SIDO KANHU MURMU UNIVERSITY, DUMKA

(A State University recognized under Section 2(f) & 12(B) of the UGC Act, 1956)

SYLLABUS

OF

FOUR-YEAR UNDER GRADUATE PROGRAMME (FYUGP)

FOR

GEOGRAPHY

HONOURS/RESEARCH/PG DIPLOMA

Accordance with the

Implementation of FYUGP in State Universities of

Jharkhand Regulations, 2024

Implemented from
Academic Session 2025-2029 Onwards

SKMU/GEOG/20/25

B.A. (Geography) syllabus as per NEP (2025 onwards)

Date: 03/11/2025

An offline/online meeting of Board of Studies to approve the syllabi of Undergraduate (FYUGP) was held on 03/11/2025 under under the chairmanship of Mrs Sweta Marandi, Head-in-charge. P.G. Dept. of Greegraphy, S.K.M.U, Dumka. The following the rmember's were present. It was unanimously accepted. and recommended.

Chairperson BOS : Mrs. Sweta Marandi, H.O.D -in-charge, Assistant Professor, P.G. Dept. of Geography, S.K.M.U, Dumka.

External Member : Dr. Anirudh Kumar, Associate Professor, T.M.B.U, Bhagalpur

Dean : Dr. T. P. Singh, Dean of Faculty of Social Science, S.K.M.U, Dumka.

Members (BOS):

1. Dr. Jay Prakash Rajak, Assistant Professor, P.G. Dept. of Geography, S.K.M.U, Dumka.
2. Mrs. Pallabi Chowdhury, Assistant Professor,P.G.Dept. of Geography,S.K.M.U, Dumka
3. Ms. Krishna Kumari Assistant Professor, P.G. Dept. of Geography, S.K.M.U, Dumka
4. Dr. Dinanath Thakur, Assistant Professor, Degree College, Nala.
5. Mr. Amit Kumar Hansdak, Assistant Professor, St. Xavier's College, Maharo.
6. Mr. Sujan Kumar, Assistant Professor, Godda College, Godda.
7. Mr. Pankaj Murmu, Assistant Professor, Godda College, Godda.

8. Mr. Jitendra Kumar Rajak, Assistant Professor, Degree College, Maheshpur. 03/11/25

9. Mrs. Babita Kisku Assistant Professor, Shikaripara College, Shikaripara. Babita Kisku 3/11/25

Semester wise Subject Combination for B.A. (GEOGRAPHY)

Semester	Course Category	Code	Papers	Credits
First Semester	Major	MJ-1	**Geomorphology**	4
	Associated Core/Associated Vocational	AC-1A	Select any one subject from the Associated Core Table with the guidance of the Class Teacher.	4
	Multidisciplinary Course	MDC-1	**Choose any one of the following:** • Mathematical and Computational Thinking Analysis • Gender Studies • Goods and Services Tax (GST) • Pollution Control and Waste Management	3
	Ability Enhancement Course	AEC-1	Hindi (Compulsory)	2
	Skills Enhancement Course	SEC-1	Introduction to Computer and IT (Compulsory)	2
	Value Added Course	VAC-1	Understanding India (Compulsory)	3
	Indian Knowledge System	IKS-I	Indian Knowledge System (Compulsory)	2
Second Semester	Major	MJ-2	**Climatology**	4
	Associated Core/Associated Vocational	AC-2B	Select any one subject either from the Associated Core subjects not studied in Semester-I or from the Associated Vocational subjects, with the guidance of the Class Teacher.	4
	Multidisciplinary	MDC-2	**Choose any one of the following:** • Nutrition and Health education • Digital Marketing • Introduction to Indian Values and Ethics • Santhal Tribes and Culture	3
	Ability Enhancement	AEC-2	English (Compulsory)	2
	Skills Enhancement	SEC-2	Digital Communication and Data Management (Compulsory)	3
	Value Added Course	VAC-2	Environmental Studies (Compulsory)	2
	Indian Knowledge System	IKS-2	Social Awareness (Compulsory)	2
Third Semester	Major	MJ-3	**Geographical Thought**	4
		MJ-4	**Oceanography**	4
	Elective Course	ELC-1A	Elective Paper-1 from the Chosen Associated Core Subject in Semester I	4

	Multidisciplinary	MDC-3	**Choose any one of the following:** • Indian Philosophy • Indian Cultural Studies • Kautilya'sArthashastra • Vedic Mathematics	3
	Ability Enhancement	AEC-3	**Select One Language Course:** Students must choose **one** of the following languages: **Hindi, English, Bangla, Sanskrit, Urdu, Santali, Persian, or Maithili.** **Note:** Students are required to study **Paper-I** of the language they choose.	2
	Skills Enhancement	SEC-3	Computer Software, Programming and AI(Compulsory)	3
Fourth Semester	Major	MJ-5	**Iks in geography**	4
		MJ-6	**Geography of India**	4
		MJ-7	**Human Geography**	4
	Elective Course	ELC-1B	Elective Paper-1 from the Chosen Associated Core/Associated Vocational Subject in Semester-II	4
	Ability Enhancement	AEC-4	Paper-2 of Selected Language course in Semester-III	2
	Value Added Course	VAC-3	Health& Wellness, Yoga Education, Sports & Fitness (Compulsory)	2
Fifth Semester	Major	MJ-8	**Population geography**	4
		MJ-9	**Social and cultural geography**	4
		MJ-10	**Geography of jharkhand**	4
		MJ-11	**Biogeography**	4
	Elective Course	ELC-2A	Elective Paper-2 from the Chosen Associated Core Subject in Semester I	4
Sixth Semester	Major	MJ-12	**Economic geography**	4
		MJ-13	**Resource geography**	4
		MJ-14	**World regional geography**	4
		MJ-15	**Environmental geography**	4
	Elective Course	ELC-2B	Elective Paper-2 from the Chosen Associated Core/Associated Vocational Subject in Semester-II	4

- In the fourth year, students have two pathways: they can either complete their graduation with **Honours**, or with **Honours with Research**.
- Those who wish to graduate with **Honours only** must follow **Table-A**, while those opting for **Honours with Research** must follow **Table-B**.

TABLE-A FOR HONOURS ONLY FOURTH YEAR				
Seventh Semester	Major	MJ-16	**Urban geography**	4
		MJ-17	**Agricultural geography**	4
		MJ-18	**Tribal geography**	4
	Advance Major	AMJ-1	**Soil geography and hydrology**	
	Elective Course	ELC-3A	Elective Paper-3 from the Chosen Associated Core Subject in Semester I	4
Eighth Semester	Major	MJ-19	**Regional planning and development**	4
		MJ-20	**Group discussion and dissertation**	
	Advance Major	AMJ-2	**Remote sensing and gis**	4
		AMJ-3	**Transport and tourism geography**	4
	Elective Course	ELC-3B	Elective Paper-3 from the Chosen Associated Core/Associated Vocational Subject in Semester-II	4
TABLE-B FOR HONS WITH RESEARCH FOURTH YEAR				
Seventh Semester	Major	MJ-16	**Urban geography**	4
		MJ-17	**Agricultural geography**	4
		MJ-18	**Tribal geography**	4
	Research Methodology	RM-1	**Research methodology**	4
	Elective Course	ELC-3A	Elective Paper-3 from the Chosen Associated Core Subject in Semester I	4
Eighth Semester	Major	MJ-19	**Regional planning and development**	4
		MJ-20	**Group discussion and dissertation**	4
	Research Project/ Dissertation	RC-2	**Research project/dissertation**	8
	Elective Course	ELC-3B	Elective Paper-3 from the Chosen Associated Core/Associated Vocational Subject in Semester-II	4

Compulsory Summer Internship:

1. ***If a student exits after Semester II, IV, or VI:***

To receive a Certificate/Diploma/Bachelor's Degree, students must complete a summer internship/project/dissertation worth 4 credits. This should be done during the summer break of any semester within the first three years.

Note: The Certificate/Diploma/Bachelor's Degree will not be awarded without completing this internship.

2. ***If a student exits after Semester VIII:***

Under the National Education Policy (NEP), all students must complete a 4-credit summer internship to get a Bachelor's Hons/Hons with Research/P.G. Diploma Degree.

There are two ways to complete this requirement:

a. Two internships of 4 weeks each (2 credits each), or

b. One internship of 8 weeks (4 credits total)

The college will help arrange the internship, and students can complete it any time between Semester 1 and Semester 6 Summer Vacation.

Note: The Bachelor (Hons)/Hons with Research, or P.G. Diploma will not be awarded without completing the internship.

INSTRUCTIONS FOR QUESTION SETTER

1. **Semester Internal Examination Question Pattern** (15 Marks)

The **Semester Internal Examination (SIE)** will carry a total of **15 marks**, which includes **10 marks for the internal test** and **5 marks for class attendance**. The question paper will have **two groups**.

