DEPARTMENT OF GEOGRAPHY
SCHEME AND SYLLABI OF EXAMINATION FOR
UG Programme (BA/B. Sc) with Single Major: Scheme-C of Geography
Duration 4 Years (8 Semesters) w.e.f. Academic Session 2024-25

Semester – I

Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Core Courses									
U24-GEO/MCC - 101	Introduction to Physical Geography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/MCC - 102	Introduction to Resource Geography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Minor/Vocational Courses									
U24-GEO/ M-101	Physical Geography of India	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Multidisciplinary Courses									
U24-GEO/MDC - 101	Geography in Everyday Life	3	2 : 0 : 1 : 4	15	05	35	20	30	75
Ability Enhancement Courses									
AEC- 01		2	2 : 0 : 0 :2	15	-	35	-	20	50
Skill Enhancement Courses									
SEC- 01	Basics of IT Tools	3	2 : 0 : 1 : 4	15	05	35	20	30	75
Value Added Courses									
VAC-01 VAC-01	Human Values and Ethics (50%) / Environmental Studies (50%)	2	2 : 0 : 0 : 2	15	-	35	-	20	50
	Total	**22**							**550**

Semester – II

Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Core Courses									
U24-GEO/MCC – 203	Introduction to Human Geography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/DSEC – 201	Skills in Cartography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Minor/Vocational Courses									
U24-GEO/ M 202	Human Geography of India	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Multidisciplinary Courses									
U24-GEO/MDC - 202	Geography of the Environment	3	2 : 0 : 1 : 4	15	05	35	20	30	75
Ability Enhancement Courses									
AEC- 02		2	2 : 0 : 0 : 2	15	-	35	-	20	50
Skill Enhancement Courses									
U24-GEO/SEC- 202	Computer Aided Cartography	3	2 : 0 : 1 :4	15	05	35	20	30	75
Value Added Courses									
VAC-02 VAC-02	Environmental Studies (50%) / Human Values and Ethics (50%)	2	2 : 0 : 0 : 2	15	-	35	-	20	50
	Total	**22**							**550**

Internship Courses

Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
INT 201	Internship of 4-6 weeks duration after 2nd semester	4	0 : 0 : 4	--	30	--	70	40	100

Exit Option

Under Graduate Certificate in Geography (**with 48 Credits**)

Semester – III									
Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Core Courses									
U24-GEO/MCC – 304	Introduction to Geography of India	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/MCC – 305	History and Philosophy of Geography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Minor/Vocational Courses									
U24-GEO/ M 303	Geography of Haryana	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Multidisciplinary Courses									
U24-GEO/MDC - 303	Weather Forecasting	3	2 : 0 : 1 : 4	15	05	35	20	30	75
Ability Enhancement Courses									
AEC- 03		2	2 : 0 : 0 :2	15	-	35	-	20	50
Skill Enhancement Courses									
U24-GEO/SEC- 303	Exploration of Geographical Landscapes	3	2 : 0 : 1 :4	15	05	35	20	30	75
Value Added Courses									
U24-GEO/VAC-303	Sustainable Development Goals	2	2 : 0 : 0 :2	15	-	35	-	20	50
	Total	**22**							**550**

Semester – IV									
Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Core Courses									
U24-GEO/MCC – 406	Basics of Economic Geography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/MCC – 407	Introduction to Social Geography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/MCC – 408	Biogeography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/DSE – 401	Geography of Tourism or Geography of Health	4 4	3 : 0 : 1 : 5 3 : 0 : 1 : 5	20 20	10 10	50 50	20 20	40 40	100 100
Minor/Vocational Courses									
U24-GEO/ M 404(V)	Fundamentals of Remote Sensing	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Multidisciplinary Courses									
--	--	--	--	--	--	--	--	--	--
Ability Enhancement Courses									
AEC- 04		2	2 : 0 : 0 :2	15	-	35	-	20	50
Skill Enhancement Courses									
--	--	--	--	--	--	--	--	--	--
Value Added Courses									
U24-GEO/VAC-404	Understanding Climate Change	2	2 : 0 : 0 : 2	15	-	35	-	20	50
	Total	**24**							**600**

Internship Courses									
Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
INT 402	Internship of 4-6 weeks duration after 4th semester (If not done after 2nd semester)	4	0:0:4	--	30	--	70	40	100

Exit Option
Under Graduate Diploma in Geography **(with 94 Credits)**

Semester – V

Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Core Courses									
U24-GEO/MCC – 509	Statistical Methods in Geography	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/MCC – 510	Regional Development and Planning	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/DSE – 502	Geography of Trade and Transport or Cultural Geography	4 4	3 : 0 : 1 : 5 3 : 0 : 1 : 5	20 20	10 10	50 50	20 20	40 40	100 100
U24-GEO/DSE – 503	Geography and Disaster Management or Geography of Water Resources	4 4	3 : 0 : 1 : 5 3 : 0 : 1 : 5	20 20	10 10	50 50	20 20	40 40	100 100
Minor/Vocational Courses									
U24-GEO/M 505(V)	Fundamentals of GIS	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Multidisciplinary Courses									
--	--	--	--	--	--	--	--	--	--
Ability Enhancement Courses									
--	--	--	--	--	--	--	--	--	--
Skill Enhancement Courses									
INT201/INT402	Internship done after 2nd or 4th semester	4	--	--	30	--	70	40	100
Value Added Courses									
--	--	--	--	--	--	--	--	--	--
Total		**24**							**600**

Semester – VI

Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Core Courses									
U24-GEO/MCC – 611	Fundamentals of Remote Sensing	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/MCC – 612	Geography of Settlements	4	3 : 0 : 1 : 5	20	10	50	20	40	100
U24-GEO/DSE – 604	Political Geography or Agricultural Geography	4 4	3 : 0 : 1 : 5 3 : 0 : 1 : 5	20 20	10 10	50 50	20 20	40 40	100 100
U24-GEO/DSE – 605	Elementary Soil Geography or Population Geography	4 4	3 : 0 : 1 : 5 3 : 0 : 1 : 5	20 20	10 10	50 50	20 20	40 40	100 100
Minor/Vocational Courses									
U24-GEO/M 606(V)	Making of Maps	4	3 : 0 : 1 : 5	20	10	50	20	40	100
Multidisciplinary Courses									
--	--	--	--	--	--	--	--	--	--
Ability Enhancement Courses									
--	--	--	--	--	--	--	--	--	--
Skill Enhancement Courses									
U24-GEO/SEC- 604	Field Survey based Report (Socio-Economic)	2	1 : 0 : 1 : 3	10	05	20	15	20	50
Value Added Courses									
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Total		**22**							**550**

Exit Option
Bachelor with Major in (Geography) and Minor in () **(with 136 Credits)**

Semester – VII									
Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Major/Core Courses in Honors									
U24-GEO/CC – H701	Geography and Climate	4	4 : 0 : 0 : 4	20	10	50	20	40	100
U24-GEO/CC – H702	Landforms: Origin, Structure and Process	4	4 : 0 : 0 : 4	20	10	50	20	40	100
U24-GEO/CC – H703	Geography and World Economics	4	4 : 0 : 0 : 4	20	10	50	20	40	100
Discipline Specific Elective Courses in Honors									
U24-GEO/DSE – H701	Geography of Asia or Population Dynamics and Policies	4 4	4 : 0 : 0 : 4 4 : 0 : 0 : 4	20 20	10 10	50 50	20 20	40 40	100 100
Practicum Courses									
U24-GEO/PC – H701	Surveying Techniques in Geography	4	0 : 0 : 4 : 8	20	10	50	20	40	100
Minor Courses in Honors									
U24-GEO/CC-HM701	Hazard Management-Man Made	4	4 : 0 : 0 : 4	20	10	50	20	40	100
	Total	**24**							**600**

Semester – VIII									
Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Major/Core Courses in Honors									
U24-GEO/CC – H804	Geography and Hazard Management	4	4 : 0 : 0 : 4	20	10	50	20	40	100
U24-GEO/CC – H805	Research Methodology in Geography	4	4 : 0 : 0 : 4	20	10	50	20	40	100
U24-GEO/CC – H806	Agriculture Geography and Food Security	4	4 : 0 : 0 : 4	20	10	50	20	40	100
Discipline Specific Elective Courses in Honors									
U24-GEO/DSE – H802	Geography of Europe or Geography and Watershed Management	4 4	4 : 0 : 0 : 4 4 : 0 : 0 : 4	20 20	10 10	50 50	20 20	40 40	100 100
Practicum Courses									
U24-GEO/PC – H802	Morphometric Analysis of Landforms	4	0 : 0 : 4 : 8	20	10	50	20	40	100
Minor Courses in Honors									
U24-GEO/CC-HM802	Hazard Management-Natural	4	4 : 0 : 0 : 4	20	10	50	20	40	100
	Total	**24**							**600**

Exit Option
Bachelor (Honours) in Geography as Major Subject (**with 184/180 Credits**)

OR

Semester – VII									
Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Major/Core Courses in Honors									
U24-GEO/CC – H701	Geography and Climate	4	4 : 0 : 0 : 4	20	10	50	20	40	100
U24-GEO/CC – H702	Landforms: Origin, Structure and Process	4	4 : 0 : 0 : 4	20	10	50	20	40	100
U24-GEO/CC – H703	Geography and World Economics	4	4 : 0 : 0 : 4	20	10	50	20	40	100
Discipline Specific Elective Courses in Honors									
U24-GEO/DSE – H701	Geography of Asia or Population Dynamics and Policies	4 4	4 : 0 : 0 : 4 4 : 0 : 0 : 4	20	10	50	20	40	100
Practicum Courses									
U24-GEO/PC – H701	Surveying Techniques in Geography	4	0 : 0 : 4 : 8	20	10	50	20	40	100
Minor Courses in Honors									
U24-GEO/CC-HM701	Hazard Management-Man Made	4	4 : 0 : 0 : 4	20	10	50	20	40	100
	Total	**24**							**600**

Semester – VIII									
Course Code	Course Title	Credit	L : T : P: CH	Internal Marks		External Marks		Total Marks	
				Th	Pr	Th	Pr	Min	Max
Major/Core Courses in Honors									
U24-GEO/CC – H804	Geography and Hazard Management	4	4 : 0 : 0 : 4	20	10	50	20	40	100
U24-GEO/CC – H805	Research Methodology in Geography	4	4 : 0 : 0 : 4	20	10	50	20	40	100
Discipline Specific Elective Courses in Honors									
-	--	--	--	--	--	--	--	--	--
Practicum Courses									
U24-GEO/PC – H802	Project/ Dissertation	12	--	--	90	--	210	120	300
Minor Courses in Honors									
U24-GEO/CC-HM802	Hazard Management-Natural	4	4 : 0 : 0 : 4	20	10	50	20	40	100
	Total	**24**							**600**

Exit Option
Bachelor (Honours with Research) in Geography as Major Subject (**with 184/180 Credits**)

Chaudhary Ranbir Singh University, Jind

Syllabi for U G Programme (BA/B. Sc) in Geography (Scheme-C) as per NEP- 2020 (Multiple Entry – Exit, Internships and Choice Based Credit System) w.e.f.2024-25

MCC-A1			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	I		
Name of the Course	Introduction to Physical Geography		
Course Code	U24-GEO/MCC - 101		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. Acquire the knowledge about basic concepts of geo-tectonics. 2. Understand about the agents and processes of change on the surface of earth. 3. Enrich knowledge about atmosphere and its climate. 4. Attain knowledge about ocean surface configuration and circulation in oceanic water. 5* Attain skills in solving practical problems associated with physical geography.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Interior of the earth, geological time scale, rocks and their types. 2. Theory of isostasy, continental drift and plate tectonic.	12
II	3. Degradational processes: weathering, mass wasting and resultant landforms. 4. Landforms generated by following geomorphic agents: river, wind and glacier.	11
III	5. Weather and Climate: Atmosphere-composition and structure. 6. Atmospheric temperature, pressure and moisture: measurement and distribution.	11
IV	7. Surface configuration of ocean floors: surface relief of the Pacific, Atlantic and Indian Ocean. 8. Circulation of oceanic waters: current of the Pacific, Atlantic and Indian Ocean.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 7 exercises on the below mentioned themes: - 1. Identification and basic characteristics of rock: granite, basalt, limestone, shale, sandstone, slate, phyllite, schist, quartzite (1 exercise). 2. Extraction of physiographic information from Survey of India 1:50000 topographical maps of mountain, plateau and plain regions (2 exercises). 3. Preparation of climograph, hythergraph and hyetograph (3	30

	exercises). 4. Interpretation of a daily weather map of India: Pre-Monsoon, Monsoon and Post-Monsoon (2 exercises).	

