SPECIFIC ELECTIVE -2 (DSE-2)

THEORY

Rural Development

4 Credits (Teaching 4 hours per week minimum 48 teaching hours) F.M.70

Module – 1 :

Defining development : Inter-dependence of Urban and rural sectors of the Economy, need for rural development, Gandhian concept of rural development.

Module – 2 :

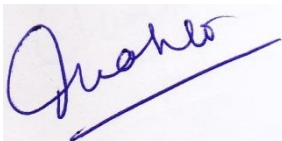
Rural economic base : agriculture and allied sectors, seasonality and need for expanding non-farm activities.

Module – 3 :

Area based approach to rural development : drought prone area programmes, PMGSY.

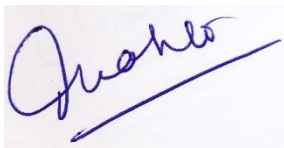
Module – 4

Target group approach to rural development : SJSY (Integrated rural development programme). Provision of services physical and socio-economic access to elementary education and primary health care and micro credit.



Books Recommended :-

1. Singh Katar (2011) : Gramin Vikas , Rawat Publications.
2. Singh Dharmendra (2017) : Panchayati Raj Evam Gramin Vikas, Rawat Publications.
3. Singh Katar & Shishodia Anil (2011) : Gramin Vikas : Siddhant, Neetiyan Evam Prabandh Rawat Publications.
4. Swami HR & Gupta B.P. : Gramin Vikas & Sahkarita, RBD Publication, Jaipur.
5. Patel Rajesh : Gramin Vikas Ki Rooprekha, Rawat Prakashan.
6. Babel Basanti Lal (2020) : Panchayati Raj Evam Gramin Vikas Yojnayan, Rajasthan Hindi Granth Academy Publisher.
7. Chand Mahesh & Puri Vinay Kumar (1990) : Regional planning in India, Allied Publishers Limited, New Delhi.
8. Chand R.C. (2013) : Pradeshik Niyojan Tatha Vikas, Kalyani Publishers, New Delhi.

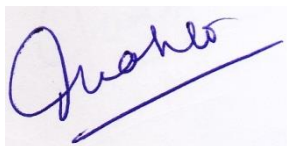


DISCIPLINE SPECIFIC ELECTIVE P-2 (DSE P-2)

PRACTICAL

2 Credits (Teaching 4 hours per week minimum 24 teaching hours) F.M. =30

- 1) Project work /report on relevant topics pertaining to rural Development in India, preferable, on any flagship programme of the Government of India or the state government (Jharkhand) [15]
- 2) Project File + Regularity [10]
- 3) Viva – Voce [05]



SIXTH SEMESTER – TOTAL 24 CREDITS

CORE COURSE – 13 (CC-13)

CORE -13 (Theory)

Bio Geography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. : 70

Module : 1

Definition, Scope & importance of Bio-Geography and its relation with other sciences, development of Bio-Geography – View of different Geographers; Hydrological cycle.

Module : 2

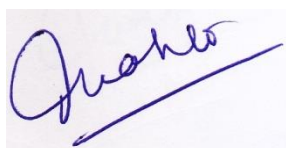
Ecology and Ecosystem; Energy flow in Ecosystem; Ecological factors of the land and their effects on plants animals; Dispersal of plants and animals. Bio-geochemical cycles.

Module : 3

Concepts of Biomes, Ecotone and community, Forest Biomes, Grassland Biomes, Desert Biomes, National Parks and Sanctuaries in India and Jharkhand.

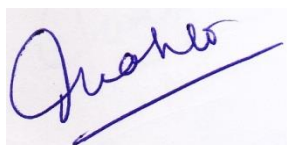
Module : 4

Climate as determinant of Bio-Resources; Bio-diversity-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 :-

1. Singh Savindra (2016) : Jaio Bhoogol, Pravalika Publications , Allahabad.
2. Pachauli Sarojni & Dubey Rajeshwari (2005) : Jaio Bhoogol, Madhya Pradesh Academy, Bhopal.
3. Thomas Samuel & Siddnartha K. (2007): Biosphere : A Geography of Life, Kisalaya Publications Pvt. Ltd. , New Delhi.
4. Siddhartha K. (2013) : Ecology & Enivornment, Kisalay Publications Pvt. Ltd., New Delhi.
5. Rao B.P. & Shrivastava V.K. (2006) : Paryavaran our Paristhitiki, Vasundhara Prakashan, Gorakhpur.
6. Negi P.S. (2010-11) : Paristhitiki Evam Paryavaran Bhoogal, Rustogi Publications, Meerut.
7. Karmondy Edward J. (2009) : Concept of Ecology, PHI learning Private Ltd., New Delhi.
8. Prasad Gayatri & Nautiyal Rajesh (2012) : Paryavaran Bhoogal, Sharda Pustak Bhawan, Allahabad.



CORE COURSE – 14 (CC-14)

CORE -14 (Theory)

Southern Continents

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. : 70

Module : 1

South America : Physiography, Agriculture, Demographic Set-up and regional study of Brazil.

Module – 2

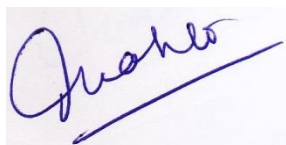
Australia and New Zealand : General account of the Physiography, Dairy farming and Demographic set-up ; detailed regional study of New Zealand.

Module – 3

Africa : Physiography, Agriculture, Grasslands (Savanna) and desert environment, Regional account of Egypt.

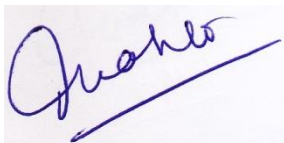
Module – 4

Geographical Account of Argentina, South Africa, Social and cultural aspects of Bushman, hotentot, Maori and Bora.

A handwritten signature in blue ink, appearing to read 'J. S. S.', with a horizontal line underneath.

Books Recommended :

1. Bharadawaj O.P. (1964) : Three Southern continents, premier Publishing Co. New Delhi.
2. Singh Jagdish Rao Bachha Prasad & Singh Rambali (1998): Teen Dakshini Mahadweap, Vasundhara Prakashan Gorakhpur.
3. Jain S.M. & Mamoria Chaturbhuj (1999) : Bhowgolik Chintan Evam Teen Dakshini Mahadweep, Sahitya Bhawan, Publishers , Agra
4. Manku Singh Drashan (2009) : A Regional Gegography of the World, Kalyani Publishers, New Delhi.
5. Mamoria Chaturbhuj & Maheshwari Deepak (2012) : Vishva Ka Pradeshik Bhoogal, Sahitya Bhawan Publication, Agra.
6. Saxena Harimohan & Saxena Rahul & Saxena Puja (2006-2007) Visva Ka Pradeshik Bhoogol, Rustogi Publications, Meerut.
7. Gautam Alka (2007) : World Geography, Sharda Pustak Bhawan, Allahabad.
8. Hussain Majix (2008) : World Geography, Rawat Publications, Jaipur.