Group A will have:**Question 1:** Five very short answer questions (1 mark each, total 5 marks)

Group B will have:Two descriptive-type questions of 5 marks each, out of which students must answer **any one** (total 5 marks)The remaining **5 marks** will be based on **class attendance**, as per the following:

- Up to 45% attendance: 1 mark
- 46% to 54%: 2 marks
- 55% to 64%: 3 marks
- 65% to 74%: 4 marks
- 75% and above: 5 marks

2. **End Semester University External ExaminationQuestion Pattern**(60 Marks)

The **End Semester Examination (ESE)** will be of **60 marks** and will also have **two groups**.

Group A (Compulsory) will include:**Question 1:** Five very short answer questions (1 mark each, total 5 marks)

Questions 2 and 3: Two short answer questions (5 marks each, total 10 marks)**Group B** will contain **five descriptive-type questions** of **15 marks each**, out of which students must answer **any three** (total 45 marks)

Note: Questions may have sub-parts if needed in the theory examination.

3. **End Semester University Practical ExaminationQuestion Pattern** (25 Marks)

The **End Semester Practical Examination (ESE)** will be of **6 hours duration**. The total marks and evaluation should be done as per the following guidelines:

- **Experiment/Activity performed during the exam** - 15 marks
- **Practical record notebook** - 5 marks
- **Viva-voce (oral questions)** - 5 marks

Students must score **at least 10 marks** to pass the practical examination.

Question format for **20 Marks**:

Subject/ Code

F.M. =20 **Time**=1Hr. Exam Year

General Instructions:

i. **Group A** carries very short answer type compulsory questions.
ii. **Answer 1 out of 2** subjective/ descriptive questions given in **Group B**.
iii. Answer in your own words as far as practicable.
iv. Answer all sub parts of a question at one place.
v. Numbers in right indicate full marks of the question.

Group A

1. [5x1=5]
   i. .....
   ii. .....
   iii. .....
   iv. .....
   v. .....
2. ..... [5]

Group B

3. ..... [10]
4. ..... [10]

Note: There may be subdivisions in each question asked in Theory Examination.

Subject/ Code

F.M. = 75 **Time**=3Hrs. Exam Year

General Instructions:

i. **Group A** carries very short answer type **compulsory** questions.
ii. **Answer 4 out of 6** subjective/ descriptive questions given in **Group B**.
iii. Answer in your own words as far as practicable.
iv. Answer all sub parts of a question at one place.
v. Numbers in right indicate full marks of the question.

Group A

1. [5x1=5]
   i. .....
   ii. .....
   iii. .....
   iv. .....
   v. .....
2. ..... [5]
3. ..... [5]

Group B

4. ..... [15]
5. ..... [15]
6. ..... [15]
7. ..... [15]
8. ..... [15]
9. ..... [15]

Note: There may be subdivisions in each question asked in Theory Examination.

PROMOTION CRITERIA

- All students will be promoted in odd Semesters (I, III, V & VII).
- To get a promotion from Semester II to Semester III, from Semester IV to Semester V, and from Semester VI to Semester VII a student has to procure a minimum of 4 CGPA.
- However, it will be necessary to obtain a minimum credit (4) to pass in each of the subjects individually before completion of the course.

CALCULATION OF MARKS FOR THE PURPOSE OF RESULT

The passing in a subject will be based on the combined marks obtained in both the internal and external examinations of the semester. However, the student must pass the theory and practical examinations separately.

SEMESTER - I

COURSE: MAJOR – 1(MJ-1) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01

PAPER NAME: Geomorphology **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To explain the concept, definition and scope of earth systems
- To impart learning about various concepts, processes and problems related to landforms and evaluate man's activities in his geographical milieu.

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the functioning of Earth systems in real time and analyze how the natural and anthropogenic operating factors affects the development of landforms
- Distinguish between the mechanisms that control these processes
- Assess the roles of structure, stage and time in shaping the landforms, interpret geomorphological maps and apply the knowledge in geographical research.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I :

Nature and Scope of Geomorphology; Interior Structure of the Earth; Major: Mountains, Plateaus, plains their classification and distribution; Rocks their origin, classification, and characteristic; Wegener Theory.

UNIT-II :

Earth Movement; Endogenic Processes; Folds and Faults; Plate tectonics; Earthquakes; Volcanicity.

UNIT-III :

Exogenetic Processes; Weathering, Mass wasting, Cycle of erosion (Davis and penck) Landforms: fluvial, aeolian, karst, coastal and glacial landforms.

PART 'B'

PRACTICAL COURSE CONTENTS:

Unit-I :

Scale-Plain, Comparative, Diagonal. Cross Profiles- Serial, Superimposed, Projected, Composite.

SUGGESTED READINGS:

1. Bloom A. L., 2003: Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of India, New Delhi.
2. Bridges E. M., 1990: World Geomorphology, Cambridge University Press, Cambridge.
3. Christopherson, Robert W., (2011), Geosystems: An Introduction to Physical Geography, 8 Ed., Macmillan Publishing Company
4. Kale V. S. and Gupta A., 2001: Introduction to Geomorphology, Orient Longman, Hyderabad.
5. Knighton A. D., 1984: Fluvial Forms and Processes, Edward Arnold Publishers, London.
6. Richards K. S., 1982: Rivers: Form and Processes in Alluvial Channels, Methuen, London.
7. Selby, M.J., (2005), Earth's Changing Surface, Indian Edition, OUP
8. Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to physical Geology, 4th Edition, John Wiley and Sons
9. Thornbury W. D., 1968: Principles of Geomorphology, Wiley.
10. Gautam, A (2010): BhautikBhugol, Rastogi Punlications, Meerut
11. Tikkaa, R N (1989): BhautikBhugol ka Swaroop, Kedarnath Ram Nath, Meerut
12. Singh, S (2009):BhautikBhugol ka Swaroop, PrayagPustak,Allahabad

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SEMESTER - II

COURSE: MAJOR – 2(MJ-2) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01

PAPER NAME : **Climatology** **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

- To recognize the structure of the atmosphere and describe its characteristic features
- To understand climatic dynamics with reference to present scenario of climate change.

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the elements of weather and climate and its impacts at different scales.
- Comprehend the climatic aspects and its bearing on planet earth.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I :

Climatology- Atmospheric Composition and Structure; Insolation, Atmospheric Pressure and Winds

UNIT-II :

Climatic classifications (Koppen's and Thornthwaite) and Regions. Cyclones: Tropical and Temperate Cyclones, Monsoon - Origin and Mechanism, El-Nino.

UNIT-III :

Global warming, Greenhouse effects, Climate change, Urban climate, Urban heat Island, International convention on climate change.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I :

Interpretation ofWeather map, Drawing of Climograph& Hythergraph, Wind rose.

SUGGESTED READINGS:

1. Barry R. G. and Carleton A. M., 2001: Synoptic and Dynamic Climatology, Routledge, UK.
2. Barry R. G. and Corley R. J., 1998: Atmosphere, Weather and Climate, Routledge, New York.
3. Critchfield H. J., 1987: General Climatology, Prentice-Hall of India, New Delhi
4. Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: The Atmosphere: An Introduction to Meteorology, Prentice-Hall, Englewood Cliffs, New Jersey.
5. Oliver J. E. and Hidore J. J., 2002: Climatology: An Atmospheric Science, Pearson Education, New Delhi.
6. Trewartha G. T. and Horne L. H., 1980: An Introduction to Climate, McGraw-Hill.
7. Gupta L S(2000): Jalvayu Vigyan, Hindi MadhyamKaryanvayNidishalya, Delhi Vishwa Vidhyalaya,
8. Delhi Lal, D S (2006): Jalvayu Vigyan, PrayagPustak Bhavan, Allahabad
9. Vatal, M (1986): BhautikBhugol, Central Book Depot, Allahabad
10. Singh, S (2009): Jalvayu Vigyan, PrayagPustak Bhawan, Allahabad

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SEMESTER - III

COURSE: MAJOR – 3 (MJ-3) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01

PAPER NAME : **Geographical Thought** **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To explain the concept, definition and scope of Geography as a distinct discipline
- To recognize the various branches, streams and school of thought in Geography

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understanding discipline through time
- Understand the geographical thinking in different regions of world
- Appreciate the past and future trends of world geography in general and Indian geography in particular

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I :

Definition, nature and scope of geography, Its relation with other subject Development of geographical thought in India. Pre-Modern- Early Origins of Geographical Thinking with reference to the Classical and Medieval Philosophies.

UNIT-II :

Modern -Evolution of Geographical Thinking and Disciplinary Trends in Germany, France, Britain, United States of America. Debates - Environmental Determinism and Possibilism, Neo-Determinism/ Probablism Systematic and Regional, Ideographic and Nomothetic.

UNIT-III :

Trends - Quantitative Revolution and its Impact, Behaviouralism, Radicalism, Feminism; Towards Post-Modernism

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I :

Topographical Map: Introduction, Interpretation Identification of Physical and cultural features.