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Barry, RG and Chorley, RJ (1998) Atmosphere, Weather and Climate, Routledge, London.
2. Bunnett, RB (1987) Physical Geography in Diagrams, Pearson Education, New Delhi.
3. Critchfield, H (2002) General Climatology, Prentice-Hall of India, New Delhi.
4. Kale, V and Gupta, A (2001) Element of Geomorphology, Oxford University Press, Calcutta.
5. Khullar, DR (2014) Physical Geography, Kalyani Publishers, New Delhi.
6. Monkhouse, FJ (1960) Principles of Physical Geography. Hodder and Stoughton, London.
7. Singh, S (1998) Geomorphology, Prayag Publication, Allahabad.
8. Singh, S (2012) Physical Geography, Prayag Publication, Allahabad.
9. Thornbury, WD (1969) Principles of Geomorphology, John Wiley and Sons, New York.
10. Trewartha, GT (1981) An Introduction to Climate, Mc-Graw Hill, New York.

*Applicable for courses having practical components.

MCC-A2			
Session: 2024-25			
Part A–Introduction			
Subject	Geography		
Semester	I		
Name of the Course	Introduction to Resource Geography		
Course Code	U24-GEO/MCC-102		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/ DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (ifany)	NA		
CourseLearningOutcomes (CLOs):	After completing this course, the learner will be able to: 1. acquaint with nature, techniques and field of resource geography. 2. enhance knowledge about classification and development process of natural resources. 3. provide knowledge on location, conservation and management methods of resources for sustainable development. 4. provide knowledge about concepts, policies, problems and models of natural resource utilization. 5* attain skills in mapping and monitoring of land, water, forest and mineral resources.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks: 100 **Internal Assessment Marks: 20+10 = 30** **End Term Exam Marks: 50+20 = 70**		**Time: 03 Hours**	

Part B- Contents of the Course

Instructions for Paper- Setter

Question 1 is compulsory comprising of five sub parts spread over entire syllabus (two marks for each sub part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Nature, scope, techniques and importance of resource geography. 2. Concepts of resource: exploitation, accumulation and resource degradation.	11
II	3. Classification of resources: renewable and non-renewable, biotic and abiotic resources. 4. Relationship between natural resources and development process. Role of technology in natural resource development.	11
III	5. Distribution, utilization, problems and management of land and water resources. 6. Distribution, utilization, problems and management of forest and mineral resources.	12
IV	7. Models of natural resources process: Zimmermann's primitive and Kirk's decision models. 8. Sustainable resource development; Policies and challenges of natural resource management.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempttwo exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Preparation of land use/land cover map of an area from topographical sheets and aerial photographs (2 exercises). 2. Mapping of forest cover of an area from topographical sheets and aerial photographs (2 exercises). 3. Mapping of water bodies of an area from topographical sheets and aerial photographs (2 exercises). 4. Decadal changes in country-wise production of coal and iron ore with comparative decadal changes (2 exercises).	30

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Barbier, EB (2005) Natural Resources and Economic Development, Cambridge University Press, Cambridge.
2. Bhatta, B (2011) Remote Sensing and GIS, Oxford University Press, New Delhi.
3. Borton, I and Kates, RW (1984) Readings in Resource Management and Conservation, University of Chicago Press, Chicago.
4. Bruce, M (1989) Geography and Resource Analysis, John Wiley and Son, New York.
5. Chiras, DD and Reganold, JP (2009) Natural Resource Conservation: Management for a Sustainable Future, Pearson, New Delhi.
6. Cutter SN, Renwich HL and Renwick W (1991) Exploitation, Conservation, Preservation: A Geographical Perspective on Natural Resources Use, John Wiley and Sons, New York.
7. Gadgil M and Guha R (2005) The Use and Abuse of Nature: Incorporating This Fissured Land: An Ecological History of India and Ecology and Equity, Oxford University Press, USA.
8. Gautam, A (2013) Geography of Resources: Exploitation, Conservation and Management. Sharda PustakBhawan, Allahabad.
9. Guha, JL and PR Chattroj (1994) Economic Geography-A Study of Resources, The World Press, Calcutta.
10. Holechek JLC, Richard A, Fisher JT and Valdez R (2003) Natural Resources: Ecology, Economics and Policy, Prentice Hall, New Jersey.
11. Jones G and Hollier G (1997) Resources, Society and Environmental Management, Paul Chapman, London.
12. Klee G (1991) Conservation of Natural Resources, Prentice Hall, Englewood.
13. Lillesand, TM, Kiefer, RW and Chipman, JW (2015) Remote Sensing and Image Interpretation, John Wiley and Sons, New York.
14. Martino, RL (1969) Resource Management. Mc Graw Hill Book Company, London.
15. Mather AS and Chapman K (1995) Environmental Resources, John Wiley and Sons, New York.
16. Mitchell B (1997) Resource and Environmental Management, Longman Harlow, England.
17. Negi, BS (2000) Geography of Resources, KedarNath and Ram Nath Publications, Meerut.
18. Owen, OS (1971) Natural Resource Conservation: An Ecological Approach,

McMillion, New Delhi.
19. Owen S and Owen PL (1991) Environment, Resources and Conservation, Cambridge University Press, New York.
20. Raja, M (1989) Renewable Resources, Development, Concept Publication, New Delhi.
21. Rees J (1990) Natural Resources: Allocation, Economics and Policy, Routledge, London.
22. Roy, PK (2006) Resource Studies, New Central Book Agency, Calcutta.
23. Shetty, R (2009) An Analysis of World Resources with reference to India, Sarala Raj Ria Publishers, Mysore.
24. Zimmermann, EW (1951) World Resources and Industries, Harper and Brothers, New Delhi.

*Applicable for courses having practical component.

MCC-M1			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	I		
Name of the Course	Physical Geography of India		
Course Code	U24-GEO/M-101		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	CC-M1		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the geological and physiographic structure of India. 2. enrich skills about drainage system and various hydrological regimes. 3. understand the climate and its characteristics. 4. acquire knowledge about different types of flora and soils found in India. 5* attain skills in solving various practical problem associated with physical aspects of India.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks:100 **Internal Assessment Marks: 20+10 =30** **End-Term Exam Marks: 50+20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of five sub parts spread over entire syllabus (two marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Geological history and regions of India. 2. Physiographic structure and divisions.	12
II	3. Drainage system of India. 4. Climatic zones of India (Koppen).	10
III	5. Natural vegetation: classification, distribution and inter-relationships 6. Biosphere reserves of India and policies.	13
IV	7. Soils: classification, distribution and inter-relationships. 8. Geological and Climatological disasters.	10
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks --- Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Annual trend of temperature for more than three decades (maximum, minimum and mean) (2 exercises). 2. Preparation of Rainfall distribution and deviation diagram of Rainfall of India (2 exercises). 3. Preparation of an inventory of flora and fauna (2 exercise). 4. Preparation of an inventory of major natural disasters in past one decade in India (2 exercise).	30

Suggested Evaluation Methods

Internal Assessment:	**End-Term Examination:**
➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks**	**50 Marks**
➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources
Recommended Books/e-resources/LMS: 1. Deshpande, C.D. (1992) India-A Regional Interpretation, Northern Book Depot, New Delhi. 2. Hussain Majid (2015) Geography of India, Mc Graw Hill Education. 3. Shafi, M. (2000) Geography of South Asia, McMillan and Company, Calcutta. 4. Singh, Gopal (2006) Geography of India, Atma Ram and Sons, New Delhi. 5. Singh, R.L. (1971) India: A Regional Geography, National Geographical Society, India, Varanasi.

*Applicable for courses having practical components.

MDC-1			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	I		
Name of the Course	Geography in Everyday Life		
Course Code	U24-GEO/MDC-101		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MDC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (ifany)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the geographical phenomena observed in its surroundings. 2. enrich skills about various elements that compose the surrounding environment. 3. understand the climate and its characteristics. 4* attain skills in solving various practical problem associated with geography.		
Credits	Theory	Practical	Total
	02	01	03
Contact Hours	02	02	04
Max. Marks:100 **Internal Assessment Marks: 15+05 =20** **End-Term Exam Marks: 35+20 = 55**		**Time:3 hours**	

Part B-Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Solar System: location, shape and uniqueness of earth. 2. Formation of Day/night, Seasons and Various movements of Earth.	7
II	3. Continents and Oceans on Earth. 4. Latitude, Longitude, Times zones and International dateline.	7
III	5. Atmosphere: structure and composition. 6. Elements of weather and climate.	8
IV	7. Types of Vegetation. 8. Climate change and human being.	8
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks --- Practical Record: A project file consisting of 11 exercises on the below mentioned themes: - 1. Solar System (1 exercises). 2. Solstices and Equinoxes (2 exercise) 3. Antipodal arrangement of land and water (1 exercise) 4. Drawing of latitudes and longitudes (2 exercise) 5. Time zones of World (1 exercise) 6. Calculation of time in eastern and western hemisphere (2 exercise) 7. International Date Line (advancement/reduction of day (2 exercise)	30

Suggested Evaluation Methods

Internal Assessment:	End-Term Examination:
➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **05 Marks**	**35 Marks**

➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **05 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. NCERT (2017), The Earth: Our Habitat, National Council for Education, Research and Training, Sri Aurobindo Marg, New Delhi.
2. Ojha, S K (2022) World Geography, Baudhik Prkashan, Pryagraj, UP.
3. Husain Majid (2018) Indian and World Geography, McGraw Hill Education (India) Private Limited, Channai.

*Applicable for courses having practical components.

MCC-A3			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	II		
Name of the Course	Introduction to Human Geography		
Course Code	U24-GEO/MCC - 203		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about the physiography of our nation. 2. understand the agriculture and irrigation system. 3. understand the basic demographic structure and literacy. 4. provide awareness about the resources and industries of our nation. 5* acquire knowledge of socio-economic and demographic data		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Definition, nature and scope of human geography. 2. Development of human geography, approaches to study human geography, branches and relation with other social sciences.	12
II	3. Human race: Meaning, classification of races and their global diffusion and distribution. 4. Religion: Meaning, nature and classification. Evolution and global distribution of major religions in the world.	11
III	5. Organization of space: central place theory, agricultural location model and industrial location model by Webber. 6. Distribution, density and growth of population: Determinants and world pattern.	11
IV	7. World pattern of development: economy and polity. 8. World pattern of migration: streams and determinants.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 10 exercises on the below mentioned themes: - 1. Composition of major religions and language of the world (2 exercises). 2. Methods of representing population distribution and density (2 exercises). 3. Flow diagram of migration streams of world population (2 exercises). 4. Spatial and temporal growth of world population (2 exercises). 5. Mapping Literacy of world for at least 2 periods (2 exercise)	

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Agarwal, A et al (1999) The Citizen's Fifth Citizen's Report, Centre for Science & Environment, New Delhi.
2. Alexander, John. W. (1988) Economic Geography, Prentice Hall of India Ltd., New Delhi.
3. Bergwan, Edward E. (1985) Human Geography: Culture Connections and Landscape, Prentice-Hall, New Jersey.
4. Carr, M. Patterns (1987) Process and Change in Human Geography, McMillan Education, London.
5. Carter, H. (1972) The study of Urban Geography, Edward Arnold, London.
6. Chandna, R.C. (2016) A Geography of Population: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
7. DeBlij, H. J. (1996) Human Geography, Culture, Society and Space, John Wiley, New York.
8. Fellman, J.L. (1997) Human Geography-Landscapes of Human Activities, Brown and Benchman Pub., USA.
9. Hassan, I. ( ) Population Geography: A Systematic Exposition, Routledge, London.
10. Hussain, M. (2018) Human Geography, Rawat, Publication, Jaipur.
11. McBride, P.J. (1996): Human Geography; Systems Patterns and Change, Nelson, UK and Canada.
12. Michael, C. (1996) New Patterns: Process and Change in Human Geography, Nelson.
13. Qazi, S.A. (2010) Population Geography, APH publishers.
14. Ramachandra, R. (1992) Urbanization and Urban System in India, Oxford, London.
15. Sharma, Y.K. (2017). Human Geography, Narain publishers.
16. Singh, N. (2015) A Text Book of Human Geography, Rajesh Publishing.

*Applicable for courses having practical components.