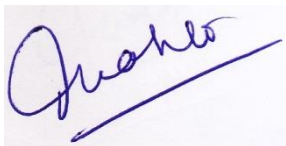
CORE COURSE – (P) -6 [CC(P) -6]

PRACTICAL

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

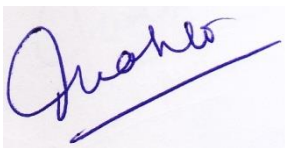
F.M. : 60

- | | | |
|----|---|------|
| 1. | i) Scatter diagram
ii) Correlation and regression analysis.
iii) Application of G.I.S., Remote Sensing and Air-Photography. | [10] |
| 2. | Instrumental Survey :
i) Dumpy Level Survey
ii) Indian Clinometer | [15] |
| 3. | Project on Environmental Awareness | [15] |
| 4. | Note Book + Regularity | [10] |
| 5. | Viva – Voce | [10] |



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogol, Rustogi Publications, Meerut.
2. Singh R.L. & Singh P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
3. Singh Gopal : Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Kanetkar T.P. & Kulkarni S.V. (1993) : Surveying and Levelling, Pune Vidyarthi Griha Prakashan, Pune.
5. Sarkar Ashis (2015) : Practical Geography a systematic approach, orient Blackswan Pvt. Ltd. , New Delhi.
6. Singh R.L. & Singh P.B.(2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
7. Chauhan P.R. & Surat Ram (1998) : Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.
8. Mamoria Chaturbhuaj and Jain Shesmal; Man Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.



DISCIPLINE SPECIFIC ELECTIVE -3 (DSE-3)

THEORY

Scientific Research in Geography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. : 70

Module – 1 :

Research in Geography : Meaning of Research, History of Geographical Research, Objectives & Purpose of Research. Trends of Research.

Module – 2 :

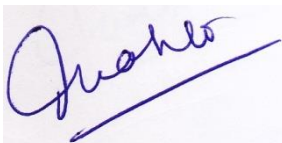
Approaches & Tools : Approaches of Scientific Research, Type of Research & Tools of Research.

Module – 3 :

Research Methods & Methodology : Hypothesis, Significance of Research, Review of Literature, Research Design, Data Collection & Analysis.

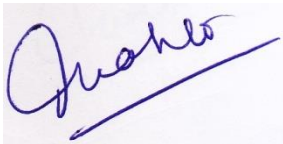
Module – 4 :

Scientific Report Writing : Techniques of Scientific Report Writing, Criteria of good Research, Problems Researchers are facing in India.



Books Recommended :

1. Sulaiman Md. and Kumar Dinesh (2010-11) :- Manovigyan, Samajshastra Tatha Shiksha Me Shodh Vidhiyan General Book Agency, Patna.
2. Gupta S.P. (2014) : Anusandhan Sandarshika, Sharda Pustak Bhawan, Allahabad.
3. Phariya B.L. (2012) : Shodh Paddhatiyan Sahitya Bhawan Publications, Agra.
4. Kothari C.R. (2004): Research Methodology, New Age International (P) Limited Publishers, New Delhi.
5. Shrivastava D.N. : Anusandhan Vidhiyan, Sahitya Prakashan, Agra.
6. Roy Parasnath & Roy C.P. (2013-14) : Anushandhan Parichai Lakshmi Narain Agarwal Prakashan, Agra.
7. Sarangi Prasant (2010) : Research Methodology Taxmann Publications (P) Ltd., New Delhi.



DISCIPLINE SPECIFIC ELECTIVE -P-2 (DSE- (P)-2)

PRACTICAL

2 Credits (Teaching 2 hours per week minimum 24 teaching hours)

F.M. : 30

Extensive Field Work

Group - A

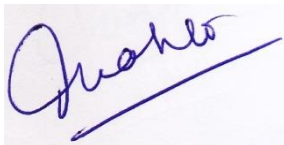
The students will choose a Geographical problem related to environment
Or society and prepare a Research project based on scientific
methodology.

[20]

Group -B

Viva Voce based on the above research Project.

[10]



DISCIPLINE SPECIFIC ELECTIVE – 4 (DSE -4)

PRACTICAL

2 Credits (Teaching 4 hours per week minimum 48 teaching hours) F.M. : 100

Extensive Field Work

Group – A

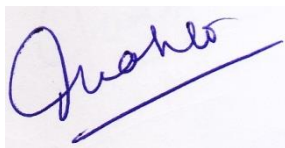
The Students have to prepared a project work based on a Comprehensive field survey of an area with specific problem Allotted by the H.O.D.

[70]

Group -B

Viva Voce based on project work.

[30]



SCHEME FOR CBCS IN

B.A. HONS. (GE) AND B.A. PROGRAM (DSC) GEOGRAPHY

Semester	Courses	Paper	Marks
	GE/DSC-1A	Introduction of Geography	70 (4)
	GE/DSC (P)-2A	Practical	30 (2)
	GE/DSC-1B	Geomorphology	70 (4)
	GE/DSC (P)-2B	Practical	30 (2)
	GE/DSC-1C	India & Jharkhand	70 (4)
	GE/DSC (P)-2C	Practical	30 (2)
	SEC -1	Emerging Trends in Geography	35 (2)
	SEC -1	Internal Assessment /Practical	15 }=50
	GE/DSC-1D	Climatology and Oceanography	70 (4)
	GE/DSC (P)-2D	Practical	30 (2)
	SEC -2	Field work in Geographical Study	35 (2)
	SEC-2	Internal Assessment/Practical	15 }=50
	DSE – 1A	Disaster Management/Rural Development	70 (4)
	DSE (P)-2A	Practical	30 (2)
	GE-1	Introduction to Geography	70
	GE-1 (P)	Practical	30
	SEC – 3	Cartographic Techniques and Maps	35 (2)
	SEC -3	Internal Assessment/Practical	15 }=50
	DSE – 1B	Climatic change : Vulnerability & Adaptation	70 (4)
	DSE (P) – 2 B	Practical	30 (2)
	GE-2	Geomorphology	70
	GE-2 (P)	Practical	30
	SEC – 4	Regional Planning and Development	35 (2)
	SEC -4	Internal Assessment/Practical	15 }=50
	DSE- 3B	Tour & Project	100 (6)