SUGGESTED READINGS:

1. Bhat, L.S., (2009): Geography in India (Selected Themes). Pearson
2. Bonnett, A., (2008): What is Geography Sage.
3. Dikshit, R. D., (1997): Geographical Thought: A Contextual History of Ideas, Prentice Hall India.
4. Freeman, R., (1970): Hundred year of Geography, Hutchinson. London.
5. Hartshone, R., (1959): Perspectives of Nature of Geography, Rand MacNally and Co.
6. Harvey, David., (1969): Explanation in Geography, London: Arnold
7. Holt-Jensen, A., (2011): Geography: History and Its Concepts: A Students Guide, SAGE.
8. Hussain, M., (2005): Bhougolik Chintan Ka Itihas, Rawat Publications
9. Johnston, R. J., (Ed.): Dictionary of Human Geography, Routledge.
10. Kapur, A., (2001): Indian Geography Voice of Concern, Concept Publications.
11. Martin Geoffrey J., (2005): All Possible Worlds: A History of Geographical Ideas, Oxford.
12. Sudeepta, Adhikari., (2015): Fundamentals of Geographical Thought, Orient Black Swan Pvt Ltd, Hyderabad

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SEMESTER - III

COURSE: MAJOR – 4(MJ-4) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01

PAPER NAME: **Oceanography** **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarise students about physical geography of India, its demography, social attributes
- To explain the concepts of regionalisation on the basis of physiography, socio-cultural and economic characteristics

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the physical attributes of the ocean.
- Study the resource endowment and its spatial distribution and utilization for sustainable development
- Synthesis and develop the idea of regional dimensions.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I :

Meaning, definition, and significance of Oceanography- Ocean Floor Topography and Oceanic Water Movements: Waves, Currents and Tides.

UNIT-II :

Physical and chemical properties of oceanwater: temperature, Ocean Salinity Distribution(Vertical and Horizontal) and Determinants.

UNIT-III :

Marine Ecosystem: Marine resources, Coral reefs, Theories of formation (Darwin and Daly) Classifications and Marine deposit.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I :

Central Tendency (Mean, Median, Mode, Centregraphictachinques, Dispersion Standard Deviation)

SUGGESTED READINGS:

1. Pinet, P. R., (2008): Invitation to Oceanography (Fifth Edition), Jones and Barlett Publishers, USA, UK and Canada.
2. Strahler, A.N., (1987) Modern Physical Geography, John Wiley and Sons, New York, Singapore.
3. Lal, D.S: Samudra vigyan, shardapustakvhawan
4. Singh savindra: samudravigyanpravalika publication allahabad publication
5. Hussan Majid, : Physical Geography

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SEMESTER - IV

COURSE: MAJOR – 5(MJ-5) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: IKS IN GEOGRAPHY **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- Introduce fundamental concepts of IKS relevant to Geography.
- Explore ancient Indian geographical thought and its Contributions.
- Analyze the practical applications of IKS in traditional Indian society related to geography.

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Compare and contrast traditional Indian geographical concepts.
- Propose innovative solutions to local or regional geographical problems.
- Demonstrate an enhanced appreciation for the diversity and depth of global geographical thoughts.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I :

Physical Geography and IKS: Traditional understanding of Landforms (Himalayas, Vindhyas, Western Ghats), Concept of Saptadvipa, Sacred- geographical significance, Traditional architecture for earthquake resistance, Indigenous Flood and Drought Prediction system, Knowledge of monsoon Patterns in ancient agraian practices.

UNIT-II :

Agriculture and Environment- Ancient indian Science of plants and agriculture, Traditional irrigation techniques (Well, tank, bamboo drip irrigation), Crop rotation, Organic manure and pest control from Ayurved.

UNIT-III :

Human Geography and IKS: Ancient indian Town Planning (Mohen Jo-daro, Dholavira and Vastu Shastra),Settlement pattern in tribal and Indigenous Communities, Pilgrimage routes and their geographic influence (Char Dham, Kumbh mela), Use of natural resources in crafts and construction.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I :

Ancient Indian Cartography, Traditional Land measurement units, Traditional Weather Forecasting methods and Objective: Identify traditional weather indicators and relate them to modern meteorology.

SUGGESTED READINGS:

1. Saluja , A, (2023): Indian Knowledge System Unveilling Traditions, perspective and narratives, Book Rivers.
2. Ray, P.P (2024): Indian Knowlwdge System, RajmangalPrakashan.
3. Bhat, L.S., (2009): Geography in India (Selected Themes). Pearson
4. Bonnett, A., (2008): What is Geography? Sage.
5. Dikshit, R. D., (1997): Geographical Thought: A Contextual History of Ideas, Prentice Hall India.
6. Barry, R. G., and Chorley, R. J., (2009): Atmosphere, Weather and Climate (9th Edition),Routledge, New York.
7. Critchfield, H. J., (1987): General Climatology, Prentice-Hall of India, New Delhi
8. Sharma, J. P., (2010): PrayogicBhugol(Hindi), Rastogi Publishers, Meerut.
9. Kaushik, S.D., (2010):ManavBhugol, Rastogi Publication, Meerut.
10. Maurya, S.D., (2012):ManavBhugol, Sharda Pustak Bhawan, Allahabad.
11. Rozenblat., Celine., Pumain., Denise and Velasquez., Elkin Eds. (2018): International and Transnational Perspectives on Urban Systems, Springer, Japan, pages 393.
12. Deshpande, C. D., (1992): India: A Regional Interpretation, ICSSR, New Delhi.
13. Mohammad Shafi (2006): Agricultural Geography, Dorling Kindessley (India) Pv. Ltd. New Delhi
14. Ahmed A., 1999: Social Geography, Rawat Publications.
15. Casino V. J. D., Jr., 2009) Social Geography: A Critical Introduction, Wiley Blackwell.
16. Cater J. and Jones T., 2000: Social Geography: An Introduction to Contemporary Issues, Hodder Arnold.

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SEMESTER - IV

COURSE: MAJOR – 6(MJ-6)
PAPER NAME: **Geography of India**
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarise students about physical geography of India, its demography, social attributes
- To explain the concepts minerals and power resource and agriculture of india

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the physical profile of the country
- Study the resource endowment and its spatial distribution and utilization for sustainable development
- Synthesis and develop the idea of regional dimensions.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Physical: Location, Physiographic Divisions, Climate: characteristics and classification, Soil, Drainage and Natural vegetation

UNIT-II

Population: Growth Distribution and density, Structure; Social: Distribution of Population by Race, Religion, Language, Tribes and their Correlation.

UNIT-III

Economic: Mineral and Power Resources: Distribution and Utilization of Iron Ore, Coal, Petroleum, Natural Gas; Agricultural Production of Rice, Wheat, Cotton and Sugarcane; Industrial Development: Industrial Corridors and Industrial Regions.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT–I :

Central Tendency (Mean, Median, Mode, Centro graphic Techniques, Dispersion standard Deviation)

SUGGESTED READINGS:

1. Deshpande, C. D., (1992): India: A Regional Interpretation, ICSSR, New Delhi.
2. Douglas, L. Johnson.,(2009): World Regional Geography, Tenth edition, Pearson Education Inc, New Jersey.
1. Johnson, B. L. C., ed. (2001): Geographical Dictionary of India. Vision Books, New Delhi.
2. Khullar, D.R. (2014): India: A Comprehensive Geography, Kalyani Publishers, New Delhi.
3. Majid Husain (2009): Geography of India, Tata McGraw hill Education Private Ltd, New Delhi.
4. Pathak, C. R. (2003): Spatial Structure and Processes of Development in India. Regional Science Assoc., Kolkata.
5. Sdyasuk, Galina and P, Sengupta., (1967): Economic Regionalisation of India, Census of India.
6. Sharma, T.C. (2013): Economic Geography of India. Rawat Publication, Jaipur.
7. Singh R. L., (1971): India: A Regional Geography, National Geographical Society of India.
8. Spate O. H. K. and Learmonth A. T. A., (1967): India and Pakistan: A General and Regional Geography, Methuen.
9. Tirtha, Ranjit (2002): Geography of India, Rawat Publs., Jaipur & New Delhi.

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SEMESTER - IV

COURSE: MAJOR – 7(MJ-7)
PAPER NAME: **Human Geography**
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To explain the concept, definition and themes of human geography.
- To familiarise students about human evolution and interaction with environment.

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Know the changing human and cultural landscape at different levels.
- Understand processes of Human growth and its implications.
- Appreciate the nature and quality of human landscapes

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Introduction: Definition, Nature and scope, Significance of Human Geography, Branches of Human Geography

UNIT-II

Evolution of man – Nature interaction: Hunting and food gathering, and pastoral nomadism, Cultural Region : Race Religion and Language.