DSEC-A1			
Session: 2024-25			
Part A–Introduction			
Subject	Geography		
Semester	II		
Name of the Course	Skills in Cartography		
Course Code	U24-GEO/DSEC-201		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/ DSE/PC/AEC/VAC)	DSEC		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (ifany)	NA		
CourseLearningOutcomes (CLOs):	After the completion of course, the students will have ability to: 1. understand and differentiate types of map scales. 2. become aware about the applications of map scales. 3. gains the basic understanding of map making and will be able to prepare different kinds of thematic maps. 4. apprehend the knowledge about surveying and survey tools. 5* acquire skills to make use of scales and making thematic maps and diagrams		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks: 100 **Internal Assessment Marks: 20+10 = 30** **End Term Exam Marks: 50+20 = 70**		**Time: 03 Hours**	

Part B- Contents of the Course		
Instructions for Paper- Setter		
Question 1 is compulsory comprising of five sub parts spread over entire syllabus (two marks for each sub part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Nature and scope of cartography, historical and recent development. 2. Drawing instruments: properties and characteristics; drawing techniques.	11
II	3. Scale: types, significance and applications. 4. Maps: classification, characteristics, significance and limitations.	11
III	5. Basic concepts of surveying and survey equipment's, coordinate system and map: magnetic and true north, polar and rectangular. 6. Techniques of map enlargement and reduction; map producing agencies in India (GSI, SOI, FSI, NRSC and IMD).	12
IV	7. Methods and representation of climatic data. 8. Methods and representation of socio-economic data.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Graphical representation of scales (2 exercises) 2. Construction of thematic maps (3 exercises) 3. Representation of data by one, two and three-dimensional diagrams (3 exercises)	30

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Dent, B.D. (1999) Cartography: Thematic Map Design, (Vol. 1), McGraw Hill.
2. Gupta, K.K. and Tyagi, V.C (1992) Working with Maps, Survey of India, DST, New Delhi.
3. Monkhouse, F.J and Wilkinson, H.R (1971) Maps and Diagrams. Methuen and Co. Ltd., London
4. Ramamurthy, K (1982) Map Interpretation, Rex Printers, Madras.
5. Robinson A (1953) Elements of Cartography, John Wiley.
6. Siddhartha, K (2006) Geography through maps, Kisalaya Publications Pvt. Ltd, Delhi
7. Singh, G (2005) Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi
8. Singh, L.R and Singh, R (1973) Map work and practical geography, Central Book Allahabad
9. Singh, R.L (2005) Elements of Practical Geography. Kalyani Publishers, New Delhi. India.

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*Applicable for courses having practical component.

MCC-M2			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	II		
Name of the Course	Human Geography of India		
Course Code	U24-GEO/M-202		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC-M2		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. Understand the demographic characteristics of India. 2. Enrich knowledge about population composition of India. 3. Understand the Resource enrichment of India. 4. Acquire knowledge about Industrial landscape of India. 5* attain skills in solving various practical problem associated with socio-economic aspects of India.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks:100 **Internal Assessment Marks: 20+10 =30** **End-Term Exam Marks: 50+20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of five sub parts spread over entire syllabus (two marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Population of India: Growth and its measures. 2. Population of India: Distribution of Density	12
II	3. Population composition: Sex ratio, literacy rate, work force. 4. Ethnic composition of India: Language and religion.	10
III	5. Energy resources of India: Production and distribution of Coal, Petroleum, hydropower and solar power. 6. Industrial Resources of India: Iron-ore, Cotton and Sugarcane.	13
IV	7. Industrial development of India: Iron and steel, sugar and textile. 8. Transportation in India: Road, Railways, Waterways.	10
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Age and sex pyramid of Indian population (1 exercise). 2. State wise distribution and composition of working population in India (2 exercises). 3. Map the scheduled tribe population distribution in India (1 exercises). 4. Distribution of scheduled caste population (1 exercise). 5. Composition of the major religions in India (1 exercise). 6. Distribution of literacy –rural - urban and male-female (2 exercises).	30

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Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Agarwal, A et al (1999) The Citizen's Fifth Citizen's Report, Centre for Science & Environment, New Delhi.
2. Alexander, John. W. (1988) Economic Geography, Prentice Hall of India Ltd., New Delhi.
3. Bergwan, Edward E (1985) Human Geography: Culture Connections and Landscape, Prentice-Hall, New Jersey.
4. Carr, M. Patterns (1987) Process and Change in Human Geography, McMillan Education, London.
5. Carter, H. (1972) The study of Urban Geography, Edward Arnold, London.
6. Chandna, R.C. (2016) A Geography of Population: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
7. DeBlij, H. J. (1996) Human Geography, Culture, Society and Space, John Wiley, New York.
8. Fellman, J.L. (1997) Human Geography-Landscapes of Human Activities, Brown and Benchman Pub., USA.
9. Hassan, I. ( ) Population Geography: A Systematic Exposition, Routledge, London.
10. Hussain, M. ( ) Geography of India,
11. Hussain, M. (2018) Human Geography, Rawat, Publication, Jaipur.
12. Khullar, D. R. ( ) India A comprehensive Geography, Kalayani Publisher.
13. McBride, P.J. (1996) Human Geography; Systems Patterns and Change, Nelson, UK and Canada.
14. Michael, C. (1996) New Patterns: Process and Change in Human Geography, Nelson, U.k..
15. Qazi, S.A. (2010) Population Geography, APH publishers.
16. Ramachandra, R. (1992) Urbanization and Urban System in India, Oxford, London.
17. Sharma, Y.K. (2017) Human Geography, Narain publishers.
18. Singh, N. (2015) A Text Book of Human Geography, Rajesh Publishing.

*Applicable for courses having practical components.

MDC-2			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	II		
Name of the Course	Geography of the Environment		
Course Code	U24-GEO/MDC-202		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MDC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (ifany)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the geographical environment observed in its surroundings. 2. enrich skills about various elements that compose the surrounding environment. 3. understand the climate and its characteristics. 4* attain skills in solving various practical problem associated with geography.		
Credits	Theory	Practical	Total
	02	01	03
Contact Hours	02	02	04
Max. Marks:75 **Internal Assessment Marks: 15+05 =20** **End-Term Exam Marks: 35+20 = 55**		**Time:3 hours**	

Part B-Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Nature and Scope of Environmental Geography. 2. Determinants of Environment.	7
II	3. Concept of Ecology and ecosystem. 4. Trophic structure and energy flow.	7
III	5. Environmental pollution: Meaning causes and impacts of Air, Water and Land pollution.	8
IV	6. Mitigating efforts of Environmental degradation: Stockholm conference, earth summit and Kyoto protocol.	8
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks --- Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Make inventory of natural vegetation of neighborhood environment (1-2 exercise). 2. Make inventory of wild animals of neighborhood environment (1-2 exercise) 3. Classification and mapping of area under forest in Haryana (1 exercise) 4. Trend in cattle population of Haryana (1 exercise) 5. Mapping National Parks and sanctuaries of India (2 exercise)	30

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **05 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **05 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **35 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Chandna R. C., (2002) Environmental Geography, Kalyani, Ludhiana.
2. Cox, C.D. and Moore, P.D. (1993) Biogeography: An Ecological and Evolutionary Approach, Blackwell.
3. MOEF (2006) National Environmental Policy-2006, Ministry of Environment and Forests, Government of India.
4. Odum, E. P. et al. (2005) Fundamentals of Ecology, Ceneage Learning India.
5. Singh S. (1997) Environmental Geography, PrayagPustakBhawan. Allahabad.
6. UNEP (2007) Global Environment Outlook: GEO4: Environment for Development,
7. United Nations Environment Programme.

Hindi Reading List

8. Singh, Savindra (2001) ParyavaranBhugol, PrayagPustakBhawan, Allahabad.
9. Singh, Shri Narayan (1993) VatavaranBhugol, Tara Book Agency.

*Applicable for courses having practical components.

SEC-2			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	II		
Name of the Course	Computer Aided Cartography		
Course Code	U24-GEO/SEC-202		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	SEC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (ifany)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. Understand the nature, scope and development of cartography. 2. Enrich skills about various cartographic methods used in geographical applications. 3. Understand different types of map and their uses. 4* attain skills in solving various practical problem associated with geography.		
Credits	Theory	Practical	Total
	02	01	03
Contact Hours	02	02	04
Max. Marks:75 **Internal Assessment Marks: 15+05 =20** **End-Term Exam Marks: 35+20 = 55**		**Time:3 hours**	

Part B-Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Nature and Scope of cartography 2. Recent advancement in cartography	11
II	3. Types and characteristics of statistical diagrams a. One dimensional diagram (bar and line) b. Two dimensional diagram (rectangular, square and circle) c. Three dimensional diagram (sphere, cube)	11
III	4. Types and characteristics of Maps a. Chorochromatic maps b. Choroschematic maps c. Choropleth maps d. Dot maps e. Isopleths maps	11
IV	5. Introduction to Computer Aided Cartography a. Introduction to Q-GIS b. Characteristics, Advantage and Disadvantages of Raster and Vector Data c. Characteristics and uses of Point, Line and Polygon d. Elements of Maps	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks --- Practical Record: A project file consisting of 11 exercises on the below mentioned themes: - 1. Introduction to MS Excel 2. One Dimensional Diagrams in MS Excel (2 Exercises) 3. Two Dimensional Diagrams in MS Excel (2 Exercise) 4. Scatter Plot in MS Excel (1 Exercise) 5. Making of Shape file in Q-GIS (3 exercise) 6. Digitization of Map in Q-GIS (1 exercise) 7. Composition of Map in Q-GIS (2 exercise)	30

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **05 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **05 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **35 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Sarkar, A. (2015 Textbook of Practical Geography, Orient Blackswan Pvt. Ltd., New Dlelhi.
2. Jensen, J. R. (2013) Remote Sensing of the Environment: An Earth Resource Perspective (2nd Edition), Pearson Education India.Singh,
3. Singh L. R. (2005) Elements of Practical Geography, Kalyani Publishers, New Delhi.
4. Misra, R. P. and Ramesh, A. (1999) Fundamentals of Cartography, Concept Publishing Company, New Delhi.
5. Tutorials by Department of Science and Technology. https://dst-iget.in/index.php/tutorialdetails/1/1

*Applicable for courses having practical components.

MCC-A4			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	III		
Name of the Course	Introduction to Geography of India		
Course Code	U24-GEO/MCC - 304		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about the physiography of our nation. 2. understand the agriculture and irrigation system. 3. understand the basic demographic structure and literacy. 4. provide awareness about the resources and industries of our nation. 5* acquire knowledge of socio-economic and demographic data		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

PartB- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Geological history and regions of India. 2. Physiographic divisions of India.	12
II	3. Drainage System and Soils of India. 4. Climate and Natural Vegetation of India.	11
III	5. Population: distribution, density and growth. 6. Population composition: sex ratio, literacy, language and religion.	11
IV	7. Energy Resources: Production and distribution of coal, petroleum, hydro power, solar. 8. Industries: iron and steel, sugar and cotton textile; transport and communication	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 10 exercises on the below mentioned themes: - 1. Drawing of Isopleth lines on map of India (1 exercise) 2. Landuse pattern of India (pie chart-1 exercise) 3. Population distribution and density map of India (choropleth and dot method- 2 exercise) 4. Occupational structure, Sex ratio, Literacy, Population of selected metro cities of India (any 2 exercise) 5. Age and sex structure (pyramid diagram) 6. Rainfall deviation diagram of at least 20 years (1 exercise) 7. Cropping intensity and irrigation intensity (mono and bi-variate- any 2 exercise)	

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Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Deshpande C. D. (1992) India: A Regional Interpretation, ICSSR, New Delhi.
2. Hussain M. (1992) Geography of India, Tata McGraw Hill Education
3. Johnson, B. L. C., ed. (2001) Geographical Dictionary of India. Vision Books, New Delhi.
4. Mamoria C. B. (1980) Economic and Commercial Geography of India, Shiva Lal Agarwala.
5. Mandal R. B. (ed.), (1990) Patterns of Regional Geography – An International Perspective. Vol. 3 – Indian Perspective.
6. Sdyasuk Galina and P Sengupta (1967) Economic Regionalisation of India, Census of India
7. Sharma, T. C. (2003) India - Economic and Commercial Geography. Vikas Publ., New Delhi. 6. Singh R. L. (1971) India: A Regional Geography, National Geographical Society of India.
8. Singh, Jagdish (2003) India - A Comprehensive & Systematic Geography, GyanodayaPrakashan, Gorakhpur.
9. Pathak, C. R. (2003) Spatial Structure and Processes of Development in India. Regional Science Assoc., Kolkata.
10. Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur
11. Spate O. H. K. and Learmonth A. T. A. (1967) India and Pakistan: A General and Regional Geography, Methuen.
12. Tirtha, Ranjit (2002) Geography of India, Rawat Publs., Jaipur & New Delhi.
13. Tiwari, R.C. (2007) Geography of India. Prayag Pustak Bhawan, Allahabad

*Applicable for courses having practical components.