FIRST SEMESTER
GENERIC ELECTIVE / DISCIPLINE SPECIFIC
COURSE – 1A (GE/DSC-1A)

GE/DSC-1A (Theory)

Introduction to Geography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M.: 70

Module – 1 :

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 – 2 :

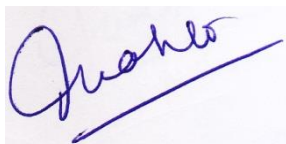
Geography in Ancient (Greek, Rome and India) and Medieval period; Development of Geography in Modern Period (German School, French School) Contribution of Humboldt, Ritter, Ratzel, Blache and Hartshorne to Geography.

Module – 3 :

Methods and Techniques in Geography – Quantitative, Behavioural, Radical, Humanistic and Environmental ; Remote Sensing, GIS, GPS and computer cartography, Trends in Renaissance period.

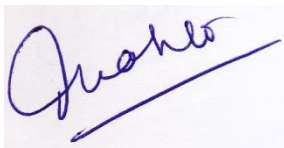
Module – 4 :

Geographical knowledge and people – Career in Geography, noted Indian Geographers who contributed to development of India, Man-environment Relationship.



Books Recommended :-

1. Maurya S.D. (2007) : Bhoogol Parichay, Sharda Pustak Bhawan, Allahabad.
2. Adhikari Sudeepta (2001) : Fundamentals of Geographical thought, Chaitanya Publishing House, Allahabad.
3. Jain M.M. (2012) : Bhowgolik Chintan Evam Vidhitantra Sahitya Bhawan Publications, Agra.
4. Dixit Shrikant (2005) : Bhoogol Ki Prastavna, Vasundhara Prakashan, Gorakhpur.
5. Dixit Ramesh Dutt (2007) : Bhowgolik Chintan Ka Vikas Ek Aitehasik Samiksha, Prentis Hall of India Private Ltd., New Delhi.
6. Singh D.P. (2013) : Bhowgolik Chintan Ki Samiksha Sharda Pustak Bhawan, Allahabad.
7. Hussain Majid : Evolution of Geographical thought, Rawat Publications, Jaipur.
8. Shrivasta V.K. (2007) : Bhowgolik Chintan Ke Adhar, Vasundhara Prakashan, Gorakhpur.

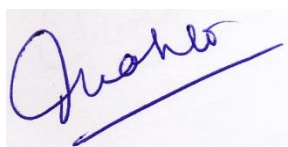


**GENERIC ELECTIVE /DISCIPLINE SPECIFIC
COURSE (P) – 2A (GE/DSC-(P) -2A)**

PRACTICAL

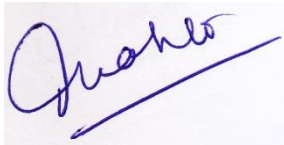
2 Credits (Teaching 2 hours per week minimum 24 teaching hours) F.M.: 30

- | | | |
|----|--|------|
| 1) | Hythergraph and Climograph and their interpretation. | [10] |
| 2) | Statistical Methods : Mean, Median and Mode. | [05] |
| 3) | Note Book + Regularity | [10] |
| 4) | Viva – Voce | [05] |

A handwritten signature in blue ink, appearing to read 'Joshi', with a horizontal line underneath it.

Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
2. Singh R.L., Singh Rana P.B. (2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
3. Mamoriya Chaturbhuj & Jain Sheshmal: Man Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.
4. Sarkar Ashish (2015) : Practical Geography, A. Systematic Approach, Orient Black Swan Private Ltd., New Delhi.
5. Singh R.L. & Singh Rana P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatwa, Kalyani Publishers, New Delhi.
6. Chauhan P.R. & Surat Ram (1998); Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.



SECOND SEMESTER

GENERIC ELECTIVE /DISCIPLINE SPECIFIC **COURSE – 1 B (GE/DSC-1B)**

GE/DSC-1B (Theory)

GEOMORPHOLOGY

4 Credits (Teaching 4 hours per week and minimum 48 Teaching Hours) F.M. : 70

Module 1 : Geo – Tectonics

Theories of origin of the earth ; Geological time scale and related topographic and structural evolution; Isostasy : theories of Airy and Pratt; folds and faults – origin, types and their topographic expressions; plate tectonics, earthquake and volcanicity.

Module – 2 : Geomorphology

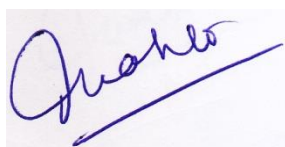
General degradation processes : processes of rock weathering and their effects on landform; fluvial processes and land forms; Glacial processes and landforms; fluvio-glacial landforms : Aeolian processes and landforms.

Module – 3 Geomorphology and structure

Basic concepts of geomorphology : landforms on granite and basalt; land forms on limestone; development of river network and land forms on uniclinal and folded structures.

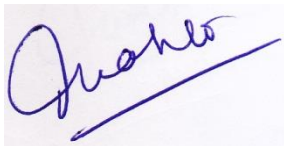
Module – 4 : Theories of geomorphology

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

1. Singh Savindra (1998) : Geomorphology, Prayag Pustak Bhawan, Allahabad.
2. Singh Savindra (2012-13) : Bhoo-Akriti Vigyan, Vasundhara Prakashan Gorakhpur.
3. Ahmad Enayat (2004) : Geomorphology, Kalyani Publishers, New Delhi.
4. Dayal P. (2000) : A Text Book of Geomorphology, Shukla Book Depot, Patna.
5. Gautam Alka (2009) : Geomorphology, Sharda Pustak Bhawan, Allahabad.
6. Prasad Gayatri (2012) : Bhoo – Akriti Vigyan, Sharda Pustak Bhawan, Allahabad.
7. Sharma Hari Shankar & Kumar Pramila (1997) : Bhoo-Akriti Vigyan, Madhya Pradesh Hindi Granth Academy .
8. Hornbury William D. (2002) : Principles of Geomorphology, CBS Publishers & Distributors, New Delhi.