UNIT-III

Human adaptation to extreme environment- Eskimos, Bushman, Pgymi, Gond

PART 'B'

PRACTICAL COURSE CONTENTS:

Sampling: Purposive, Random, systematic, and stratified.

SUGGESTED READINGS:

1. Chandna, R.C., (2017): Population Geography, Kalyani Publishers, New Delhi.
2. Roy D (2022): Population Geography, 2nd Edition, Books & Allied, Kolkata
3. Daniel, P.A. and Hopkinson, M.F. (1989): The Geography of Settlement, Oliver & Boyd, London.
4. Hassan, M.I. (2005): Population Geography, Rawat Publications, Jaipur
5. Hussain, Majid., (2012):ManavBhugol, Rawat Publications, Jaipur.
6. Johnston, R., Gregory, D.,& Pratt, G., et al. (2008):The Dictionary of Human Geography, Blackwell Publication.
7. Jordan-Bychkov., et al., (2006):The Human Mosaic: A Thematic Introduction to Cultural Geography, W. H. Freeman and Company, New York.
8. Kaushik, S.D., (2010): Manav Bhugol, Rastogi Publication, Meerut.
9. Maurya, S.D., (2012): Manav Bhugol, Sharda Pustak Bhawan, Allahabad.
10. Rozenblat., Celine., Pumain., Denise and Velasquez., Elkin Eds. (2018): International and Transnational Perspectives on Urban Systems, Springer, Japan, pages 393.

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SEMESTER - V

COURSE: MAJOR – 8(MJ-8)
PAPER NAME: POPULATION GEOGRAPHY
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarize student with the nature and scope of Population geography.
- To make students learn about the population change, and its dynamics

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Know the pattern of population change and its dynamics.
- Understand processes of population growth and its implications.
- Appreciate the growth, distribution and composition of population in different parts of the world.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Nature and Scope of Population Geography, Population Geography and Demography, Sources of Population Data, Distribution and its Pattern in the India & World, Factors Influencing Distribution of Population in the India & world.

UNIT-II

Concept of Population Composition, Population Change: Growth of Population in the World and India, Components of Population Change, Demographic Transition Theory (F. W. Noteatein& Malthus).

UNIT-III

Migration – Meaning and Types, Causes and Consequences, Theories of Migration (Ravenstein& Lee), Population and Resources, Optimum Population, Population Projection, Malthus Population Theory, Population Policy of India.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Diagrammatic data presentation, Dot, Pie; Choropleth and Isopleths.

SUGGESTED READINGS:

1. Chandna R.C. (2009), Geography of Population, Kalyani Publicishers, Ansari Road, Daryaganj, N. Delhi-2.
2. Majid Hussain (1999), Human Geography, Rawat Publications, Jaipur.
3. Trewartha GT. (1959) A Geography of Population, World Patterns, John Wiley and Sons Inc. New York.
4. Ghosh BN. (1987) Fundamentals of Population Geography, Sterling Publishing Company, New Delhi
5. R.K. Tripati ((2000) Populaton Geography, Commonwealth Publishers, New Delhi.
6. Kayastha, S.L. (1998) Geography of Population, Rawat Publications, Jaipur.
7. Clerk I (1984) Geography of Population, Approaches and Applications, Pergamon Press, Oxford, UK.
8. Tiwari, Ram Kumar (2015): JansankhyaBhugol, Prwalika Publication, Allahabad.
9. Hiralal (2007): JansankhyaBugolKeMulTatwa, Radha Publication, New Delhi.
10. Mourya, S.D. (2011): JansankhyaBhugol, Sharda Pustak Bhawan, Allahabad.
11. Dubey, K.K. & Singh, M.B. (2001): JansankhyaBhugol, Rawat Publication, Jaipur.
12. Roy, Debjani (2022) Population Geography, Books and Allied publisher, Kolkata

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SEMESTER - V

COURSE: MAJOR – 9(MJ-9) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: SOCIAL AND CULTURAL GEOGRAPHY **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarize the about social geography, its concept, nature and scope; migration social categories
- To make students learn about Cultural geography and its concepts; Tribes and their economic activities, marriage, faith and practices

COURSE OUTCOMES:

After the completion of course, the students will have ability to:-

- Understand the nature, scope and relationships of geography and human wellbeing;
- Acquire knowledge on spatial dimensions of social diversity components;
- Understand the aspects of Cultural geography and tribal socio-economic activities.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Social Geography: Concept, Origin, Nature and Scope, Social Structure and processes, Social Well-being and Quality of life,

UNIT-II

Social Categories: Caste, Class, Religion, Race and Gender and their Spatial distribution.

UNIT-III

Concept of Culture, Cultural Heritage, Cultural Ecology and Cultural Convergence

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Graphical representation: Spherical, proportional circles,histogram, polygons,ogive

SUGGESTED READINGS:

1. Ahmed A., 1999: Social Geography, Rawat Publications.
2. Casino V. J. D., Jr., 2009) Social Geography: A Critical Introduction, Wiley Blackwell.
3. Cater J. and Jones T., 2000: Social Geography: An Introduction to Contemporary Issues, Hodder Arnold.
4. Panelli R., 2004: Social Geographies: From Difference to Action, Sage.
5. Rachel P., Burke M., Fuller D., Gough J., Macfarlane R. and Mowl G., 2001: Introducing Social Geographies, Oxford University Press.
6. Smith D. M., 1977: Human geography: A Welfare Approach, Edward Arnold, London.
7. Smith S. J., Pain R., Marston S. A., Jones J. P., 2009: The SAGE Handbook of Social Geographies, Sage Publications.
8. Sopher, David (1980): An Exploration of India, Cornell University Press, Ithasa
9. Valentine G., 2001: Social Geographies: Space and Society, Prentice Hall.

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SEMESTER - V

COURSE: MAJOR – 10(MJ-10)
PAPER NAME: GEOGRAPHY OF JHARKHAND
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarise students about physical geography of Jharkhand, its demography, social attributes
- To explain the concepts of regionalisation on the basis of physiography, socio-cultural and economic characteristics

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the physical profile of the State.
- Study the resource endowment and its spatial distribution and utilization for sustainable development
- Synthesis and develop the idea of regional dimensions

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Physiography of Jharkhand, Relief, Geological structure, Drainage, Climate, Forest Resource and its Economics importance.

UNIT-II

Population Growth and Distribution, Population Composition, Natural Resources, Mineral resources and its environmental Importance, Energy Resources, Industrial Belt in Jharkhand, Agriculture,: Irrigation_ Type, Distribution, Problem and solution.

UNIT-III

Regional account of Santhal Pargana, Drainage, Climate, Natural Vegetation, major Tribes of Santhal Pargana, Education status and their important, major tourist places.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Tabulation and Descriptive Statistics: Frequency (Deciles, Quartiles), Cross Tabulation, Scatter diagram.

SUGGESTED READINGS:

1. Deshpande, C. D., (1992): India: A Regional Interpretation, ICSSR, New Delhi.
2. Douglas, L. Johnson.,(2009): World Regional Geography, Tenth edition, Pearson Education Inc, New Jersey.
3. Johnson, B. L. C., ed. (2001): Geographical Dictionary of India. Vision Books, New Delhi.
4. Khullar, D.R. (2014): India: A Comprehensive Geography, Kalyani Publishers, New Delhi.
5. Majid Husain (2009): Geography of India, Tata McGraw hill Education Private Ltd, New Delhi.
6. Pathak, C. R. (2003): Spatial Structure and Processes of Development in India. Regional Science Assoc., Kolkata.
7. Sdyasuk, Galina and P, Sengupta., (1967): Economic Regionalisation of India, Census of India.
8. Sharma, T.C. (2013): Economic Geography of India. Rawat Publication, Jaipur.
9. Singh R. L., (1971): India: A Regional Geography, National Geographical Society of India.
10. Spate O. H. K. and Learmonth A. T. A., (1967): India and Pakistan: A General and Regional Geography, Methuen.
11. Tirtha, Ranjit (2002): Geography of India, Rawat Publs., Jaipur & New Delhi.

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SEMESTER - V

COURSE: MAJOR – 11(MJ-11)
PAPER NAME: BIOGEOGRAPHY
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To Understand the Definition, scope & importance of bio- geography.
- To Study the Various aspects related to the same.
- Understanding the important of Environment for human being.

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the dynamic interactive relationship between man and environment.
- Make assessment and review of planning and policies related to environment and natural resources.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Definition, scope & importance of bio- geography relation with other science; Development of bio- geography, Hydrological Cycle; Bio- Geo- Chemical Cycles.

UNIT-II

Ecology and Ecosystem: Concept, Structure and Functions, Energy Flow in Ecosystem, Ecological Pyramid, Ecological Niche.

UNIT-III

Concept and type of Biomes, National Parkes and sanctuaries in jharkhand and india, Biodiversity degradation and conservation.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Correlation: Rank Correlation, Product Moment Correlation and Regression.