MCC-A5			
Session: 2024-25			
Part A - Introduction			
Subject	Geography		
Semester	III		
Name of the Course	History and Philosophy of Geography		
Course Code	U24-GEO/MCC - 305		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	200-299		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. develop an understanding on nature and philosophy of geography 2. have geographical knowledge regarding ancient and medieval period 3. acquaint with philosophical development in subject 4. acquire knowledge of modern geographical thinking 5* develop skills of making 3D earth on 2D surface.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	3	2	5
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time: 3 hours**	

Part B-Contents of the Course		
Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part).There will be eight questions, two from each unit. The candidate has to answer four more questions selecting at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Classification of empirical knowledge and place of geography in the realm of knowledge. 2. Nature of geography as a scientific discipline and its relationship with other sciences.	11
II	3. Contribution of Greeks, Romans and Arabs in geographic knowledge. 4. Modern Geography: contribution of Humboldt and Ritter.	12
III	5. Concepts – environmental determinism and possibilism, areal differentiation. 6. Dualism in Geography: Physcial vs Human, Systematic vs Regional	11
IV	7. Quantitative revolution and development of geography as spatial science. 8. Approaches in contemporary geography – behavioural and welfare.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Cylindrical: Equal area and Mercator (2 exercises). 2. Conical: one and two standards parallel, Bonne's and Polyconic (4 exercises). 3. Zenithal: equal area and gnomonic projections (2 exercises).	

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **5** • Seminar/presentation/assignment/quiz/class test etc.: **5** • Mid-Term Exam: **10** ➢ **Practicum** • Class Participation: NIL • Seminar/Demonstration/Viva-voce/Lab records etc.:**10** • Mid-Term Exam: NIL	**End Term Examination:** **50** **20**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Dickinson, R. E (1969) The Makers of Modern Geography, London.
2. Dikshit, R.D (1997) Geographical Thought-A Contextual History of Ideas, Prentice Hall of India, New Delhi.
3. Hartshorne, R (1959) Perspectives on the Nature of Geography, Rand MacNelly, Chicago.
4. Harvey David (1989) Explanation in Geography, Edward Arnold, London.
5. Holt-Jonson (2011) Geography, History and Concepts: A Study's Guide, Sage Publications.
6. James P.E and Martin J Geoffrey (1972) All possible Worlds, John Wiley and Sons, New York.
7. Johnston, R.J (1983) Geography and Geographers, Edward Heinemann, London.
8. Peet, Richard (1998) Modern Geographical Thought, Oxford, Blackwell Publishers.

*Applicable for courses having practical components.

MCC-M3			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	III		
Name of the Course	Geography of Haryana		
Course Code	U24-GEO/M-303		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC-M3		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the geological and physiographic structure of Haryana. 2. enrich skills about drainage system and various hydrological regimes. 3. understand the climate and its characteristics. 4. acquire knowledge about different types of flora and soils found in India. 5* attain skills in solving various practical problem associated with physical aspects of India.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Physiography of Haryana. 2. Relief and climate of Haryana	11
II	3. Drainage and natural vegetation of Haryana. 4. Agriculture: cropping pattern and challenges.	11
III	5. Population: distribution, density and growth. 6. Population composition: structure and literacy.	11
IV	7. Major industries and industrial centres of Haryana. 8. Transportation development of Haryana.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 6 exercises on the below mentioned themes: 1. Composition of land use/land cover of Haryana (1 exercises). 2. Population distribution map of Haryana 2001 and 2011 (2 exercises). 3. Population density map of 2001 and 2011 (2 exercises). 4. Mapping of major industrial regions of Haryana (1 exercises).	

Suggested Evaluation Methods	
InternalAssessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

1. Census of India (1981) Regional Division in Haryana.
2. Census of India (2001) Administrative Atlas of Haryana.
3. Deshpande CD (1992) India: A Regional Interpretation, ICSSR and Northern Book Centre.
4. FICCI (2007) State of Infrastructure in Haryana.
5. Singh, Jasbir (1976) Agricultural Geography of Haryana, Vishal Publishers, Kurukshetra.
6. Singh, R.L. (1971) India-A Regional Geography, National Geographical Society, Varanasi
7. Spate OHK and ATA Learmonth (1971) India and Pakistan, Methuen, London.
8. Tirtha R and Gopal Krishna (1996) Emerging India, Rawat Publications, Jaipur.
9. Regional division of Haryana, census of India, Chandigarh

*Applicable for courses having practical components.

MDC-3			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	III		
Name of the Course	Weather Forecasting		
Course Code	U24-GEO/MDC-303		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MDC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (ifany)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. Understand the weather phenomena. 2. Enrich skills about various elements that compose the surrounding environment. 3. Understand the climate and its characteristics. 4* attain skills in solving various practical problem associated with weather.		
Credits	Theory	Practical	Total
	02	01	03
Contact Hours	02	02	04
Max. Marks:75 **Internal Assessment Marks: 15+05 =20** **End-Term Exam Marks: 35+20 = 55**		**Time:3 hours**	

Part B-Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Distinction of weather and climate. 2. Elements of weather and climate and their measurement.	7
II	3. The concept and Uses of Isohyets, Isobars, Isotherms, Isoneph, Isohume.	7
III	4. Concept of High and Low pressure system. 5. Introduction to Prevailing, Seasonal and Local winds.	8
IV	6. Introduction to Weather map of India. 7. Interpretation of Weather maps.	8
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks --- Practical Record: A project file consisting of 6 exercises on the below mentioned themes:- 1. Inventory of symbols of weather map (1 exercise). 2. General forecasting of weather, precipitation and cloudiness (2 exercise) 3. Interpretation of pressure phenomena (1 exercise) 4. Interpretation of wind direction and speed (2 exercise)	30

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **05 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **05 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **35 Marks** **20 Marks**

Part C-Learning Resources
Recommended Books/e-resources/LMS: 1. Barry, RG and Chorley, RJ (1998) Atmosphere, Weather and Climate, Routledge, London. 2. Bunnett, RB (1987) Physical Geography in Diagrams, Pearson Education, New Delhi. 3. Critchfield, H (2002) General Climatology, Prentice-Hall of India, New Delhi. 4. Singh, G (2005) Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi 5. Singh, L.R and Singh, R (1973) Map work and practical geography, Central Book Allahabad 6. Singh, R.L (2005) Elements of Practical Geography. Kalyani Publishers, New Delhi. India.

*Applicable for courses having practical components.

SEC-3			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	III		
Name of the Course	Exploration of Geographical Landscapes		
Course Code	U24-GEO/SEC-303		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	SEC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (ifany)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the nature of physical and cultural landscapes. 2. internalize the processes shaping natural and cultural landscapes 3. understand the transformation process of urban and rural landscapes. 4. foster an appreciation for the environment and the role of human interactions in shaping landscapes. 5* enhance students' observational, analytical, and critical thinking about their surrounding environment		
Credits	Theory	Practical	Total
	02	01	03
Contact Hours	02	02	04
Max. Marks:75 **Internal Assessment Marks: 15+05 =20** **End-Term Exam Marks: 35+20 = 55**		**Time:3 hours**	

Part B-Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Landscapes: concept, definition. 2. The basis for classification of landscapes.	7
II	3. Major land surface features: continents and oceans and their characteristics.	7
III	4. Natural landscapes and their formation processes. 5. Cultural landscapes and their formation processes.	8
IV	6. Urban landscapes and their formation process. 7. Rural landscapes and their formation process.	8
V*	Instructions for external practical examiner: This is field based study and all the students have to prepare a project report individually. The external examiner shall be conducting viva-voce on the project report. Distribution of marks for evaluation; 1. Field based project report = 10 marks 2. Viva-Voce = 10 marks	30
	Practical Record: Project report of a landscape by individual students based on field survey focusing on 1. Type and characteristics of the landscape 2. Identification of factors transforming landscape	
Suggested Evaluation Methods		
Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **05 Marks**		**End-Term Examination:** **35 Marks**

➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **05 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Alanen, A.R. and Melnick, R.Z. (2000) Preserving cultural landscape in America.
2. Hayden, D(1995)The power of place: Urban landscape as public history, The MIT press.
3. Hess, D. (2013)Physical Geography: A landscape appreciation, Pearson.
4. Hoss, T.A. (2016) Appreciating physical landscape: Three hundred years of geo-tourism.
5. Johnson, L.M. and Hunn, E.S. (2010) Landscape ethno ecology(concepts of biotic and physical space).
6. Terry, AG.(1989) The Physical landscape, McGraw-Hill, USA.
7. Sinha, A.(2020) Cultural landscape of India: Imagined, enacted and Reclaimed, University of Pittsburg press, USA.

*Applicable for courses having practical components.

VAC-3			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	III		
Name of the Course	Sustainable Development Goals		
Course Code	U24-GEO/VAC-303		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	VAC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (ifany)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the concept of sustainable development. 2. enrich skills about united nation development projects. 3. understand different types of sustainable development goals. 4* attain skills in solving various UNDP programs.		
Credits	Theory	Practical	Total
	02	00	02
Contact Hours	02	00	02
Max. Marks:50 **Internal Assessment Marks:15** **End-Term Exam Marks:35**		**Time:2 hours**	

Part B-Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. The concept and dimensions of sustainable development 2. UN sustainable development summit, 2015	7
II	3. The characteristics and targets of SDG-1,2,3 4. The characteristics and targets of SDG-4,5,6	7
III	5. The characteristics and targets of SDG-7,8,9 6. The characteristics and targets of SDG-10,11,12	8
IV	7. The characteristics and targets of SDG-13,14,15 8. The characteristics and targets of SDG-16,17	8
V*	NA	

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **05 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **NIL** • Mid-Term Exam: **NIL**	**End-Term Examination:** **35 Marks** **NIL**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. https://www.un.org/sustainabledevelopment/sdg-book-club-archive/
2. https://www.undp.org/sustainable-development-goals
3. https://sdgs.un.org/goals

*Applicable for courses having practical components.

MCC-A6			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	IV		
Name of the Course	Basics of Economic Geography		
Course Code	U24-GEO/MCC - 406		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provides knowledge about the fundamental concepts of economic geography. 2. acquisition of knowledge about resources and their conservation. 3. enrichment of knowledge about distribution of crops, minerals and energy resources 4. acquaintance with global industries, transport, communication and trade 5* attain skills in solving practical problems associated with economic geography.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Nature and scope of economic geography and its relationship with economics. 2. Classification of economic activities and their impact on environment.	12
II	3. Natural resources: types, bases of classification. 4. Utilization and conservation of natural resources.	11
III	5. World distribution of food crops (rice and wheat) and commercial crops (cotton and sugarcane). 6. World distribution and production of coal, petroleum and iron ore and bauxite.	11
IV	7. World distribution and production of iron and steel industry, textile industry and automobile industry. 8. International trade and transport and major oceanic trade routes.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Choropleth mapping of state-wise variation in GDP and PCI (2 exercises). 2. Computation of rail and road transport network accessibility index (2 exercises). 3. Time series analysis of world food, commercial and plantation crops production and trade using polygraph method (2 exercises). 4. Representation of coal and sugar production of major countries of the world using compound bar diagram (1 exercise). 5. Representation of decadal production of major petroleum	30

	and iron and steel producing countries using multiple bar diagram (1 exercise).	

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Gautam, A. 2010. Advanced Economic Geography. Sharda PustakBhawan, Allahabad.
2. Hartshorne, T. A. and Alexander, J. W. 2001. Economic Geography. Prentice Hall of India. New Delhi.
3. Hudson, R. 2005. Economic Geography. Sage Publication, New Delhi.
4. Jones, C. F. and Drakenwarld, G. G. Economic Geography. The Macmillan and Company. New York.
5. Knowled, R. and Wareing, J. 1992. Economic and Social Geography. Rupa and Company, Calcutta.
6. Knox, P. 2003. The Geography of World Economy. Arnold, London.
7. Saxena, H.M. 2013. Economic Geography. Rawat Publications, Jaipur.
8. Thomas, RS. 1962. The Geography of Economic Activities. McGraw Hill, New York.
9. Wheeler, J.O. and Muller, P.O. 1995. Economic Geography. John Wiley and Sons. New York.