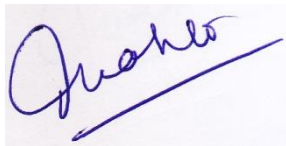
GENERIC ELECTIVE /DISCIPLINE SPECIFIC

COURSE (P) – 2B (GE/DSC-(P) -2B)

PRACTICAL

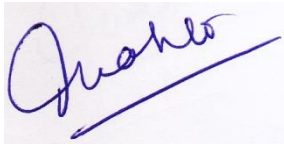
2 Credits (Teaching 2 hours per week minimum 24 teaching hours) F.M.: 30

- 1) Simple Cartograms; Bar, Pie and Dot [05]
- 2) Study of Topographical maps of India of Hilly and Plain Areas [10]
In respect of :
 - i) Relief
 - ii) Drainage
 - iii) Settlement
- 3) Note Book + Regularity [10]
- 4) Viva – Voce [05]



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
2. Singh R.L., Singh Rana P.B. (2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
3. Mamoriya Chaturbhuj & Jain Sheshmal: Man Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.
4. Sarkar Ashish (2015) : Practical Geography, A. Systematic Approach, Orient Black Swan Private Ltd., New Delhi.
5. Singh R.L. & Singh Rana P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatwa, Kalyani Publishers, New Delhi.
6. Chauhan P.R. & Surat Ram (1998); Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.



THIRD SEMESTER
GENERIC ELECTIVE /DISCIPLINE SPECIFIC
COURSE – 1C (GE/DSC- 1C)

(GE/DSC-1C

India and Jharkhand

Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 70

Module – 1 :

India ; structure and physiography, drainage (peninsular and extra peninsular), Origin of Monsoon and climatic regions. Edaphic and biotic regions of India; Indian forests and their economic importance.

Module – 2 :

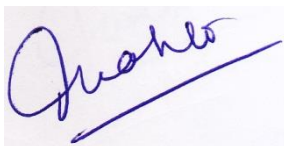
India : Minerals - distribution of iron ore, bauxite, manganese, atomic minerals, power resource – coal, petroleum, wind energy in India.
Regional geography : Middle Ganga plain, Lower Ganga plain, Chhotanagpur plateau.

Module – 3 :

Jharkhand : Structure and relief, climate, drainage pattern, forest resources and its economic importance.

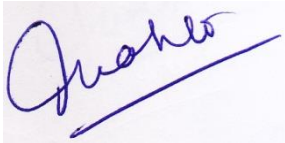
Module – 4 :

Jharkhand : Agriculture :- types and distribution;
Population : Distribution & Density; Mineral Resources, Iron & Steel and Cement Industries , Economy and habitat of Santhal, Oraon & Munda.



Books Recommended :-

1. Mamoria Chaturbhuj Evam Mahato Bhoopal Kumar (2010) : Bharat Ka Bhoogol, Jharkhand Ka Pradeshik Bhoogol Sahit, Sahitiya Bhawan Publications, Agra.
2. Chauhan V.S. & Gautam Alka (2003-2004) : Bharat, Bharatvarsh Ka Vistrit Bhoogol, Rustogi Publication Meerut.
3. Khullar D.R. (2006) : India, A comprehensive Geography, Kalyani Publishers, New Delhi (In Hindi & English both)
4. Gautam Alka (2013) : Bharat Ka Brihad Bhoogol , Sharda Pustak Bhawan, Allahabad.
5. Singh Sunil Kumar (2014) : Jharkhand Paridrishya, Crown Publications, Ranchi.
6. Singh Sunil Kumar (2005) : Inside Jharkhand, Crown Publications, Ranchi.
7. Tiwari Ram Kumar (2009) : Jharkhand Ka Bhoogol, Rajesh Publications, New Delhi.
8. Kumar Shyam (2004) : Jharkhand : Ek Vistrit Adhyayan, Safal Prakashan, New Delhi.



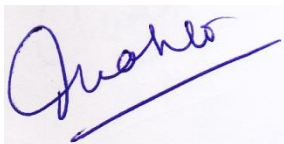
**GENERIC ELECTIVE /DISCIPLINE SPECIFIC
COURSE – (P) – 2C (GE/DSC-(P) - 2C)**

PRACTICAL

2 Credits (Teaching 2 hours per week minimum 24 teaching hours)

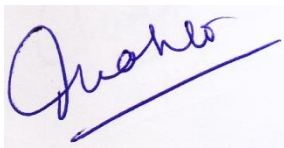
F.M. 30

- | | | |
|----|--|------|
| 1) | Map Projection : | [10] |
| | i) Cylindrical equal – area and equidistance. | |
| | ii) Zenithal Equal – Area and Equidistance. | |
| | iii) Conical projection with one and two standard parallels. | |
| 2) | Method of Data Collection | [05] |
| 3) | Note Book + Regularity | [10] |
| 4) | Viva – Voce | [05] |



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogol, Rustogi Publications, Meerut.
2. Singh R.L. & Singh P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
3. Singh Gopal : Map Work and Practical Geography Vikas Publishing House Pvt. Ltd., New Delhi.
4. Sarkar Ashis (2015) : Practical Geography a systematic approach, orient Blackswan Pvt. Ltd. , New Delhi.
5. Singh R.L. & Singh P.B.(2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.



THIRD SEMESTER

SEC-1

EMERGING TRENDS IN GEOGRAPHY

F.M. : 35

Module -1 :

Progress in physical Geography : Progress in Geomorphology, recent advances in meteorology and Climatology.

Module - 2 :

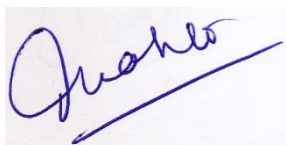
Progress in Human Geography : Recent advances in Population Geography, Rural Settlements and development, Progress in transport Geography.

Module - 3 :

Health Pathology and well being : Definition, Linkages with environment, Diseases and their regional pattern, Health hazards and Biotic treatments.

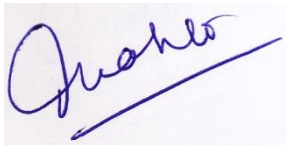
Internal Assessment/ Practical

1. Project work/Report on a relevant topic from the prescribed syllabus allotted by the HOD. [10]
2. Viva – Voce based on project work. [05]



Books Recommended :-

1. Deo Sunil (2011) : Bhoo-Akriti Vigyan, Vishva Bharti Publications, New Delhi.
2. Maurya S.D. (2010) : Manav Bhoogol, Sharda Pustak Bhawan, Allahabad.
3. Maurya S.D. (2013) : Jansankhya Bhoogol, Sharda Pustak Bhawan, Allahabad.
4. Dixit Ramesh Dutt (2007) : Bhowgolik Chintan Ka Vikas, Prentis Hall of India Pvt. Ltd., New Delhi.
5. Smch Michael, Elisabeth D.R. and Margaret Carrel (2017) : The Guilford Press, New York London.
6. Ojha N.N. & Singh Sanjay Kumar : Vaikalpik Bhoogal, Cronikal Publications (Pra) Ltd.