SUGGESTED READINGS:

1. Chandna, R. C., (2002): Environmental Geography, Kalyani, Ludhiana.
2. Cunninghum, W. P. and Cunninghum, M. A., (2004): Principals of Environmental Science: Inquiry and Applications, Tata Macgraw Hill, New Delhi.
3. Goudie, A., (2001): The Nature of the Environment, Blackwell, Oxford.
4. Holechek, J. L. C., Richard, A., Fisher, J. T. and Valdez, R., (2003): Natural Resources: Ecology, Economics and Policy, Prentice Hall, New Jersey.
5. Miller, G. T., (2004): Environmental Science: Working with the Earth, Thomson Brooks Cole, Singapore.
6. Mitchell, B., (1997): Resource and Environmental Management, Longman Harlow, England.
7. MoEF, (2006): National Environmental Policy-2006, Ministry of Environment and Forests, Government of India.
8. Odum, E. P. et al, (2005): Fundamentals of Ecology, Ceneage Learning India.
9. Saxena, H.M., 2012: Environmental Studies, Rawat Publications, Jaipur.
10. Singh, Savindra., (2001): ParyavaranBhugol (Hindi), PrayagPustak Bhawan, Allahabad. (in Hindi)
11. UNEP, (2007): Global Environment Outlook: GEO4: Environment for Development, United Nations Environment Programme.

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SEMESTER - VI

COURSE: MAJOR – 12(MJ-12) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: ECONOMIC GEOGRAPHY **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarise students about nature, scope and importance of economic geography
- To explain the concepts of industrial location, various types of economic activities

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Distinguish different types of economic activities and their utilities.
- Appreciate the factors responsible for the location and distribution of activities.
- Examine the significance and relevance of theories in relation to the location of different economic activities.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Nature, scope and importance of Economic Geography, Spatial Structure of Economy. Factors Affecting location of Economic Activity with special reference to Agriculture,

UNIT-II

Primary Economic Activities Fishing ground and aquaculture. Issues and Challenges for the Development of fishing and forestry, Secondary Activities: Cotton Textile, Iron and Steel industry, Special Economic Zones and Technology Parks. Knowledge –based Technologies, Electronic age, spatial information Technology, Telecommunication, Tertiary Activities: Transport, Trade and Services.

UNIT-III

Economic Growth and Development; Definition, concept of Development and Sustainable Development, Human resource development; concept, Measurement, indicators and component; Industry and Industrial location (Weber's and Losch theory)

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Field Excursion : Preparation of tour report

1. Based on observations prepare a tour report. The report need to be supplemented with maps, sketches, diagrams and photographs etc.
2. The report should aim at identification of different geographical dimension.

SUGGESTED READINGS:

1. Alexander, J. W., (1963): Economic Geography, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
2. Bagchi-Sen, S. and Smith, H. L., (2006): Economic Geography: Past, Present and Future, Taylor and Francis.
3. Clark, Gordon L.; Feldman, M.P. and Gertler, M.S., eds. (2000): The New Oxford Handbook of Economic Geography, Oxford Press.
4. Coe, N. M., Kelly P. F. and Yeung H. W., (2007): Economic Geography: A Contemporary Introduction, Wiley-Blackwell.
5. Combes, P., Mayer T. and Thisse, J. F., (2008): Economic Geography: The Integration of Regions and Nations, Princeton University Press.
6. Durand, L., (1961): Economic Geography, Crowell.
7. Hodder, B. W. and Lee, Roger, (1974): Economic Geography, Taylor and Francis
8. Knowles, R. &Wareing, J., (2004): Economic and Social Geography Made Simple, Rupa& Co., Kolkata.
9. Saxena, H.M.,(2013): Economic Geography, Rawat Publications, Jaipur.
10. Siddhartha, K., (2013): Economic Geography, Kisalaya Publications Pvt. Ltd., New Delhi.

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SEMESTER - VI

COURSE: MAJOR – 13(MJ-13)
PAPER NAME: RESOURCE GEOGRAPHY
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarize the concept of Nature and scope of resource geography, meaning and approaches of resource geography.
- To make students learn about Type of resources, Natural Resource, man- made resource and capital resource, conservation

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the dynamic interactive relationship between man and environment.
- Have sound understanding on distribution, utilization and proper management of natural resources at global level.
- Make assessment and review of planning and policies related to environment and natural resources.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Nature and scope of resource geography, meaning and approaches of resource geography.

UNIT-II

Type of resources, Natural Resource, man- made resource and capital resource, Distribution of resources, Relation between man and nature, Appraisal and Conservation of Environment and Natural Resources and Sustainable Resource Development.

UNIT-III

Environment and Natural Resource Management, Natural Resource: Concept, Classification; Distribution, Utilization, Problems and Management of Land, Water Forests and Energy.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Field Excursion: Preparation of survey report

1. Based on survey prepare a report. The report needs to be supplemented with maps, sketches, diagrams and photographs etc.
2. The report should aim at identification of land use, settlement structure and life style of the people.

SUGGESTED READINGS:

1. Jaat, B.C. (2020): Resource Geography, PanchsheelPrakashan
2. Goel, B.K.(2023): Resource Geography, Laxmi Publication PVT Ltd.
3. Memoria,C, (2024): Economic and Resources Geography, SBPD Publication.
4. Gautam, A, (2018): Geography of Resources: Exploitation, Conservation and Management, Sharda Pustak Bhawan Allahabad.
5. Maurya S.D.(2022): Resource Geography, Pravalika Publication Prayagraj.

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SEMESTER - VI

COURSE: MAJOR – 14(MJ-14) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: WORLD REGIONAL GEOGRAPHY **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To explain the physical features, drainage and climatic feature of continents
- To familiarize students about major physiographic region of continents

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Locate physical features of the world major continents.
- Understand climatic condition and climatic pattern of the continents.
- Understand the drainage of the continents

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Asia, North America and Europe: Physiography, Soil, Climatic Zone, Population- Factor affecting the distribution; Agriculture development, industries, SAARC Nations, Regional study of USA, Regional study Japan.

UNIT-II

Africa and South America: Physiography and Population, Savanna Grassland of Africa, Amazon Basin, extensive Agriculture of South America, Regional study of Brazil and South Africa.

UNIT-III

Australia and New Zealand: Physiography, Dairy farming and Demographic set-up, detailed regional study of Western Desert (Australia) and New Zealand.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Importance of fieldwork, scope and purpose, types of survey, principles and applications of selected survey instruments, Plane Table Survey, Intersection method and Radiation method

SUGGESTED READINGS:

1. Sing, K.(2021): Teen UttariMahadweepon ka Bhugol, SPBD Publication.
2. Jat, B. C.,(2020): Vishwa ka PraadeshikBhugol, Punchshil Publication.
3. Memoria, C & Jain S.M.(2015): Geographical Thought and Three Southern Continents, SPBD Publication.
4. Singh R.(2017): Teen Dakshinimahadesh: Australia ekBhaugolikAdhyan, Bihar Hindi Granth Academy, Patna.
5. Hussain ,M.(2024): World Regional Geography, Rawat Publication.
6. Douglas, L. Johnson.,(2009): World Regional Geography, Tenth edition, Pearson Education Inc, New Jersey.
7. Baker, A. R. H. and Billinge, M. (forthcoming) Geographies of England: the North–South Divide, Imagined and Real (Cambridge)
8. Brigham, A. P. 1903 Geographic Influences on American History (Boston)
9. Brooks, C. E. P. 1926 Climate through the Ages (London).

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SEMESTER - VI

COURSE: MAJOR – 15(MJ-15) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: ENVIRONMENTAL GEOGRAPHY **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarize the Definition and Scope of Environmental Geography, Meaning and Component of Environment, Environmental Rules and Regulations in india.
- To make students learn about the Ecosystem, its structure, functions and various policy with regard to environmental conservation

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the dynamic interactive relationship between man and environment.
- Make assessment and review of planning and policies related to environment and natural resources.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Definition and Scope of Environmental Geography, Meaning and Component of Environment, Environmental Rules and Regulations in India.

UNIT-II

Ecology and Ecosystem: Concept, Structure and Functions. Environmental Issues in Tropical, Temperate and Polar Ecosystems.

UNIT-III

Depletion of Ozone Layer and its Consequences, Protection of Ozone Layer, Acid Rain- Causes and Effects: Concept of Global Warming, Environmental Programs and Policies – Global, National and Local levels

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Prismatic Compass: Open and Closed Traverse ,other smaller instruments: Sextant, Abney Level and Indian Clinometer.