*Applicable for courses having practical components.

MCC-A7			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	IV		
Name of the Course	Social Geography		
Course Code	U24-GEO/MCC-407		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	200-299		
Pre-requisite for the course (ifany)	N.A.		
CourseLearningOutcomes(CLO):	After completing this course, the learner will be able to: 1. acquaint with social structure in spatial context. 2. gain knowledge about ethnic and social groups in India. 3. understand the social structure and religious diversity of India. 4. be well versed with concept of well-being and its indicators. 5* develop the skill to process social data.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	3	2	5
Max. Marks: 100 **Internal Assessment Marks: 20+10=30** **End Term Exam Marks: 50+20=70**		**Time: 3 hours**	

Part B-Contents of the Course		
Question 1 is compulsory and comprises five sub-parts spread over the entire syllabus (two marks for each sub-part). There will be eight questions, two from each unit. The candidate has to answer four questions from these by selecting at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Definition, nature and scope of social geography. 2. Development of social geography and approaches to study.	12
II	3. Social Structure and Processes: Tribes, and their spatial distribution. 4. Caste: origin, form and its distribution.	11
III	5. Language and dialects: origin and linguistic diversity. 6. Religion: major religion and religious plurality in India.	11
IV	7. Social problems: geography of poverty and human development index. 8. Gender inequality and gender development index	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation: Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Computation and mapping of human development index (1exercise) 2. Computation and mapping of gender development index (1exercise). 3. Concentration of S.C. population: Location Quotient & dissimilarity index (2exercises). 4. Graphical representation of income inequality: Lorenz curve (2exercises). 5. Construction of composite index by ranking and standardization method (2 exercises).	

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Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **5** • Seminar/presentation/assignment/quiz/class test etc.: **5** • Mid-Term Exam: **10** ➢ **Practicum** • Class Participation: NIL • Seminar/Demonstration/Viva-voce/Lab records etc.: **10** • Mid-Term Exam: NIL	**End Term Examination:** **70** **30**

PartC-Learning Resources

Recommended Books/e-resources/LMS:

1. Ahmad, A. (1993) Social Structure and Regional Development, Rawat Publications, Jaipur
2. Ahmad, A. (1999) Social Geography, Rawat Publications, Jaipur
3. Ahmad, A. (2012) Social Geography of India, Concept Publishing Company, New Delhi
4. Knox, P. L. (1975) Social Wellbeing- A Spatial Perspective, Oxford University Press, London
5. Pain, R., Barke, M., Fuller, D., Gough, J., MacFarlane, R. and Mowl, G. (2001) Introducing Social Geographies, Arnold and Oxford University Press, New York
6. Panelli, R. (2004) Social Geographies: From Difference to Action, Sage Publications, London
7. Sopher, D. (1980) An Exploration of India: Geographical Perspectives on Society and Culture, Cornell Press, New York
8. Smith, D.M. (1977) Human Geography: A Welfare Approach, Arnold Heinemann.
9. Smith, D.M. (1973) The Geography of Social Well-being in the United States. McGraw Hill, New York.
10. Smith, D.M. (1977) Where the Grass is Greener: Geographical Perspectives on Inequality, Penguin.

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*Applicable for courses having practical component.

MCC-A8			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	IV		
Name of the Course	Biogeography		
Course Code	U24-GEO/MCC-408		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the basic ecological principles. 2. enrich understanding about distribution of plants and animals' life on the earth. 3. awareabout conservation of biotic resources and effects of industrial effluents on ecosystems. 4. acquaint with environmental hazards and bio reserves. 5* develop the skill of mapping ecological areas, flora and fauna.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Nature, scope and significance of biogeography. 2. Basic ecological principles: Bio-energy cycle in territorial ecosystem; trophic levels and food web.	11
II	3. Distribution of plant life on the earth and its relation to soil, climate and human activities. 4. Geographical distribution of animal life on the earth and its relation to vegetation types, climate and human activities.	11
III	5. Communities: nature of communities and ecosystems: bio-diversities. 6. Industrial effluent and its effect on fresh water and marine biology.	11
IV	7. Environmental hazards: ecological consequences; and adjustment with respect to flood, drought and earthquake. 8. Bio-Reserves in India; distribution and characteristics.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Identification of natural vegetation of neighborhood environment and interpretation of their characteristics. 2. Identification of wild animals of neighborhood environment and interpretation of their characteristics. 3. Mapping of forest area and percent of forest to geographical area of selected individual countries. 4. Trend in population of selected wild animal species. 5. Mapping of national parks and sanctuaries of India by suitable method. 6. Mapping the ecological hot spots of the world and interpretation of their characteristics.	

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Chandna R. C., (2002) Environmental Geography, Kalyani, Ludhiana.
2. Cox, C.D. and Moore, P.D. (1993) Biogeography: An Ecological and Evolutionary Approach, Blackwell.
3. Cunninghum W. P. and Cunninghum M. A., (2004) Principals of Environmental Science, McGraw hill, London.
4. Huggett, R.J. (1998) Fundamentals of Biogeography. Routledge, U.S.A.
5. Khushoo, T.N. and Sharma, M. (1991) Indian Geosphere-Biosphere Har-Anand Publication, Delhi.
6. Lllies, J. (1974) Introduction of Zoogeography, McMillan. London.
7. Mathur, H.S. (1998) Essentials of Biogeography, Anuj Printers, Jaipur.
8. MOEF (2006) National Environmental Policy-2006, Ministry of Environment and Forests, Government of India.
9. Odum, E. P. et al. (2005) Fundamentals of Ecology, Ceneage Learning India.
10. Pears, N. (1985) Basic Biogeography, Longman, London.
11. Simmon, I.G. (1974) Biogeography, Natural and Cultural, Longman, London.
12. Singh S. (1997) Environmental Geography, PrayagPustakBhawan. Allahabad.
13. Tivy, J. (1992) Biogeography: A study of Plants in Ecosphere, Oliver and Boyd, U.S.A.
14. UNEP (2007) Global Environment Outlook: GEO4: Environment for Development,
15. United Nations Environment Programme.

Hindi Reading List

16. Singh, Savindra (2001) ParyavaranBhugol, PrayagPustakBhawan, Allahabad.
17. Singh, Shri Narayan (1993) VatavaranBhugol, Tara Book Agency.

*Applicable for courses having practical components.

DSE-A1(i)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	IV		
Name of the Course	Geography of Tourism		
Course Code	U24-GEO/DSE-401(i)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-1(i)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. familiarization with the fundamentals of tourism geography 2. understand the types of tourism and their trend 3. acquaintance with tourism infrastructure and its impact 4. provide awareness of the carrying capacity of tourism destinations 5* attain skills in solving practical problemsassociated with tourism.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Tourists and tourism. Nature, scope, approaches and significance of tourism. 2. Travel and tourism through ages. Role of geography in tourism industry.	11
II	3. Types of tourism and its importance. Development of tourism in India and other major tourist countries. 4. Trends of international and domestic tourism. Tourism motivation and tourism demand.	11
III	5. Tourism infrastructure; transport, accommodation, hospitality and other facilities. 6. Positive and negative impact of tourism: economic, political, socio-cultural and environmental.	11
IV	7. Carrying capacity: a tool for sustainable development 8. Tourism planning and policies.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. State-wise distribution of tourists (Bar diagram). 2. Development of accommodations in India (comparative bar diagram). 3. Composition of tourists - states wise or of different tourist destinations (comparative bar). 4. Total, domestic, and foreign tourists (Compound bar diagram). 5. Tourism infrastructure (Trend graph). 6. Location and characteristics of highway tourism resorts of Haryana(dot method). 7. Tourist-population pressure (Bivariate method). 8. Explored and unexplored tourist destinations (Point method).	

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Suggested Evaluation Methods	
InternalAssessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Bhatia, A. K., (1991) International Tourism: Fundamentals and Practices, Sterling Publishers, New Delhi.
2. Dhar, P.N. (2006) International Tourism: Emerging Challenges and Future Prospects. Kanishka, New Delhi.
3. Kaul R. N. ( ) Dynamics of Tourism: Sterline Publisher Ltd.
4. Shinde S.B. ( ) Geography of Tourism, PhadkePrakashan, Kolhapur.
5. Hall, M. and Stephen, P. (2006) Geography of Tourism and Recreation – Environment, Place and Space, Routledge, London.
6. Kamra, K. K. and Chand, M. (2007) Basics of Tourism: Theory, Operation and Practise, Kanishka Publishers, Pune.
7. Muluk, Musmade, Doke, More, (2021) Geography of Tourism-I, Nirali Publication, Pune.
8. Page, S. J. (2011) Tourism Management: An Introduction, Butterworth-Heinemann USA. Chapter 2.
9. Singh Jagbir (2014) "Eco-Tourism" Published by - I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).
10. Seth P.N. (1985) Successful Tourism Management: Sterling Publisher Ltd., New Delhi.

*Applicable for courses having practical components.

DSE-A1(ii)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	IV		
Name of the Course	Geography of Health		
Course Code	U24-GEO/DSE-401(ii)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-1(ii)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. familiarization with the fundamentals of tourism geography 2. understand the types of tourism and their trend 3. acquaintance with tourism infrastructure and its impact 4. provide awareness of the carrying capacity of tourism destinations 5* attain skills in solving practical problems associated with tourism.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Evolution of Medical geography. 2. Concept of Health and its determinants.	11
II	3. Indicators of Health, its measurement and data sources. 4. Global pattern of Health, Mortality and Morbidity.	11
III	5. Food security and health. 6. Demographic transition and Health transition models.	11
IV	7. Health care, infrastructure, provisions and policies in developed and developing countries. 8. Medical tourism: scope and prospect of India.	12
V*	Instructions for external practical examiner: This is literature/field/secondary data based study and all the students have to prepare a project report individually. The external examiner shall be conducting viva-voce on the project report. Distribution of marks for evaluation; 1. Field based project report = 10 marks 2. Viva-Voce = 10 marks Practical Record: Project report of literature/secondary data based study by individual students focusing on 1. The pattern of CBR and CDR since independence 2. The pattern and change in Maternal Mortality Rate and Infant Mortality Rate	30

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Suggested Evaluation Methods

InternalAssessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources
Recommended Books/e-resources/LMS: 1. D.M. Smith, (1977), Human Geography: Welfare approach, Arnold Meinman. 2. Melinda Meade and R.J. Earichson (2008), Medical Geography, Guilford Press, New York. 3. Peter Hagett (2000) , The Geographical Structure of Epidemics, Oxford. 4. R.P. Misra (2006), Geography of Health, Concept Publishing.

*Applicable for courses having practical components.

MCC-M4(V)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	IV		
Name of the Course	Fundamentals of Remote Sensing		
Course Code	U24-GEO/M-404(V)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC-M4(V)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the basics of aerial photography. 2. enrich skills about technique of remote sensing. 3. understand the various satellite systems of India. 4. acquire knowledge about interpretation of images. 5* attain skills in solving various practical problem associated with aerial photography and remote sensing.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20+10 = 30** **End Term Exam Marks: 50+20 = 70**		**Time: 03 Hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Aerial Photography: History, advantage, and limitations. 2. Types of Aerial photograph.	11
II	3. Geometry of Aerial photograph. 4. Interpretation of Aerial photographs.	11
III	5. Stages of Remote sensing. 6. Electromagnetic radiation and spectrum.	11
IV	7. Uses of UAV (Drone) in Agriculture and Settlement Analysis.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 6 exercises on the below mentioned themes: - 1. Identification and mapping of Principal and conjugate principal point (1 exercise). 2. Determination of Flight line (1 exercise) 3. Interpretation and mapping of landuse from Aerial photograph (2 exercise) 4. Interpretation and mapping of landuse from the satellite image (2 exercise)	30

Suggested Evaluation Methods

Internal Assessment:	**End-Term Examination:**
➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks**	**50 Marks**
➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Bhatta, B. (2010) Remote Sensing and GIS, Oxford University Publications.
2. Chauniyal, D.D. (2010) Sudur Samvedan evam Bhogolik Suchana Pranali, Sharda PustakBhawan, Allahabad
3. Jha, M.M. and Singh, R.B. (2008) Land Use: Reflection on Spatial Informatics Agriculture and Development, New Delhi: Concept.
4. Singh, G (2005) Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi
5. Singh, L.R and Singh, R (1973) Map work and practical geography, Central Book Allahabad
6. Singh, R.L (2005) Elements of Practical Geography. Kalyani Publishers, New Delhi. India.