FOURTH SEMESTER
GENERIC ELECTIVE /DISCIPLINE SPECIFIC
COURSE – 1D (GE/DSC- 1D)

(GE/DSC-1D (Theory)

Climatology and Oceanography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M. 70

Module – 1 :

Atmosphere : Structure & composition, Insolation, Heat Balance, inversion of temperature, Factors affecting the horizontal distribution of temperature atmospheric pressure – Vertical and horizontal distribution.

Module – 2 :

Wind : General Circulation, Planetary winds, Seasonal winds. Air masses, Fronts, jet stream, Koppen’s climatic classification, Factors of climate change.

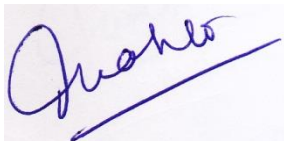
Module – 3 :

Land and sea : hypsographic curve, Zones of ocean bottom accounting to depth, continental slope, deep sea plain & ocean deeps. Bottom relief of Atlantic & Indian oceans, horizontal & vertical distribution of temperature in ocean oceanic routes.

Module – 4 :

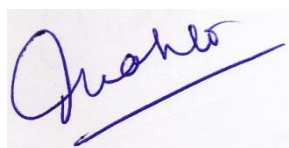
Composition of sea water : Distribution of salinity in open ocean, Enclosed & partially enclosed sea. Oceanic circulation, factors controlling oceanic circulation in Atlantic & Indian oceans.

Waves & tides : Types of waves & tides, Ocean deposits; terrigenous & pelagic deposits, distribution; coral reefs.



Books Recommended :-

1. Singh Savindra (2015) : Jalvayu Vigyan, Pravalika Publication, Allahabad.
2. Singh Savindra (2012) : Climatology, Prayag Pustak Bhawan, Allahabad.
3. Critchfield Howard J.(1995) : General Climatology Prentice Hall of India, New Delhi.
4. Lal D.S. (2002) : Jalvayu Vigyan, Sharda Pustak Bhawan, Allahabad (Book in Hindi English both)
5. Lal D.S. (2010) : Oceanography, Sharda Pustak Bhawan, Allahabad. (Book in Hindi & English both)
6. Singh Savindra (2011) : Oceanography, Prayag Pustak Bhawan, Allahabad. (Book in Hindi & English both)
7. Siddhartha K. (2009) : Oceanography, A Brief Introduction, Kisalaya Publications Pvt. Ltd., New Delhi.
8. Sharma R.C. & Vatal M. (2009) ; Chaitanya Publishing House, Allahabad.



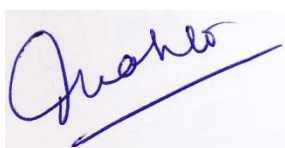
**GENERIC ELECTIVE /DISCIPLINE SPECIFIC
COURSE – (P) – 2D/ (GE/DSC-(P) – 2D)**

PRACTICAL

2 Credits (Teaching 2 hours per week minimum 24 teaching hours)

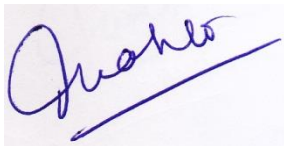
F.M. 30

- | | | |
|----|--|------|
| 1) | Types of Cartographic symbols and their uses: | [10] |
| | i) Points (proportional, circles and spheres diagram). | |
| | ii) Choropleth & Isopleth Representing population, Agriculture, industry and transport data representing of population (distribution, density, growth); land use and cropping pattern. | |
| 2) | Statistical Method : | [05] |
| | i) Quartiles, deciles, Percentiles | |
| | ii) Measures of dispersion or variation : Mean deviation, Standard Deviation. | |
| 3) | Note Book + Regularity | [10] |
| 4) | Viva – Voce | [05] |



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogol, Rustogi Publications, Meerut.
2. Singh R.L. & Singh P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
3. Singh Gopal : Map Work and Practical Geography Vikas Publishing House Pvt. Ltd., New Delhi.
4. Kanetkar T.P. & Kulkarni S.V. (1993) : Surveying and Levelling, Pune Vidyarthi Griha Prakashan, Pune.
5. Sarkar Ashis (2015) : Practical Geography a systematic approach, orient Blackswan Pvt. Ltd. , New Delhi.
6. Singh R.L. & Singh P.B.(2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.



FOURTH SEMESTER

SEC -2

FIELD WORK IN GEOGRAPHICAL STUDY

F.M.: 35

Module : 1

Field work in Geographical study Historical development of field work in Geography, Data and Ethics of field work, Defining the field work and identifying the case study – Rural – Urban, Physical Human and Environmental.

Module : 2

Field Technique : Merits, Demerits and selection of the appropriate technique Observation, Questionnaire, interview, space surveying or other techniques.

Module : 3

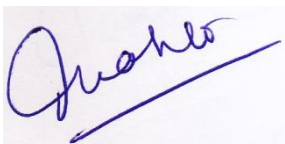
Designing the field report : Aims, objectives, methodology analysis interpretation and writing the report

Internal Assessment / Practical

F.M.: 15

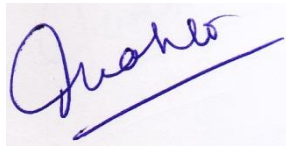
Field Survey

1. The students have to prepared a project work based on a comprehensive field survey of an area with specific problems allotted by the HOD.
2. Viva – Voce based on project work.



Books Recommended

1. Sinha M.M.P. & Bala Seema (2012) : Uchh Cartography, Sharda Pustak Bhawan, Allahabad.
2. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
3. Saha Pijushkanti & Basu Partha (2011) : Advanced Practical Geography, Books and Allied (P) Ltd., Kolkata.
4. Ray Parasnath & Ray C.P. (2012-13) : Ansandhan Parichay, Laxmi Narayan Agarwal, Agra.
5. Bajpayee S.R. (2002) : Samajik Ansandharn Tatha Servekshan, Kitab Ghar, Kanpur.
6. Fariya B.R. (2012) : Shodh Padhhatiyan, Sahitya Bhawan, Publications, Agra.