SUGGESTED READINGS:

1. Chandna, R. C., (2002): Environmental Geography, Kalyani, Ludhiana.
2. Cunninghum, W. P. and Cunninghum, M. A., (2004): Principals of Environmental Science: Inquiry and Applications, Tata Macgraw Hill, New Delhi.
3. Goudie, A., (2001): The Nature of the Environment, Blackwell, Oxford.
4. Holechek, J. L. C., Richard, A., Fisher, J. T. and Valdez, R., (2003): Natural Resources: Ecology, Economics and Policy, Prentice Hall, New Jersey.
5. Miller, G. T., (2004): Environmental Science: Working with the Earth, Thomson Brooks Cole, Singapore.
6. Mitchell, B., (1997): Resource and Environmental Management, Longman Harlow, England.
7. MoEF, (2006): National Environmental Policy-2006, Ministry of Environment and Forests, Government of India.
8. Odum, E. P. et al, (2005): Fundamentals of Ecology, Ceneage Learning India.
9. Saxena, H.M., 2012: Environmental Studies, Rawat Publications, Jaipur.
10. Singh, Savindra., (2001): ParyavaranBhugol (Hindi), PrayagPustak Bhawan, Allahabad. (in Hindi)
11. UNEP, (2007): Global Environment Outlook: GEO4: Environment for Development, United Nations Environment Programme.

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SEMESTER - VII

COURSE: MAJOR – 16(MJ-16)
PAPER NAME: URBAN GEOGRAPHY
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objectives of this course are as follows-

- To familiarise students about Urbanization, its patterns and theories
- To make student learn about urban functions, urban sprawl, urban renewal-policies, Master plan

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Understand the fundamentals and patterns of urbanization process
- Learn the functional classification of cities and Central Place Theory
- Know about policies of urban development of India

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Nature and scope of Urban Geography-Definition of Urban Settlements (Towns, Cities and Metro etc.), Origin and growth of Urban Settlements. Structure and morphology of Urban settlement

UNIT-II

Classification of urban settlements on the basis of size and function, Urban growth and theories, Central Place theory of Christaller and Losch.

UNIT-III

Urban Hierarchy- Rank-Size Rule – Central Place Theory – Functional Classification of Towns by C.D. Harris and H.J. Nelson. Urban Issues & Challenges: Water supply, traffic congestion, solid waste, smog, sewage and drainage system; Slum and housing problems

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Projections: Simple conical projections (with one standard parallel and two standard parallels), Bonnes Projection.

SUGGESTED READINGS:

1. Bansal, S.C. (2011): NagariyaBhogol. Meenakshi Publication, Meeruth.
2. Beanjen-Garnier J&G. Chabot (1967) Urban Geography, Jhonwiley, New York.
3. Johnson James H (1966) Urban Geography – An Introductory Analysis, Pergamon Press Oxford, London.
4. Karen Stromme Christensen (1999) Cities and Complexity, University of California, Berkely USA, Sage Publication, New Delhi.
5. Mandal R.B. (2002) Urban Geography – A Text Book, Concept Publishing Company, New Delhi.
6. Mayer H.M. & Kohn CF (1967) Urban Geography, Central Depot, Allahabad, India
7. Northham Ray M. (1975) Urban Geography, Jhon Wiley & Sons, Inc. New York
8. Peter Roberts (2000) Urban Regeneration, University of Dundee, U.K., Sage Publication, New Delhi.
9. RananPaddison (2001) Hand Book or Urban Studies, University of Glasgow, U.K., Sage Publications, N. Delhi.
10. Saskia Sassen (2000) Cities in a World Economy, University of Chicago, USA, Sage Publications, New Delhi.
11. Siddartha K & S. Mukherjee (1996). Cities, Urbanization and Urban Systems, Transworld Media and Communication Pvt. Ltd. New Delhi
12. Ashish Sarkar, Practical Geography- A systematic approach

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SEMESTER - VII

COURSE: MAJOR – 17(MJ-17)
PAPER NAME: AGRICULTURAL GEOGRAPHY
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objectives of this course are as follows-
1. To familiarize student about the nature, scope, significance and approaches of agriculture geography.
2. To make students learn about the determinants of agricultural land use, new trends in Indian Agriculture, food security

COURSE OUTCOMES:

After the completion of course, the students will have ability to:
1. Conceptualize the agriculture and its determinants.
2. Get the overview of Indian agriculture regions and systems.
3. Have sound knowledge of agriculture revolutions and food security

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Nature and scope, Significance and development of agricultural geography, Approaches to the study of agricultural geography, Origin and dispersal of agriculture; Determinants of agricultural land use – Physical, economic, social and technological.

UNIT-II

Theories of agricultural location based on several multi-dimensional factors, Von Thunen's model and its recent modifications, Whittlesey's classification of agricultural regions, Agro-climatic regions of India.

UNIT-III

Croppingpattern, Agriculture in India – Land use and shifting cropping pattern, New trends in Indian agriculture, Green Revolution, White Revolution, Blue Revolution, Problems of Indian agriculture, Agricultural Policy of India, Food security.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Projections: Cylindrical (Equal area and Equidistant), Gall's Projection, Mercator's Projection.

SUGGESTED READINGS:

1. Mohammad Shafi (2006): Agricultural Geography, Dorling Kindessley (India) Pv. Ltd. New Delhi.
2. Negi. B.S. (2003) Indian Agriculture: problems, Progress & Prospects, Vikas publishing house Pvt. Ltd. S. Ansari Road, Daryagani, New Delhi-2.
3. Majid Hussain (2000): Agricultural Geography, Ed Anmol Publishing Pvt. Ltd. Ansari Road, Daryagani, New Delhi-2.
4. Shafi M. (1999): Agricultural Geography, Kedarnath Ram Nath, 132, College road, Meetat UP-1.
5. Singh &Dhillion (2000): Agricultureal Geography, PrayagPustak Bhavan, 20 A, University road, Allahabad-211002, UP.
6. Jasbirsingh (2001): Agricultureal geography, PrayogPustak Bhavan, 20 A, University road, Allahabad-211002, UP.
7. Memonia CB (1998): Aricultural Problems in India: PrayogPustak Bhavan, 20 A, University road, Allahabad-211002, UP.
8. Majid Husain (2007): Systematic Agricultural Geography, Rawat publications, Jawahar Nagar, Jaipur, New Delhi – 92.
9. Tiwari, R.C., & Singh, B.N. (2015): Krishi Bhugol, Prawalika Publications, Allahabad
10. Ashish Sarkar, Practical Geography- A systematic approach

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SEMESTER - VII

COURSE: MAJOR – 18(MJ-18)
PAPER NAME: TRIBAL GEOGRAPHY
TOTAL CREDITS: THEORY-03, PRACTICAL-01
TEACHING HOURS: THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objectives of this course are as follows-
1. To familiarize the about social geography, its concept, nature and scope; migration social categories
2. To make students learn about Tribal geography and its concepts; Tribes and their economic activities, marriage, faith and practices

COURSE OUTCOMES:

After the completion of course, the students will have ability to:-
1. Understand the nature, scope and relationships of geography and human wellbeing;
2. Acquire knowledge on spatial dimensions of social diversity components;
3. Understand the aspects of Tribal geography and tribal socio-economic activities

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Tribal Geography- meaning, concept, and scope of tribal geography; Tribes and their habitat- Geographical distribution of Indian tribes, groups and sub-groups.

UNIT-II

Economic activities; Socio- Political Organization- Family, Marriage and kinship, faith, beliefs and practices.

UNIT-III

Tribal rights- Land, forests, water; Emerging social problems- Health and education, malnutrition, illiteracy, Alcoholism; Industrialization and tribe, mining and tribes displacement.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Projections: Zenithal (Polar Zenithal, Gnomonic and stereographic), Sinusoidal and Mollweide.

SUGGESTED READINGS:

1. Ahmed A., 1999: Social Geography, Rawat Publications.
2. Casino V. J. D., Jr., 2009) Social Geography: A Critical Introduction, Wiley Blackwell.
3. Cater J. and Jones T., 2000: Social Geography: An Introduction to Contemporary Issues, Hodder Arnold.
4. Panelli R., 2004: Social Geographies: From Difference to Action, Sage.
5. Rachel P., Burke M., Fuller D., Gough J., Macfarlane R. and Mowl G., 2001: Introducing Social Geographies, Oxford University Press.
6. Smith D. M., 1977: Human geography: A Welfare Approach, Edward Arnold, London.
7. Smith S. J., Pain R., Marston S. A., Jones J. P., 2009: The SAGE Handbook of Social Geographies, Sage Publications.
8. Sopher, David (1980): An Exploration of India, Cornell University Press, Ithasa
9. Valentine G., 2001: Social Geographies: Space and Society, Prentice Hall.

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SEMESTER - VIII

COURSE: MAJOR – 19(MJ-19) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: REGIONAL PLANNING AND DEVELOPMENT **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objective of this course are as follows-

- To familiarize the concept of Region and regional planning, Its need and techniques
- To make students learn about the theories and models for regional planning, Indicators of development, Multi-Purpose Projects

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

- Identify notable lagging regions and solutions for their overall development
- Have comprehensive understanding regarding the different regions and application of different models and theories for integrated regional development.
- Select appropriate indicators for the measurement of socio-economic regional development

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Concept of Region, Types, hierarchy, characteristics and delineation of Regional planning, Geography of regional planning, concept, scope, methods, techniques and need of regional planning. Types of planning: Temporal, sectoral, spatial and non- spatial, Regionalization of India for Planning (Agro Ecological Zones)

UNIT-II

Theories and Models for Regional Planning: Growth Pole Model of Perroux; Growth Centre Model in Indian Context; Myrdal, Hirschman, Rostow and Friedmann.