*Applicable for courses having practical components.

VAC-4			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	IV		
Name of the Course	Understanding Climate Change		
Course Code	U24-GEO/VAC-404		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	VAC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (ifany)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the nature, scope and development of climate. 2. enrich skills about various climatic features. 3. understand different types of map and their uses. 4* attain skills in solving various practical problem associated with geography.		
Credits	Theory	Practical	Total
	02	00	02
Contact Hours	02	00	02
Max. Marks:50 **Internal Assessment Marks:15** **End-Term Exam Marks:35**		**Time:2 hours**	

Part B-Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Understanding climate 2. Elements of climate	7
II	3. Basis of classification of climate 4. Various types of climate	7
III	5. The concept of climate change 6. Tools of reconstruction of past climate	8
IV	7. Evidences of climate change 8. Effects of climate change on natural vegetation	8
V*	NA	

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **05 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **NIL** • Mid-Term Exam: **NIL**	**End-Term Examination:** **35 Marks** **NIL**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Barry, R G and Chorley, RJ (1998) Atmosphere, Weather and Climate, Routledge, London.
2. Khullar, D R (2014) Physical Geography, Kalyani Publishers, New Delhi.
3. Singh, S (2020) Jalvayu Vigyan, Pravalika Publications, Allahabad.

*Applicable for courses having practical components.

MCC-A9			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	V		
Name of the Course	Statistical Methods in Geography		
Course Code	U24-GEO/MCC - 509		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about basic statistical methods. 2. understand the uses of statistical methods in Geography. 3. understand the computation of different statistical tools. 4. provide awareness about the statistics in Geography. 5* acquire knowledge of statistical tools and techniques		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Type of Data and descriptive statistics: Histograms, Ogives. 2. Measures of Central tendency: Mean, Median, Mode	12
II	3. Measures of Dispersions: Quartile deviation, mean deviation and standard deviation. 4. Measures of inequalities: Lorenz curve.	11
III	5. Sampling: its types and application in Geography. 6. Probability distribution and models.	11
IV	7. Correlation: Scatter diagram, rank correlation and correlation coefficient. 8. Properties of Normal distribution.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Preparation of Bar diagrams (3 exercise). 2. Simple and Polyline graph (2 exercise). 3. Plotting of data through scatter plot (1excercise). 4. Making of maps using statistical diagrams (2 exercises).	
Suggested Evaluation Methods		

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Internal Assessment:	End-Term Examination:
➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks**	**50 Marks**
➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. S. Gregory, 2006. Statistical Methods and the Geographers, Longman, London.
2. C. B. Gupta, 2004. An Introduction to Statistical Methods, Vikas Publishing House, Delhi.
3. R. J. Johnston,1989. Multivariate Statistical Analysis in Geography, Longman Scientific and Technical, John Wiley & Sons (4th edition).
4. Aslam Mahmood, 1999. Statistical Methods in Geographical Studies, Rajesh Publications, New Delhi.
5. Saroj K. Paul, 1998. Statistics for Geoscientists : Techniques and Applications, Concept Publishing Company, New Delhi.
6. A. Reza Hoshmand, 1998. Statistical Methods for Environmental and Agricultural Sciences, CRC Press, New York (second edition).
7. Jack Levin and J.A. Fox, 2006. Elementary Statistics in Social Research, 10th edition, Peason Education, New Delhi.
8. Rogerson. P.A. 2010. Statistical Methods for Geography, (A Student's Guide), 3rd Edition, Sage Publication, New Delhi
9. Ashis Sarkar, 2013. Quantitative Geography: Techniques and Presentations, Orient Blackswan Private Limited - New Delhi.

*Applicable for courses having practical components.

MCC-A10			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	V		
Name of the Course	Regional Development and Planning		
Course Code	U24-GEO/MCC - 510		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about concept of regional planning. 2. understand the concept of regional development. 3. understand the latest improvements in regional development. 4. provide awareness about development and planning of various regions. 5* acquire knowledge of process of regional development and planning.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Concept of Region, type of regions. 2. Methods of regionalization.	12
II	3. Theories of Regional Development: Hirschman and Myrdal's. 4. Regional imbalances in development in India with spatial reference of human and economic development.	11
III	5. Concept of planning: Spatial and Sectoral, Regional and National, Micro and Macro. 6. Environmental issues in Regional Planning: Planning for Sustainable Development.	11
IV	7. Features of various Five Years plans of India. 8. Urban Planning in India with special reference to National Capital Region.	11
V*	Instructions for external practical examiner: This is literature based study and all the students have to prepare a project report individually. The external examiner shall be conducting viva-voce on the project report. Distribution of marks for evaluation; 1. Literature based project report = 10 marks 2. Viva-Voce = 10 marks	30
	Practical Record: Project report on one of following by individual students focusing on 1. Review of five year plans of Planning Commission of India. 2. Significance and role of NITI Aayog in the regional development of India. 3. Smart Waste Management.	

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. R.C. Chandna : Regional Planning and Development.
2. Mahesh Chand and Puri : Regional Planning in India, Allied Publishers, Delhi.
3. S.C. Patnaik, Economics of Regional Development and Planning in Third World Countries, Associated Publishing, New Delhi.
4. V. Nath, Regional Development and Planning in India.

*Applicable for courses having practical components.

DSE-A2(i)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	V		
Name of the Course	Geography of Trade and Transport		
Course Code	U24-GEO/DSE-502(i)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-2(i)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. familiarization with the fundamentals of transport geography 2. understand the types of tourism and their trend 3. acquaintance with tourism infrastructure and its impact 4. provide awareness of the carrying capacity of tourism destinations 5* attain skills in solving practical problems associated with tourism.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Nature, scope and development of transport geography. 2. Factors associated with development of transport system; physical, economic, social, cultural and institutional.	11
II	3. Characteristics and relative significance of railways, roads, airways and waterways. 4. Spatial interaction model of Ulman.	11
III	5. Transport and location activities; problems of location and regional development. 6. Transport network: function, pattern and geometry.	11
IV	7. Urban transportation; transport services and urban landuse pattern. 8. Problems of urban transportation: transport and environmental degradation, vehicular pollution.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 7 exercises on the below mentioned themes: - 1. Temporal growth in length of roads and railways in India (2 exercise). 2. Traffic flow diagram of any two districts of Haryana (2 exercises) 3. Traffic flow diagram along major sea routes of Atlantic, Pacific and Indian ocean (3 exercises)	

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL**	**End Term Examination:** **50 Marks**

• Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Ashton, W.D. 1966. The Theory of Traffic Flow. Methuen, London.
2. Bhaduri, S. 1992. Transport and Regional Development, Concept Publishing Company, New Delhi.
3. Fleming, D.K. and Hayuth. Y. 1994. Spatial Characteristics of Transportation Hubs. Centrality and Intermediacy. Journal of Transport Geography 2(i) 3-18.
4. Hagget, P. 1965. Locational Analysis in Human Geography. Methuen, London.
5. Hay, A. 1973. Transport Economy, Macmillan, London.
6. Hoyle, B. S. and Knowles, R. 2000, Modern Transport Geography. John Wiley and Sons, New York.
7. Hoyle, B.S. 1973. Transport and Development. Macmillan, London.
8. Husain, M. and Zaidi, S.S.H. 1996. Environmental Management in India. Concept Publications, New Delhi.
9. Nagar, V.D. and Gautam, S. 1984. Principles and Problems of Indian Transport. Kailash Pustak Sadan, Gwalior.
10. Raza, M and Agarwal Y.P. 1986. Transport Geography of India. Concept Publication, New Delhi.
11. Vaidya, B.C. 1998. Readings in Transport Geography, Devika Publications, New Delhi.
12. White, H.P. and Senior, M.L. 1983. Transport Geography. Longman, London.

*Applicable for courses having practical components.

DSE-A2(ii)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	V		
Name of the Course	Cultural Geography		
Course Code	U24-GEO/DSE-502(ii)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-2(ii)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. familiarization with the fundamentals of cultural geography 2. understand the types of cultures and their development 3. acquaintance with cultural landscapes 4. provide awareness of the cultural assimilation 5* attain skills in solving practical problems associated with tourism.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Nature and scope of cultural geography. 2. Elements and components of culture.	11
II	3. Bases of cultural diversity: race, religion, language. 4. Cultural diversity in world.	11
III	5. Cultural landscape and cultural ecology. 6. Religion: origin, diffusion and spatial distribution.	11
IV	7. Pattern of livelihood: economic activities and cultural adaptation. 8. Technological changes and culture.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Mapping the location of ancient cultural sites in world and in India (2 exercise). 2. Diagrammatic representation of composition of the population of world for major religion and languages (2 exercises) 3. Making of religious and linguistic map of India (2 exercises) 4. Diagrammatic representation of composition of the population of India for major religion and languages (2 exercises)	

Suggested Evaluation Methods

InternalAssessment:	**End Term Examination:**
➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks**	**50 Marks**

➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Wagner, P.L. and Mikesell, M. (1962) Readings in Cultural Geography, the University of Chicago Press, Chicago.
2. Spencer, J.E. and Thomas, W.L. (1973) Introducing Cultural Geography, John Wiley and Sons, New York.
3. Dickens, S.N. (1970) Introduction to Cultural Geography, Xerox College Publishing House, Waltham, Massachusatts.
4. De Blij, Harm J. (1977) Human Geography, Cultural Society and Space, John Wiley and Sons, New York.
5. Taylor G. (1971), the Geography in the Twentieth Century, Asia Publishing House, New Delhi.
6. Magunder, D.N. (1973), Races and Culture of India, Asia Publishing House, New Delhi.
7. Mukerjee, A.B. and Aijazuddin A. (1985) India: Culture, Society and Economy, Inter-India Publications, New Delhi.
8. Craig, Mike (1998): Cultural Geography, Routledge Publications, London.

*Applicable for courses having practical components.

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DSE-A3(i)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	V		
Name of the Course	Geography and Disaster Management		
Course Code	U24-GEO/DSE-503(i)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-3(i)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the meaning of hazard and disaster and its approaches and classification. 2. acquire knowledge about various fundamental concepts of hazard and disaster including technological interventions in the field. 3. develop an awareness regarding management of common hydrological disasters occurring in and around. 4. develop an understanding about the consequences and management of frequently occurring man-made hazards. 5* attain skills in solving practical problems associated with disaster.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Natural hazards and disasters: definition and approaches of study; classification of disasters. 2. Disaster profile of India and world.	11
II	3. Concepts of disaster vulnerability and mitigation. 4. Preventive measures and preparedness for disasters.	11
III	5. Flood: factors, vulnerability, consequences and management. 6. Drought: Definition, nature, mitigation measures and management.	11
IV	7. Industrial disasters: major industrial disasters and their causes and consequences. 8. Epidemics: Causes and consequences, Covid-19 a case study.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Trends in flood frequency and casualties in India for at least 2-3 decades (2 exercises). 2. Mapping the water bodies based on topographical sheets of an area (2 exercises). 3. Mapping the frequency or intensity of earthquakes and casualties of a geographical area (2 exercises). 4. Comparative analysis of seasonal variability of rainfall from different climatic reasons of India (2 exercises).	
Suggested Evaluation Methods		

Internal Assessment:	End Term Examination:
➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks**	**50 Marks**
➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Coch, NK (1994) Geohazards: Natural and Human, Pearson, New Delhi.
2. Cutter, SL (2006) Hazards Vulnerability and Environmental Justice, Routledge, London.
3. Gupta, HK (2013) Disaster Management, University Press, New Delhi.
4. Kapur, A (2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
5. Modh, S (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, New Delhi.
6. Pine, JC (2014) Hazards Analysis: Reducing the Impact of Disasters, CRC Press, New Delhi.
7. Sinha, A (2001) Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
8. Smith, K (2013) Environmental Hazards: Assessing Risk and Reducing Disaster, Routledge, London.
9. Singh, RB (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
10. Singh, S (2000): Environmental Geography, PrayagPustakBhavan, Allahabad.
11. Stoltman, JP (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
12. Turk, J (1985) Introduction to Environmental Studies, Saunders Publications, Tokyo, Japan.