FIFTH SEMESTER

STUDENT CAN OPT ANYONE OPT THE FOLLOWING :-

1. **Disaster Management**
2. **Rural Development**

DISCIPLINE SPECIFIC ELECTIVE – 1A (DSE-1A)

THEORY

Disaster Management

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M.70

Module – 1 :

Disasters : definition and concepts ; hazards, disasters, risk and vulnerability; classification.

Module – 2 :

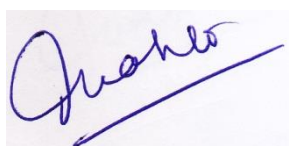
Disaster in India : (A) flood : Causes, impact, distribution and mapping; landslide : causes impact, distribution and mapping drought : disasters causes, impact, distribution and mapping.

Module – 3 :

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.

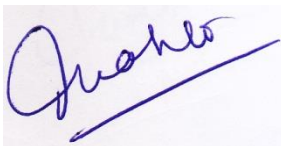
Module - 4

Responses 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 :-

1. Singh Savindra & Singh Jeetendra (2013) : Disaster Management, Pravalika Publications, Allahabad.
2. Garg H.S. (2015) : Prabandhan, S.B.P.D Publications, Aapda.
3. Mondal Debabrata & Basu Debabrata (2020) : Disaster Management Concept and Approaches, CBS Publishers and Distributors.
4. Shukl Chandra Prakash (2019) : Apada Prabandha, Aavishkar Publishers.
5. Sharma Varun Dutt Pandey SK & Sharma Vimal Kumar : Environmental Education and Disaster Management, CBS Publishers and distributors.
6. Sharma S.C. (2018) : Disaster Management Khanna Books Publisher.
7. Burnval Mahesh Kumar : Apapda Avam Apda Prabhandhan, Cosmos Publication.
8. Singh Savindra (2003) : Paryavaran Bhoogol, Prayag Pustak Bhawan, Allahabad.

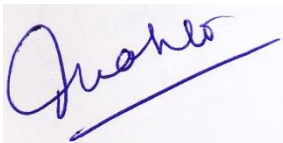


DISCIPLINE SPECIFIC ELECTIVE – (P) -2A [DSE-(P)-2A]

PRACTICAL

2 Credits (teaching 2 hours per week and minimum 24 teaching hours) F.M. : 30

- 1) Project work / report on relevant topics pertaining to disaster management, Preferable on any major disaster in the world (natural or manmade). [15]
- 2) Project File + Regularity [10]
- 3) Viva – Voce [05]



FIFTH SEMESTER
DISCIPLINE SPECIFIC ELECTIVE – 1A (DSE-1A)

THEORY

Rural Development

4 Credits (Teaching 4 hours per week minimum 48 teaching hours) F.M.70

Module – 1 :

Defining development : Inter – dependence of Urban and rural sectors of the Economy, need for rural development, Ghandhian concept of rural development.

Module – 2 :

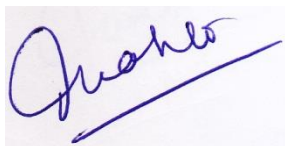
Rural economic base : agriculture and allied sectors, seasonality and need for expanding non-farm activities.

Module – 3 :

Area based approach to rural development : drought prone area programmes, PMGSY.

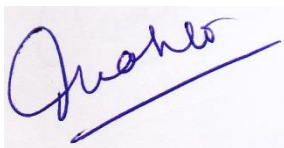
Module – 4

Target group approach to rural development : SJSY (Integrated rural development programme). Provision of services physical and socio-economic access to elementary education and primary health care and micro credit.



Books Recommended :-

1. Singh Katar (2011) : Gramin Vikas , Rawat Publications.
2. Singh Dharmendra (2017) : Panchayati Raj Avam Gramin Vikas, Rawat Publications.
3. Singh Katar & Shishodia Anil (2011) : Gramin Vikas : Siddhant, Neetiyan Evam Prabandh Rawat Publications.
4. Swami HR & Gupta B.P. : Gramin Vikas & Sahkarita, RBD Publication, Jaipur.
5. Patel Rajesh : Gramin Vikas Ki Rooprekha Rawat Prakashan.
6. Babel Basanti Lal (2020) : Panchayati Raj Evam Gramin Vikas Yojnayan Rajasthan Hindi Granth Academy Publisher.
7. Chand Mahesh & Puri Vinay Kumar (1990) : Regional planning in India, Allied Publishers Limited, New Delhi.
8. Chand R.C. (2013) : Pradeshik Niyojan Tatha Vikas, Kalyan Publishers, New Delhi.

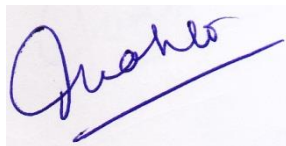


DISCIPLINE SPECIFIC ELECTIVE – (P) -2A [DSE-(P)-2A]

PRACTICAL

2 Credits (teaching 2 hours per week and minimum 24 teaching hours) F.M. : 30

1. Project work/report on relevant topics pertaining to rural development In India, preferable, on any flagship programme of the government of India or the state government (Jharkhand). [15]
2. Project File + Regularity [10]
3. Viva – Voce [05]



FIFTH SEMESTER
GENERIC ELECTIVE
COURSE – GE-1

GE-I (Theory)

Introduction to Geography

4 Credits (Teaching 4 hours per week minimum 48 teaching hours)

F.M.: 70

Module – 1 :

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 – 2 :

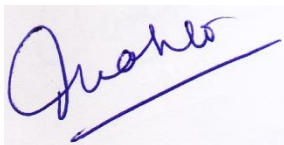
Geography in Ancient (Greek, Rome and India) and Medieval period; Development of Geography in Modern Period (German School, French School) Contribution of Humboldt, Ritter, Ratzel, Blache and Hartshorne to Geography.

Module – 3 :

Methods and Techniques in Geography – Quantitative, Behavioural, Radical, Humanistic and Environmental ; Remote Sensing, GIS, GPS and computer cartography, Trends in Renaissance period.

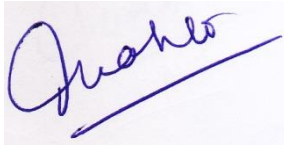
Module – 4 :

Geographical knowledge and people – Career in Geography, noted Indian Geographers who contributed to development of India, Man-environment Relationship.