UNIT-III

Concept of Development, Indicators of development (Economic, Demographic and Environmental), Human Development Index, Underdevelopment concept and Causes, evaluation of regional disparities/imbalances. Planning Issues in Hill areas (as formal region) and City Region (as functional region).

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Delineation of formal regions through weighted index method, Measurement of inequality through location quotient, preparation of interview schedule for a gram panchayat member on relevant development issue.

SUGGESTED READINGS:

1. Agyeman, Julian, Robert, D. Bullard and Bob, Evans., (Eds.) (2003): Just Sustainabilities: Development in an Unequal World. London: Earth scan. (Introduction and conclusion.).
2. Anand, Subhash.,(2011):Ecodevelopment : Glocal Perspectives, Research India Press, New Delhi.
3. Baker, Susan., (2006): Sustainable Development. Milton Park, Abingdon, Oxon; New York, NY: Routledge (Chapter2," The concept of sustainable development"
4. Blij, H. J. De., (1971): Geography: Regions and Concepts, John Wiley and Sons.
5. Friedmann, J. and Alonso W. (1975): Regional Policy - Readings in Theory and Applications, MIT Press, Massachusetts.
6. Haynes J., (2008): Development Studies, Polity Short Introduction Series.
7. Misra, R. P., Sundaram, K.V. and V.L.S. Prakasa Rao, (1974): Regional Development planning in India, Vikas Publishing House Delhi.
8. Peet, R., (1999): Theories of Development, The Guilford Press, New York.
9. Singh, R.B. (2002): Human Dimensions of Sustainable Development, Rawat Pub., Jaipur, pages
10. UNDP (2001-04): Human Development Report, Oxford University
11. Shukla, J (2016) Regional Planning and Development, Disha Publication, Delhi

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SEMESTER - VIII

COURSE: MAJOR – 20(MJ-20) **TOTAL CREDITS:** 04
PAPER NAME: GROUP DISCUSSION & DISSERTATION

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

1. To enhance students' communication skills through active participation in seminars and group discussions.
2. To prepare students for professional and academic settings where effective communication and collaboration are essential.

COURSE OUTCOMES:

Students will be prepared to apply the communication and collaboration skills developed in this course to professional and academic contexts, enhancing their overall employability and academic success.

COURSE CONTENTS:

The **Head of the Department (HOD)** will divide the class into small groups. Each group will be assigned a specific topic related to their subject area. Students must work on the assigned topic under the guidance of a departmental teacher and prepare a **dissertation** based on their research.

Each student is required to submit a **typed and hardbound copy** of their dissertation **at least one week before the examination**.

Evaluation Process

1. A **group discussion** will be held within each group, conducted at the department level and chaired by the HOD. Based on their performance in this discussion, students will be awarded **internal marks out of 25**.
2. Each student's **presentation** and **dissertation report** will be evaluated by:
    - **One internal examiner** (from the department), and
    - **One external examiner**

    The **external examiner** will be appointed by the HOD and will be either:

    - A **permanent Professor/Associated Professor/ Assistant Professor** from the university's postgraduate department or another constituent college,

    OR

    - A **retired Professor, Associate Professor, or Assistant Professor** of the university.

3. **Evaluation (Total 100 Marks)**

    - **Group Discussion** – 25 marks
    - **Dissertation Report** – 25 marks
    - **Presentation** – 50 marks

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SEMESTER - VII

COURSE: ADVANCE MAJOR – 1(AMJ-1) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: SOIL GEOGRAPHY AND HYDROLOGY **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objectives of this course are as follows-

1. To familiarise students about nature, scope and significance of soil geography
2. To make student learn about soil development, hydrology, hydrological cycle, surface and ground ` water and its management

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

1. Study the soil as a basic resource, focusing its distribution, problems and management.
2. Understand the basic components of hydrological cycle and comprehend practices of integrated watershed management.
3. Evaluate the water balancing and river basin and water disputes

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Nature, scope and significance of Soil Geography; its relationship with Pedology, Soil forming factors: parent material, organic, climatic, topographic, Spatio-temporal dimensions, Processes of soil formation and soil development: Physical, Biotic and Chemical, Soil profile.

UNIT-II

Physical properties of soils: Morphology, Texture, Structure, Water, Air, Temperature and other properties of soil, Chemical properties of soil and soil reaction, Soil fertility: macronutrients and micronutrients, Soil erosion, Degradation and Conservation

UNIT-III

Definition and scope of hydrology, importance of water, hydrological cycle, water storages – glaciers, river channels, lakes and reservoirs, precipitation, transpiration, evapotranspiration, infiltartion, ground water storage, ground water aquifers in different rock systems, Water Crisis: a Case study- rural or urban, water management: ground water and surface water.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Determination of Soil pH, organic matter and NPK through field kit**,** Determination of Soil type by ternary diagram, Construction and interpretation of Rating Curves, Construction and interpretation of Hydrographs

SUGGESTED READINGS:

1. Miller, R. W. and Donahue, R. L. (1992): Soils: An Introduction to Soils and Plant Growth, Prentice-Hall of India, New Delhi
2. Brady, N. C., and Weil, R. R. (2008): The Nature and Properties of Soils, Prentice Hall,New Jersey
3. Pitty, A. F. (1978): Geography and Soil Properties, Methuen and Co., London
4. Bridges, E. M. and Davidson, D. A. (1982): Principles and Applications of Soil Geography, Longman Group, London
5. Birkeland, P. W (1999): Soils and Geomorphology, Oxford University Press, New York
6. GovindaRajan, S.V. and Gopala Rao, H.G.: Studies on soils of India, Vikas, New Delhi, 1978.
7. Raychoudhuri, S.P.: Soils of India, ICAR, New Delhi, 1958.
8. Bunting, B.T.: The Geography of Soils, McGraw Hill, New York.
9. Timothy, Davie. 2003. Fundamentals of Hydrology. Routledge, Taylor and Francis Group, U.K.
10. Todd, D.K. 2009. Groundwater Hydrology. John Wiley & Sons Inc.
11. Mahajan, G. 1989. Evaluation and Development of Groundwater. Ashish Publishing House, New Delhi.
12. Karanth, K.R.C. 1988.Ground Water: Exploration, Assessment and Development. Tata-Mcgraw Hill, New Delhi.
13. Andrew D. Ward and Stanley Trimble. 2004(2nd edition). Environmental Hydrology. Lewis Publishers.
14. Andrew. D. ward and Stanley, Trimble (2004): Environmental Hydrology, 2nd edition, Lewis Publishers, CRC Press.
15. Karanth, K.R., 1988 : Ground Water: Exploration, Assessment and Development, Tata- McGraw Hill, New Delhi.
16. Ramaswamy, C. (1985): Review of floods in India during the past 75 years: A Perspective. Indian National Science Academy, New Delhi.
17. Rao, K.L., 1982 : India's Water Wealth 2nd edition, Orient Longman, Delhi,.
18. Singh, Vijay P. (1995): Environmental Hydrology. Kluwar Academic Publications, The Netherlands.

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SEMESTER - VIII

COURSE: ADVANCE MAJOR – 2(AMJ-2) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER name: REMOTE SENSING AND GIS **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Remote Sensing: Definition and development; platforms and types; photogrammetry; 2. Satellite Remote Sensing: Principles, EMR Interaction with atmosphere and earth surface; satellites (Landsat and IRS); sensors;

UNIT-II

Visual Satellite Image Interpretation; Application of Remote Sensing in Land use/Land cover mapping.

UNIT-III

Geographical Information System (GIS): Definition and Components; Global Positioning System (GPS): Principles and uses; GIS Data Structures: Types (spatial and non-spatial), raster and vector data structure; GIS Data Analysis: Input; geo-referencing; editing and output; Application of GIS: Land use mapping; urban sprawl analysis; forests monitoring.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Image Processing, Classification (supervised & unsupervised); Geo referencing, Editing and Output, Overlays.

SUGGESTED READINGS:

1. Bhatta, B. (2010) Analysis of Urban Growth and Sprawl from Remote Sensing, Springer, BerlinHeidelberg.41
2. Burrough, P.A., and McDonnell, R.A.(2000) Principles of Geographical Information System-Spatial Information System and Geo-statistics. Oxford University Press
3. Heywoods, I., Cornelius, S and Carver, S. (2006) An Introduction to Geographical Information system. Prentice Hall.
4. Jha, M.M. and Singh, R.B. (2008) Land Use: Reflection on Spatial Informatics Agriculture and Development, New Delhi: Concept.
5. Nag, P. (2008) Introduction to GIS, Concept India, New Delhi.
6. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi
7. Singh, R.B. and Murai, S. (1998) Space Informatics for Sustainable Development, Oxford and IBH, New Delhi.