*Applicable for courses having practical components.

DSE-A3(ii)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	V		
Name of the Course	Geography of Water Resources		
Course Code	U24-GEO/DSE-503(ii)		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSC-3(ii)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about water resource geography. 2. understand the uses of water in different sectors. 3. understand the computation of water demand. 4. provide awareness about watershed management. 5* acquire knowledge of statistical tools and techniques		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Definition, nature, scope and importance of Water Resource Geography. 2. Status of water resources in India.	12
II	3. Estimation of water demand and use in agriculture sector. 4. Groundwater assessment, development and management.	11
III	5. Water pricing and its marketing, virtual and footprints of water. 6. Irrigation induced waterlogging and salinity with reference to Indira Gandhi Canal project.	11
IV	7. Water harvesting techniques. 8. Watershed management.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Composition of world water scenario and potable water (2 exercises) 2. Mapping of water bodies of an area from topographical sheets and aerial photographs (2 exercises). 3. Sectoral uses of groundwater and mapping gap between availability and demand (2 exercises). 4. Mapping of district wise stage of groundwater development in Haryana (2 exercises)	

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Aggarwal, A. and Narain, S. 1997. Dying Wisdom: Rise, Fall and Potential of India's Traditional Water Harvesting System. Centre of Science and Environment, New Delhi, 1997.
2. Gurjar R.K. and Jat B.C. 2008. Geography of Water Resources, Rawat Publications, Jaipur.
3. Jones, J.A. 1997. Global Hydrology-Processes, Resources and Environmental Management. Longman.
4. Michael. A.M. 1978. Irrigation: Theory and Practices. Vikas Publishing House Pvt. Ltd., New Delhi.
5. Mather, J.R. 1984. Water Resources Distribution, Use and Management. John Wiley, Marylane.
6. Newson, M. 1992. Land, Water and Development River Basin Systems and their Sustainable Management. Routledge, London.
7. Rao, K.L. 1979. India's Water Wealth. Orient Longman, New Delhi.
8. Tideman, E.M. 1996. Watershed Management; Guidelines for Indian Conditions, Omega, New Delhi.

*Applicable for courses having practical components.

MCC-M5			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	V		
Name of the Course	Fundamentals of GIS		
Course Code	U24-GEO/M-505(V)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC-M5		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the basics of Geographic Information System. 2. enrich skills about functioning of GIS. 3. understand the tools used in GIS. 4. acquire knowledge about application of GIS. 5* attain skills in solving various geographical problems using GIS.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. GIS: Definition, scope and development. 2. Components and elements of GIS	11
II	3. Sources of data in GIS. 4. Type of data: spatial and non-spatial.	11
III	5. Models in GIS: Raster and vector. 6. Advantages and disadvantages of raster and vector models.	11
IV	7. Application of GIS in agriculture and forestry mapping	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes:- 1. Components of interface of QGIS (1 exercises). 2. Making of shapefiles in QGIS (3 exercises). 3. Digitization in QGIS (3 exercises). 4. Map composition (1 exercise)	

Suggested Evaluation Methods	
InternalAssessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**
Part C-Learning Resources	

Recommended Books/e-resources/LMS:

1. Bhatta, B. (2010) Remote Sensing and GIS, Oxford University Publications.
2. Burrough, P.A., and McDonnell, R.A. (2000) Principles of Geographical Information System-Spatial Information System and Geo-statistics. Oxford University Press
3. Chauniyal, D.D. (2010) SudurSamvedanevamBhogolikSuchanaPranali, Sharda PustakBhawan, Allahabad
4. Heywoods, I., Cornelius, S and Carver, S. (2006) An Introduction to Geographical Infromation system. Prentice Hall.
5. Jha, M.M. and Singh, R.B. (2008) Land Use: Reflection on Spatial Informatics Agriculture and Development, New Delhi: Concept.
6. Nag, P. (2008) Introduction to GIS, Concept India, New Delhi.

*Applicable for courses having practical components.

MCC-A11			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Fundamentals of Remote Sensing		
Course Code	U24-GEO/MCC - 611		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about Remote sensing and GIS. 2. understand the uses of these techniques in Geography. 3. understand the latest technology in GIS. 4. provide awareness about Remote sensing and GIS. 5* acquire knowledge of functioning of remote sensing and GIS		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Introduction to Aerial photographs: Their types and advantages. 2. Elements of Aerial photo interpretation.	12
II	3. Introduction to Remote Sensing: Electromagnetic spectrum and processes of Remote Sensing. 4. Types of Satellite, Indian Space programs and their data products.	11
III	5. Introduction to GIS: Definition, purpose, and components. 6. Spatial and Non spatial data: their characteristics and sources.	11
IV	7. Application of Remote Sensing and GIS in Urban Planning and Resource management. 8. Uses of UAV (Drone) in Agriculture and Settlement Analysis.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 13 exercises on the below mentioned themes: - 1. Identification and mapping of Principal and conjugate principal point and Determination of Flight Line (2 exercise). 2. Determination of Flight line (1 exercise) 3. Interpretation and mapping of landuse from the satellite image (2 exercise) 5. Introduction to QGIS (1 exercises). 6. Making of shapefiles in QGIS (3 exercises). 7. Digitization in QGIS (3 exercises). 8. Map composition (1 exercise). 9. Mapping uses Drone (1 exercise)	30

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Bhatta, B. (2010) Remote Sensing and GIS, Oxford University Publications.
2. Burrough, P.A., and McDonnell, R.A. (2000) Principles of Geographical Information System-Spatial Information System and Geo-statistics. Oxford University Press
3. Chauniyal, D.D. (2010) Sudur Samvedan evam Bhogolik Suchana Pranali, Sharda PustakBhawan, Allahabad
4. Heywoods, I., Cornelius, S and Carver, S. (2006) An Introduction to Geographical Infromation system. Prentice Hall.
5. Jha, M.M. and Singh, R.B. (2008) Land Use: Reflection on Spatial Informatics Agriculture and Development, New Delhi: Concept.
6. Nag, P. (2008) Introduction to GIS, Concept India, New Delhi.

*Applicable for courses having practical components.

MCC-A12			
Session: 2024-25			
Part A - Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Geography of Settlements		
Course Code	U24-GEO/MCC - 612		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC		
Level of the course (As per Annexure-I	200-299		
Pre-requisite for the course (ifany)	NA		
CourseLearningOutcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about the fundamentals of settlements geography. 2. enrich knowledge about the distribution of rural and urban settlements. 3. familiarized with the types and patterns of rural and urban settlements. 4. acquaint with the issues and policies regarding settlement. 5* develop skill of mapping socio-economic and demographic data.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	3	2	5
Max. Marks:100 **Internal Assessment Marks:20+10=30** **End-Term Exam Marks: 70**		**Time:3 hours**	

Part B-Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Definition, nature, scope, significance and approaches to study settlement geography. 2. Theories of evolution and development of settlements.	12
II	3. Geographical factors affecting the growth of settlements distribution, importance of settlement studies in geography 4. Types of settlement: rural and urban rural-urban dichotomy and continuum.	11
III	5. Rural settlement: shape, site, types and pattern. 6. Urban settlement: Characteristics of ancient and medieval cities.	11
IV	7. Hierarchy of urban settlement: rank-size rule and primate city. 8. Issues and policies in settlements.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempttwo exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Location and distribution of urban and rural settlements using toposheets (1 exercises). 2. Graphical representation of rank size rule (1 exercise). 3. Identification of settlement pattern (2 exercises). 4. Traffic flow diagram(1 exercise). 5. Diagrammatic distribution of different class towns(1 exercise). 6. Composition of urban & rural population(1 exercise). 7. Distribution of types of houses by bar diagram(1 exercise).	30

Suggested Evaluation Methods	
InternalAssessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

PartC-Learning Resources

Recommended Books/e-resources/LMS:

1. Desphpande, C. D. (2005) "Cities: A Geographical Study", Translated by V. G. Amrita, Manan Prakashan, Mumbai
2. Gharpure, V. (2013) "NagariBhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur
3. Gharpure, V. (2013) "VastiBhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur
4. Gharpure, V. (2017) "ManaviBhugol", (Marathi) Pimpalapure and Company Publishers, Nagpur
5. Ghosh. S. (2015) "Introduction to Settlement Geography", Orient Blackswan Private Limited, Hyderabad
6. Jyptirmoy Sen (2007) A Text Book of Social and Cultural Geography," Kalyani Publishers, New Delhi.
7. Knowles, R, and Wareing, J. (1996) "Economic and Social Geography", the Made Simple Series, Rupa & Co., Calcutta
8. Leong, Goh-Cheng and Morgan, G. (1994) "Human and Economic Geography", Oxford University Press, Oxford
9. Misra, R. P. &Misra, K. eds. (1998) Million Cities of India, Sustainable Development Foundation, New Delhi.
10. Siddhartha, K and Mukherjee, S. (2016) "Cities, Urbanisation and Urban Systems (Settlement Geography)", Kitab Mahal, Allahabad
11. Singh, L. R. (2009) "Fundamentals of Human Geography", Sharda PustakBhawan, Allahabad
12. Singh, R. Y. (2012) "Geography of Settlements", Rawat Publications, Jaipur
13. Thakur S. A. (2012) "Settlement Geography"/ VastiBhugol- Konkan Geographers, Publication
14. Tiwari, R. C. (2016) "Geography of India", Pravalika Publications, Allahabad

*Applicable for courses having practical components.

DSE-A4 (i)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Political Geography		
Course Code	U24-GEO/DSE-604(i)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-4(i)		
Level of the course (As per Annexure-I	200-299		
Pre-requisite for the course (ifany)	N.A.		
CourseLearningOutcomes(CLO):	After completing this course, the learner will be able to: 1. acquaint with concept of political geography. 2. gain knowledge about theories of political geography. 3. understand the functioning and characteristics of electoral geography. 4. be well versed with politics of displacements. 5* develop the skill to process political data.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	3	2	5
Max. Marks: 100 **Internal Assessment Marks: 20+10=30** **End Term Exam Marks: 50+20=70**		**Time: 3 hours**	

Part B-Contents of the Course		
Question 1 is compulsory and comprises five sub-parts spread over the entire syllabus (two marks for each sub-part). There will be eight questions, two from each unit. The candidate has to answer four questions from these by selecting at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Definition, nature and scope of Political geography. 2. Concept of Nation and State, Attributes of State – Frontiers, Boarders, Shape, Size, Territory and Sovereignty.	12
II	3. Distinction between frontiers and boundaries, Demarcation of boundaries, Classification and functions of boundaries 4. Landlocked states: advantages and disadvantages.	11
III	5. Global strategic views: Mahan and Sea power, Mackinder and Heartland, Spykman and Rimland. 6. Geopolitical significance of Indian Ocean.	11
IV	7. Geopolitical issues in India with special reference to water dispute and riparian claims. 8. Kashmir, Galwan valley problem and Indo-Pak relations.	11
V*	Instructions for external practical examiner: This is field/literature based study and all the students have to prepare a project report individually. The external examiner shall be conducting viva-voce on the project report. Distribution of marks for evaluation; 1. Project report = 10 marks 2. Viva-Voce = 10 marks	30
	Practical Record: Project report on one of following by individual students focusing on 1. Geo-political significance and consequences of Israel-Palestin conflict. 2. Geo-political significance and consequences of Capitalist and Socialist Nation conflicts. 3. Constituencies wise vote performance of different political parties in MP and MLA elections of Haryana	

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **5** • Seminar/presentation/assignment/quiz/class test etc.: **5** • Mid-Term Exam: **10** ➢ **Practicum** • Class Participation: NIL • Seminar/Demonstration/Viva-voce/Lab records etc.: **10** • Mid-Term Exam: NIL	**End Term Examination:** **70** **30**

PartC-Learning Resources

Recommended Books/e-resources/LMS:

1. Alexander, L.M. 1963. World Political Patterns Ran Mc Nally, Chicago.
2. De Blij, H.J. and Glassner, Martin. 1968. Systematic Political Geography, John Wiley, New York.
3. Dikshit, R.D. 1996. Political Geography: A Contemporary perspective, Tata McGraw Hill, New Delhi.
4. Dikshit, R.D. 1999. Political geography: A Century of Progress, Sage, New Delhi.
5. Sukhwal, B.L. 1968. Modern Political Geography of India Sterling publishers, New Delhi.
6. Taylor, Peter. 1985. political Geography Longman, London.
7. Fisher Charles A. 1968. Essays in Political Geography, Methuen, London.
8. Pounds N.J.G. 1972. Political Geography. McGraw Hill, New York.
9. John R. Short. 1982. An introduction to Political Geography Routledge, London.
10. Deshpande C.D. 1992. India-A Regional Interpretation Northern Book Centre, New Delhi.
11. Panikkar K.M. 1959. Geographical Factors in India History:2 Vols, Asia Publishing House Bombay.