Books Recommended :-

1. Maurya S.D. (2007) : Bhoogol Parichay, Sharda Pustak Bhawan, Allahabad.
2. Adhikari Sudepta (2001) : Fundamentals of Geographical thought, Chaitanya Publishing House, Allahabad.
3. Jain M.M. (2012) : Bhowgolik Chintan Evam Vidhitantra Sahitya Bhawan Publications, Agra.
4. Dixit Shrikant (2005) : Bhoogol Ki Prastavna, Vasundhara Prakashan, Gorakhpur.
5. Dixit Ramesh Dutt (2007) : Bhoogolik Chintan Ka Vikas Ek Aitehasik Samiksha, Prentis Hall of India Private Ltd., New Delhi.
6. Singh D.P. (2013) : Bhowgolik Chintan Ki Samiksha Sharda Pustak Bhawan, Allahabad.
7. Hussain Majid : Evolution of Geographical thought, Rawat Publications, Jaipur.
8. Shrivasta V.K. (2007) : Bhowgolik Chintan Ke Adhar, Vasundhara Prakashan, Gorakhpur.

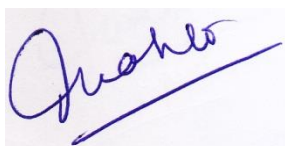


FIFTH SEMESTER
GENERIC ELECTIVE
COURSE GE-1 (P)

PRACTICAL

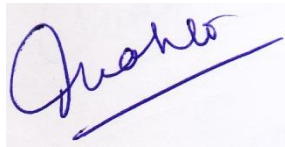
2 Credits (Teaching 2 hours per week minimum 24 teaching hours) F.M.: 30

- | | | |
|----|--|------|
| 1) | Hythergraph and Climograph and their interpretation. | [10] |
| 2) | Statistical Methods : Mean, Median and Mode. | [05] |
| 3) | Note Book + Regularity | [10] |
| 4) | Viva – Voce | [05] |

A handwritten signature in blue ink, appearing to read 'J. K. S.', is written over a horizontal line.

Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
2. Singh R.L., Singh Rana P.B. (2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
3. Mamoriya Chaturbhuj & Jain Sheshmal: Man Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.
4. Sarkar Ashish (2015) : Practical Geography, A. Systematic Approach, Orient Black Swan Private Ltd., New Delhi.
5. Singh R.L. & Singh Rana P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatwa, Kalyani Publishers, New Delhi.
6. Chauhan P.R. & Surat Ram (1998); Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.



FIFTH SEMESTER

SEC-3

CARTOGRAPHIC TECHNIQUES AND MAPS

F.M. : 35

Module 1 :

Meaning and significance of Cartography, Historical development of Cartography, Techniques of Cartography.

Module 2 :

Cartograms : Geographical scales, enlargement and reduction of maps, contours, conventional signs.

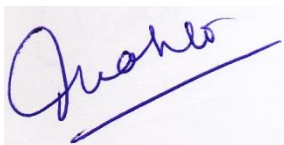
Module 3 :

Maps and scales : Basics of map reading and their importance, latitude, longitude dates and time, time zones and international date line.

Internal Assessment /Practical

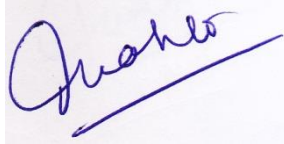
F.M.:15

1. Project work / Report on a relevant topics from the prescribed Syllabus allotted by the HOD. [10]
2. Viva Voce based on project work. [05]



Books Recommended :-

1. Sharma J.P. (2004) Prayogik Bhoogol, Rustogi Publications, Meerut.
2. Sinha M.M.P. & Bala Seema (2012) : Uchh Cartography , Sharda Pustak Bhawan, Allahabad.
3. Sarkar Ashis (2013) : :Quantitative Geography Techniques and Presentations, Orient Blackswan (P) Ltd., New Delhi.
4. Singh R.L. & Singh P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatva, Kalyani Publishers, New Delhi.
5. Mamoria Chaturbhuj & Jain Sheshmal : Man-Chitrangan Evam Prayoyik Bhoogol, Sahitya Bhawan, Agra.
6. Singh R.L., Singh Rana P.B. (2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.



SIX SEMESTER

DISCIPLINE SPECIFIC ELECTIVE – 1B (DSE-1B)

Theory

Climatic Change : Vulnerability & Adaptation

4 Credits (Teaching 4 hours per week and minimum 48 Teaching hours) F.M. : 70

Module : 1

Science of climate change : Understanding climate change ; Green house effect and Global warming, global climatic assessment – IPCC.

Module : 2

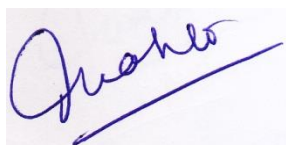
Climate change and vulnerability : Physical vulnerability, economic vulnerability
Social vulnerability.

Module : 3

Impact of climate change : Agriculture and water; Flora and Fauna; Human Health.

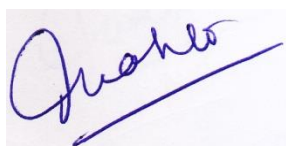
Module : 4

Adaptation and mitigation : Global initiatives with particular reference to south Asia; National Action plan on climate change; Local institution (Urban local bodies, Panchayats).



Books Recommended :-

1. Singh Savindra (2015) : Jalvayu Vigyan, Pravalika Publication, Allahabad.
2. Singh Savindra (2012) : Climatology, Prayag Pustak Bhawan, Allahabad.
3. Critchfield Howard J.(1995) : General Climatology Prentice Hall of India, New Delhi.
4. Lal D.S. (2002) : Jalvayu Vigyan, Sharda Pustak Bhawan, Allahabad (Book in Hindi English both)
5. Lal D.S. (2010) : Oceanography, Sharda Pustak Bhawan, Allahabad. (Book in Hindi & English both)
6. Singh Savindra (2011) : Oceanography, Prayag Pustak Bhawan, Allahabad. (Book in Hindi & English both)
7. Siddhartha K. (2009) : Oceanography, A Brief Introduction, Kisalaya Publications Pvt. Ltd., New Delhi.
8. Sharma R.C. & Vatal M. (2009) ; Chaitanya Publishing House, Allahabad.