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SEMESTER - VIII

COURSE: ADVANCE MAJOR – 3(AMJ-3) **TOTAL CREDITS:** THEORY-03, PRACTICAL-01
PAPER NAME: TRANSPORT AND TOURISM GEOGRAPHY **TEACHING HOURS:** THEORY-45, PRACTICAL-30

EVALUATION			
	External Exam	**Internal Exam**	**Practical**
Full Marks	**60**	15 (10 Written + 5 Attendance/Overall Class Performance)	**25**
Duration of Exam	3 Hours	1 Hour	6 Hours
Pass Marks	30 Marks		10 marks

COURSE OBJECTIVES:

The Learning objectives of this course are as follows-

1. To be aware of the various dimensions of Tourism Geography and make the students aware about various types of tourism
2. To assess sustainable ecotourism and other contemporary forms of tourism
3. To critically evaluate the infrastructure in tourism in India along with reviewing the tourism policy

COURSE OUTCOMES:

After the completion of course, the students will have ability to:

1. Learn the concept of transport, its types and factors
2. Equip with a basic understanding of nature and scope, trends and patterns of various types of tourisms
3. Apply the principles of Geo-tourism and analyse the prospects and problems associated with pilgrimage tourism.

PART 'A'

THEORY COURSE CONTENTS:

UNIT-I

Nature, scope, significance of and Development of Transport Geography, factors of Development: Physical, Economic, Social, Economic and transport and regional, Modes development, relative significance of transport (railways, roadways, waterways).

Accessibility and flow models; network structure, measurement of accessibility,

Models of network change, Function, pattern of movement and transport development.

UNIT-II

Nature, scope and extent, concept of tourism, Relationship between geography and Tourism, Eco- tourism, Geotourism, Agro-tourism, Heritage Religions tourism and Adventure tourism.

UNIT-III

Types of tourism- Domestic and the international, Adventure, wildlife, Pilgrimage, Business, Leisure, Pleasure, and cultural tourism, Local, National and international, Socio-Economic impact of tourism.

PART 'B'

PRACTICAL COURSE CONTENTS:

UNIT-I:

Use of GIS for mapping heritage sites and transport infrastructure, SWOT analysis of a selected transport system or tourist destination, Field Visit to a local tourism site or transport hub (e.g., railway station, airport, bus terminal, heritage site, eco-tourism park)

SUGGESTED READINGS:

1. Hagget, F and Chorley; R.J.Network analysis, Edward Arnold, London.1973
2. Raza, M and Agrawal, Y.P., Transport Geography in India. Concept Publication New Delhi, 1985.
3. White, H.P. and Senior, M.L; Transport- Longmon London, 1983.
4. Ulman, E.L. American Commodity flow, University of Washington press, 1957.
5. Bhatia, A.K. (1996) Tourism Development sterling Publisher, New Delhi.
6. Singh, R.L. and Kashi Nath Singh; Reding in Rural Settlement, Geographers.
7. Sharma , J.K. (2000) Tourism, Plannings, and Development – A New perspective Kanishks.

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SEMESTER - VII

COURSE: RESEARCH – 1(RM-1)
PAPER NAME: RESEARCH METHODOLOGY
TOTAL CREDITS: THEORY-04
TEACHING HOURS: THEORY-60

EVALUATION		
	External Exam	**Internal Exam**
Full Marks	**75**	25 (20 Written + 5 Attendance/Overall Class Performance)
Duration of Exam	3 Hours	1 Hour
Pass Marks	40 Marks	

COURSE OBJECTIVES:

The course aims to inculcate research aptitude among the learners and equip them with knowledge and skills required to successfully undertake various steps in the research process.

COURSE OUTCOMES:

After completion of the course, learners will be able to:

1. Analyse research concepts, its types and steps in the research process.
2. Formulate research problems and assimilate various types of research design.
3. Create scales, sampling techniques and design data collection tools.
4. Recognise various techniques of data analysis and interpretation.
5. Prepare a complete research report in appropriate format.

COURSE CONTENTS:

Unit-1: Introduction of Research

Research: Meaning, Definition, Nature, Scope, Significance, Steps Types and Methods of Research. Characteristics of Goods Research

Unit-II: Research Process

Defining Research Problem, Title Formulation; Setting of Hypothesis, Research Design - Exploratory, Descriptive and Experimental Research Designs.

Unit-IV: Data

Data, types of data, Methods of Collection of Primary and Secondary Data. Process of Questionnaire Design; Processing of Data-Editing, Coding, Classification and Tabulation.

Unit-III: Sample and Sampling & Report Writing

Meaning of Sample, Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of Good Sample Design.

Meaning and Types of Report, Steps of Report Writing, and Characteristics of a good report, Reference and bibliography

SUGGESTED READINGS:

1. Research Methodology – Text and Cases with SPSS Applications, by Dr S.L. Gupta and Hitesh Gupta, International Book House Pvt Ltd
2. Business Research Methodology by T N Srivastava and Shailaja Rego, Tata Mcgraw Hill Education Private Limited, New Delhi
3. Methodology of Research in Social Sciences, by O.R. Krishnaswami, Himalaya Publishing House
4. Newman, W. L. (2021). Social research methods: qualitative and quantitative approaches. (8th ed.). India: Pearson.
5. Saunders, M. (2010). Research methods for business. Pearson Education.
6. Schindler, P. S. (2021), Business research methods. (13th ed.). India: Mc Graw Hill Education
7. Research Methodology, Methods and Techniques by C.R Kothari
8. Research Methodology by Dr Vijay Upagude and Dr. Arvind Shende
9. Foundations of Social Research and Econometrics Techniques by S.C. Srivastava, Himalaya publishing House
10. Gupta, Santhosh Research Methodology and Statistical Techniques, Deep and Deep.
11. Business Research Methodology and Project Work, SBPD Publication

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SEMESTER - VIII

COURSE: RESEARCH – 2 **TOTAL CREDITS:**08
PAPER NAME: RESEARCH PROJECT/DISSERTATION

COURSE OBJECTIVES:

The objectives of the course are to facilitate students to carry out extensive research and develop as self-guided learning and analytical skills through problem and gap identification, development of research methodology, interpretation of findings and presentation of results.

COURSE OUTCOMES:

After completion of the course, the learners will be able to:

1. Gain in-dept knowledge in the major field of study.
2. Design and justify research methodology.
3. Utilize appropriate research methodology for data collection
4. Analyze the collected data and draws conclusions accordingly.

COURSE CONTENTS:

Dissertation/Project Guidelines:

Students who secure **75% marks or above** in the first six semesters and are interested in pursuing research at the undergraduate level may opt for the **Research Stream in the fourth year**.

In Semester VIII, students will undertake an 8-credit course that includes a dissertation and the preparation of a dissertation/thesis. This course may involve laboratory work, practicums, field projects, survey analyses, or internship-based projects. Students are required to submit a comprehensive research report and defend their dissertation/thesis.

The HOD of the department has to allot supervisor to the students from among the permanent faculty members who have PhD degree, after that the students have to select a research problem with the help of the supervisor and they have to submit a summary or research proposal to the department. Thereafter, the HOD of the department will organize a meeting of the Departmental Research Committee and after the presentation of the student the committee will approve or reject his/her synopsis/research proposal. Students will start their research work after getting approval from the department research committee.

At the end of the semester the student has to submit the project thesis/ dissertation to the department and after that the department will conduct an open viva-0voce examination for the students in the presence of the external member as well as the internal member.

The Department Research Committee will be constituted from the following persons:

1. HOD of the Department - Chairmen
2. Dean, Faculty of Commerce - External member
3. HOD, University Department - External member
4. At list two permanent faculty member of the department (Nominated by HOD) - Member

External members can be any of the following:

1. Permanent professors working in the postgraduate department of the university or other colleges who have the qualification to become PhD supervisors.

OR

2. Retired Professor/Associate Professor/Assistant Professor of the university who has been supervise PhD scholar.

OR

3. Professor/Associate Professor/Assistant Professor of the outside university who has been supervise PhD scholar.

Note- Minimum three external examiner lists will be sent by HOD through concern college principal to controller of examination, SKMU, Dumka for final approval. In that list priority will be given as per order mentioned above.

The evaluation will be based on the following criteria:

- Project dissertation design
- Methodology and content depth
- Participation in an internship programme with a reputed organization
- Application of research techniques in data collection
- Data analysis
- Report presentation
- Presentation style
- Results and discussion
- Future scope
- References

Marks Distribution

Marks will be distributed as follows:

- Assessment of Project Synopsis: **50 marks**
- Assessment of Project Thesis: **100 marks**
- Viva-voce: **50 marks**

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