*Applicable for courses having practical component.

DSE-A4 (ii)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Agricultural Geography		
Course Code	U24-GEO/DSE-604(ii)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-4(ii)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. understand the basic of Agriculture geography. 2. enrich understanding about cropping pattern and cropping intensity. 3. Aware about Agricultural regions of world. 4. acquaint with Agricultural development and its role in food security. 5* develop the skill of Agricultural mapping.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Definition, nature and scope of agricultural geography. 2. Various approaches to study agriculture geography with special reference to commodity, systematic and regional approaches.	11
II	3. Physical factors as determinants of land use and cropping pattern. 4. Technological and institutional factors as determinants of agricultural patterns.	11
III	5. Significance of surveys in agricultural geography-land use and land capability survey. 6. Von Thunen model of agricultural land use.	11
IV	7. Rainbow revolution in Agriculture. 8. Green Revolution in India- its impact and consequences.	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 8 exercises on the below mentioned themes: - 1. Temporal pattern in production of wheat, rice, mustard and cotton in India since independence (4 exercises). 2. Mapping the location of major wheat and rice producing areas (2 exercises) 3. Mapping the location of major textile and sugar industries (2 exercises).	

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Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Singh Jasbir and Dhillon SS (1994), Agricultural Geography, Tata Mc.Graw Hill, New Delhi.
2. Husain, Majid (1996), Systemic Agricultural Geography, Rawat Publication, Jaipur.
3. Safi, Mohammad, (2007) Agricultural Geography.
4. Tarrant JR (1974) Agricultural Geography, Wiley, New York

*Applicable for courses having practical components.

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DSE-A5(i)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Elementary Soil Geography		
Course Code	U24-GEO/DSE-605(i)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-5(i)		
Level of the course (As per Annexure-I	200-299		
Pre-requisite for the course (ifany)	N.A.		
CourseLearningOutcomes(CLO):	After completing this course, the learner will be able to: 1. acquaint with concept of soil geography. 2. gain knowledge about classification schemes of soil. 3. understand the physical and chemical properties of soil. 4. be well versed with soil and environmental problems. 5* develop the skill to process soil data.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	3	2	5
Max. Marks: 100 **Internal Assessment Marks: 20+10=30** **End Term Exam Marks: 50+20=70**		**Time: 3 hours**	

Part B-Contents of the Course		
Question 1 is compulsory and comprises five sub-parts spread over the entire syllabus (two marks for each sub-part). There will be eight questions, two from each unit. The candidate has to answer four questions from these by selecting at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Definition, nature and scope of soil geography. Relation of soil geography and pedology. 2. Soil forming factors: parent material, climate, topographic organic and their spatial temporal dimensions.	12
II	3. Land capability classification. 4. Development and characteristics of soil profile.	11
III	5. Physical properties of soils: tenure, structure, colour, porosity and permeability. 6. Chemical properties of soil: Soil reaction, Factors of controlling soil reaction, Humus, pH and EC.	11
IV	7. Soil and Environmental problems: Soil erosion, degradation and conservation, methods to improve the physical qualities of soil. 8. Methods and techniques of soil survey.	11
V*	Instructions for external practical examiner: This is field/literature based study and all the students have to prepare a project report individually. The external examiner shall be conducting viva-voce on the project report. Distribution of marks for evaluation; 1. Project report = 10 marks 2. Viva-Voce = 10 marks	30
	Practical Record: Project report on one of following by individual students focusing on 1. Types of soil, characteristics and their classification bases of Haryana/India. 2. The problem of soil degradation and erosion in Haryana/India. 3. Soil Testing.	

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **5** • Seminar/presentation/assignment/quiz/class test etc.: **5** • Mid-Term Exam: **10** ➢ **Practicum** • Class Participation: NIL • Seminar/Demonstration/Viva-voce/Lab records etc.: **10** • Mid-Term Exam: NIL	**End Term Examination:** **70** **30**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Buckman, H.O. and Brady N.C. 2000. The Nature and Properties of Soils, Macmillan, New York.
2. Bunting, B.T. 1973. The Geography of Soils. Hutchinson, London.
3. Brikeland, P.W.1984. Soils and Geomorphology. Oxford University Press, London.
4. Daji, J.A. 1990. A Text Book of Soil Science. Asia Publishing House, New Delhi.
5. Foth H.D. and Turk L.M. 1972. Fundamentals of Soils Science. John Wiley, New York.
6. Govinda Rajan, S.V. and Gopala Rao, H.G. 1978. Studies of Soils of India. Vikas Publications, New Delhi.
7. Sehgal, J. 2000. Pedology Concepts and Applications. Kalyani Publications, New Delhi.
8. Pitty, A.F. 1978. Geography and Soil Properties. University Press, London.

*Applicable for courses having practical component.

DSE-A5(ii)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Population Geography		
Course Code	U24-GEO/DSE-605(ii)		
CourseType: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	DSE-5(ii)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. provide knowledge about the population geography. 2. understand the various components of population data. 3. understand the basic demographic structure and composition. 4. provide awareness about the different aspects of population geography. 5* acquire knowledge of socio-economic and demographic data		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course		
Instructions for Paper-Setter Question 1 is compulsory comprising five sub-parts spread over the entire syllabus (two marks for each sub-part), to be answered in 15-20 words. There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.		
Unit	**Topics**	**Contact Hours**
I	1. Definition, nature and scope of Population geography. 2. Sources of population data, quality and reliability of data.	12
II	3. Concepts, determinants and world patterns of the following attributes of population: (i) Distribution and density (ii) Vital rates: birth and death rates (iii) Migration; Laws of migration (Ravnstein's, Lee's and Zelinsky) (iv) Growth	11
III	4. Composition of population; Determinants and World regional patterns of: (i) Age and Sex composition (ii) Rural-Urban composition (iii) Economic composition	11
IV	5. Population problems and Policies in developed and developing countries. 6. Population problems and Policies in India since independence.	11
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 10 exercises on the below mentioned themes: - 1. Age and sex pyramid of selected countries (3 exercises). 2. Mapping trends in world population growth (1 exercise) 3. Composition of the major religions and languages of world (2 exercises). 4. Mapping the economic development and growth of selected countries (4 exercises).	

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: **05 marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 marks** • Mid-Term Exam: **10 marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.:**10 Marks** • Mid-Term Exam: **NIL**	**End-Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Beaujeu, Garnier, J. (1966) Geography of Population, Longman, London.
2. Brooks, S. (1977): The World Population Today (Ethnodemographic Process), USSR Academy of Sciences, Moscow.
3. Cassen, Robert & Bates, Lisa M. (1994) : Population Policy : A New Consensus Overseas Development Council, Washington, D.C.
4. Chandna, R. C. (1997) : Jansankhya Bhugol, Kalyani Publishers, New Delhi.
5. Chandna, R. C. (1998) : Population, Publishers, New Delhi.
6. Chandna, R. C. (1998) : Environmental awareness, Publishers, New Delhi.
7. Chandna, R. C. (1998) : a Geography of Population : Concepts, Determinants and Patterns, Publishers, New Delhi.
8. Clarks, John, I. (1971) : Population Geography and the Developing Countries, Pergamon Press, New York.
9. Demko, G. J. and others (Eds.) (1971) : Population Geography, Reader, McGraw-Hill Books Co., New York
10. Jones, Huw, R. (1981) : A Population Geography, Harper and Row Publishers, London.
11. Petrov, V. (1985) : India: Spotlight of Population, Progress Publishers, Moscow.
12. Trewartha, G. T. (1972) : The Less Developed Realm-A Geography of its Population, John Wiley & Sons, Inc., New York.
13. Trewartha, G. T. (1978) : The More Developed Realm-A Geography of its Population Pergamon Press, New York.
14. Woods, R. (1979) : Population Analysis in Geography, Longman, London.

*Applicable for courses having practical components.

MCC-M6 (V)			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Making of Maps		
Course Code	U24-GEO/M-606(V)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC-M6(V)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. familiarization with the cartographic techniques 2. understand the elements of map 3. acquaintance with types of maps 4. provide awareness of the uses of maps in geographical studies 5* attain skills in solving practical problems associated with mapping.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 100 **Internal Assessment Marks: 20 + 10 = 30** **End-Term Exam Marks: 50 + 20 = 70**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Nature and Scope of cartography. 2. Recent developments in cartography.	11
II	3. Elements of Maps. 4. Types and characteristic of maps.	11
III	5. Introduction of topographical maps, one million sheets, half degree sheets and one fourth degree sheets.	11
IV	6. Maps scale, types of scale and uses of scale	12
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation Exercise = 10 marks File record = 5 marks Viva-Voce = 5 marks	30
	Practical Record: A project file consisting of 6 exercises on the below mentioned themes: - 1. Linear scale, representative scale (2 exercises). 2. Interpretation of topographic sheet (2 exercises). 3. Dots and Choropleth maps- distribution and density of population (2 exercises).	

Suggested Evaluation Methods

InternalAssessment:	**End Term Examination:**
➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks**	**50 Marks**
➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**20 Marks**

Part C-Learning Resources
Recommended Books/e-resources/LMS: 1. F.J Monkhouse and H.R. Wilkinson (1972) Maps and Diagrams, Mothuen and Co. Ltd., London 2. L.R. Singh and Raghuvander Singh (1973), Map Work and Practical Geography, Central Book Depot, Allahabad. 3. R.I. Singh and P.K. Dutt (1968), Elements of Practical Geography, Students Friends, Allahabad. 4. Singh Gopal (2004) 4th edition, Map work and Practical Geography, Viksa Publication House.

*Applicable for courses having practical components.

SEC-4			
Session: 2024-25			
Part A – Introduction			
Subject	Geography		
Semester	VI		
Name of the Course	Field Survey based Report (Socio-Economic)		
Course Code	U24-GEO/SEC-604		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	MCC-SEC4		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. familiarization with field survey. 2. understand the basics of field survey. 3. acquaintance with techniques of field survey 4. provide awareness of the importance of field survey in geographical studies. 5* attain skills of conducting field survey and report preparation.		
Credits	Theory	Practical	Total
	03	01	04
Contact Hours	03	02	05
Max. Marks: 50 **Internal Assessment Marks: 10 + 05 = 15** **End-Term Exam Marks: 20 + 15 = 35**		**Time:3 hours**	

Part B- Contents of the Course

Instructions for Paper-Setter

Question 1 is compulsory comprising of seven sub parts spread over entire syllabus (one marks for each sub part). There will be eight long questions, two from each unit. The candidate has to answer four long questions, at least one question from each unit. All questions carry equal marks.

Unit	Topics	Contact Hours
I	1. Basic tools and techniques to conduct a field survey. 2. Types and Sources of Demographic and Socio-Economic data.	7
II	3. Survey types: Census and Sample Survey. 4. Sampling techniques: Probability and Non Probability samplings.	7
III	5. Schedule and Questionnaire: Differences, types, advantages and disadvantages 6. Use of Schedule and Questionnaire in Field Survey.	7
IV	7. Survey/Research Reports: Types, Components and precautions in preparation of Survey/Research reports.	8
V*	Instructions for external practical examiner: There will be three questions in all and candidate has to attempt two exercises. Distribution of marks for evaluation File record = 10 marks Viva-Voce = 5 marks 1. Students have to carry out compulsory socio-economic field survey of a village/town, analyze and interpret the collected data. Every student has to prepare a field survey based report.	30

Suggested Evaluation Methods

Internal Assessment: ➢ **Theory** • Class Participation: **05 Marks** • Seminar/presentation/assignment/quiz/class test etc.: **05 Marks** • Mid-Term Exam: **10 Marks** ➢ **Practicum** • Class Participation: **NIL** • Seminar/Demonstration/Viva-voce/Lab records etc.: **10 Marks** • Mid-Term Exam: **NIL**	**End Term Examination:** **50 Marks** **20 Marks**

Part C-Learning Resources
Recommended Books/e-resources/LMS: 1. C R Kothari (2004) Research Methodology-Methods and Techniques, New Age International Publishers, New Delhi.

*Applicable for courses having practical components.