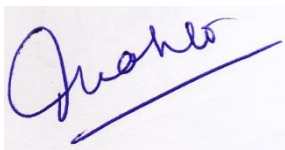


DISCIPLINE SPECIFIC ELECTIVE (P) – 2B [DSE (P) – 2B]

PRACTICAL

2 Credits (Teaching 2 hours per week and minimum 24 teaching hours) F.M.:30

- 1) Project work/report on relevant topics pertaining to climate change and efforts to tackle it, preferably on any major climate change issue. [15]
- 2) Note Book + Regularity [10]
- 3) Viva – Voce [05]

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DISCIPLINE SPECIFIC ELECTIVE (P) – 3B [DSE - 3B]

TOUR & PROJECT

F.M. : 100

Group – A

Field Survey within the state for the study of natural resources & their utilization.

[40]

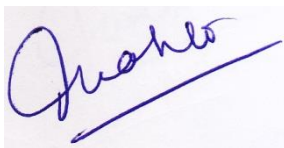
Group – B

Socio-Economic Survey in and around your city/town (Topic allotted by the Department of Geography)

[30]

Viva-Voce based on field survey & Socio-Economic Survey.

[30]



SIXTH SEMESTER

GENERIC ELECTIVE

COURSE – GE-2

GE -2 (Theory)

GEOMORPHOLOGY

4 Credits (Teaching 4 hours per week and minimum 48 Teaching Hours) F.M. : 70

Module 1 : Geo – Tectonics

Theories of origin of the earth ; Geological time scale and related topographic and structural evolution; Isostasy : theories of Airy and Pratt; folds and faults – origin, types and their topographic expressions; plate tectonics, earthquake and vulcanicity.

Module – 2 : Geomorphology

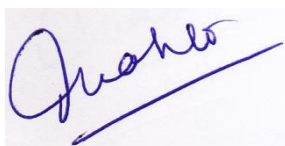
General degradation processes : processes of rock weathering and their effects on landform; fluvial processes and land forms; Glacial processes and landforms; fluvio-glacial landforms : Aeolian processes and landforms.

Module – 3 Geomorphology and structure

Basic concepts of geomorphology : landforms on granite and basalt; land forms on limestone; development of river network and land forms on uniclinal and folded structures.

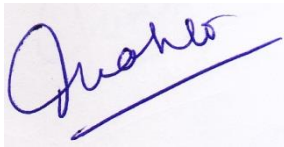
Module – 4 : Theories of geomorphology

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

1. Singh Savindra (1998) : Geomorphology, Prayag Pustak Bhawan, Allahabad.
2. Singh Savindra (2012-13) : Bhoo-Akriti Vigyan, Vasundhara Prakashan Gorakhpur.
3. Ahmad Enayat (2004) : Geomorphology, Kalyani Publishers, New Delhi.
4. Dayal P. (2000) : A Text Book of Geomorphology, Shukla Book Depot, Patna.
5. Gautam Alka (2009) : Geomorphology, Sharda Pustak Bhawan, Allahabad.
6. Prasad Gayatri (2012) : Bhoo – Akriti Vigyan, Sharda Pustak Bhawan, Allahabad.
7. Sharma Hari Shankar & Kumar Pramila (1997) : Bhoo-Akriti Vigyan, Madhya Pradesh Hindi Granth Academy .
8. Hornbury William D. (2002) : Principles of Geomorphology, CBS Publishers & Distributors, New Delhi.



SIXTH SEMESTER
GENERIC ELECTIVE /
COURSE – GE-2 (P)

PRACTICAL

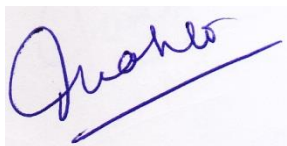
2 Credits (Teaching 2 hours per week minimum 24 teaching hours) F.M.: 30

- 1) Simple Cartograms; Bar, Pie and Dot [05]

- 2) Study of Topographical maps of India of Hilly and Plain Areas [10]
In respect of :
 - i) Relief
 - ii) Drainage
 - iii) Settlement

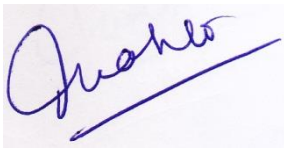
- 3) Note Book + Regularity [10]

- 4) Viva – Voce [05]



Books Recommended :-

1. Sharma J.P. (2004) : Prayogik Bhoogal, Rustogi Publications, Meerut.
2. Singh R.L., Singh Rana P.B. (2002) : Elements of Practical Geography, Kalyani Publishers, New Delhi.
3. Mamoriya Chaturbhuj & Jain Sheshmal: Man Chitrangan Evam Prayogik Bhoogol, Sahitya Bhawan, Agra.
4. Sarkar Ashish (2015) : Practical Geography, A. Systematic Approach, Orient Black Swan Private Ltd., New Delhi.
5. Singh R.L. & Singh Rana P.B. (2013) : Prayogatmak Bhoogol Ke Mool Tatwa, Kalyani Publishers, New Delhi.
6. Chauhan P.R. & Surat Ram (1998); Prayogatmak Bhoogol, Vasundhara Prakashan, Gorakhpur.



SIXTH SEMESTER

SEC-4

REGIONAL PLANNING AND DEVELOPMENT

F.M. : 35

Module : 1

Definition, Evolution and Types : Definition of region, Evolution and types of regional planning.

Module : 2

Choice of a region for planning : Characteristics of an ideal planning region, delineation of planning region, regionalization of India for planning.

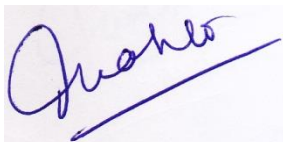
Module : 3

Changing concept of development and planning : Concept of under development and sustainable development, Rural and Urban Planning.

Internal Assessment / Practical

F.M. : 15

1. Project work/Report on a relevant topics from the prescribed syllabus
Allotted by the HOD. [10]
2. Viva – Voce [05]



Books Recommended :

1. Chand Mahesh & Puri V.K. (2012) : Regional Planning in India, Allied Publishers Pvt. Ltd., New Delhi.
2. Chandna R.C. (2010) Regional Planning and development, Kalyani Publishers, New Delhi.
3. Sharma Nandeshwar (2012) : Pradeshik Niyojan Bhoogol, Drishtikon Prakasan Pvt. Ltd., New Delhi.
4. Singh Mahendra Bahadur & Dubey Kamla Kant (2012) : Pradeshk Vikas Niyojan, Tara Book Agency, Varanasi.
5. Chandna R.C. (2013) : Pradeshik Niyojan Tatha Vikas, Kalyani Publishers, New Delhi.
6. Bhat L.S. (1973) : Regional Planning in India, Micro Level Planning.

