UNIVERSITY OF KOTA

SCHEME OF EXAMINATION

AND

COURSES OF STUDY

Session- 2025-26

Faculty of Social Science

M.A./M.Sc. (Geography)

First &Second Semester Examination

UNIVERSITY OF KOTA

MBS Marg, Near Kabir Circle, KOTA (Rajasthan)-324 005

INDIA

M.A./M. Sc. Geography:

The M.A. /M. Sc. Geography is a two years full time course. The course has beenorganized in IV semesters over two years. That means two semesters per year.

A brief note on the Innovation and the Employability -

1. Now a days Geography has become a very useful subject in various competitive examinations including Civil services and Rajasthan Administrative Services.

2. Geography not only deals with the physical economic and social conditions of the World, India, Rajasthan but now its nature has become applied and it is helpful in solving the environmental and urban problems.

3. Geography provides a background for the regional planning in development and help in sustainable development.

4. The modern techniques of Geographical analysis such as Remote Sensing, GIS, GPS etc. are helpful in Resource and Environmental Management and Disaster Management.

5. Geography provide an opportunity of employment in various fields. The important are : Teaching and Research ;Town Planning Departments ; Regional Planning ; Remote Sensing ; Statistical Departments ;Urban / Rural / Agricultural Planning ; Water Resource Departments ; Demographic Study Departments & Administrative Services – Central and State Governments etc.

Eligibility Criteria – As Per University / College / Government Policy

Scheme of Examination:

1.The course shall have 24 or 26 credits in one semester and 100 credits in a complete 4 semester course.However the credits in a course shall be equal in each semester.

2. There shall be fixed 4 theory papers each of 100 marks and one practical paper of 200 marks in each semester comprising both theory & Practical papers. The Total marks for each semester shall be600/650(CBCS) marks.

3. The Total marks of theory papers will be dividedInto 70% external assessment and 30% internal Assessment marks. Hand written/ Typed one/two assignments/Test for each theory papers of 10 marks each assignment/Test and 10 marks for general performance, attendance etc.

4. There will be no internal assessment in practical papers.

5. Each paper shall divided into five units for question paper framing from examination point of view.

6. The assessment of the student for theory paper shall be divided into two parts in which first part is continuous assessment or internal (30% of maximum marks) and second part is semester assessment or external assessment (70% of maximum marks) for practical papers there will be only one external assessment(100% of maximum marks).

7. Following rules have been recommended for internal assessment:

(a)The internal assessment for each theory paper shall be taken by the teacher concerned in the department during each semester. There will be two/one internal assessment test paper/assignmentor both each 10%/20% weightage.For theory papers in each semester, Each internal assessment test shall be of one hour duration for each semester. Each internal assessment test shall be taken according to academic calendar notified by the university. There will be no internal examination in the practical paper.

(b) A student, who remains absent(defaulter) or fails or wants to improve the marks in the internal assessment , may be permitted to appear in the desired paper(s) (only one time) in the same semester with the permission of the concerned Head of the Department. A defaulter/improvement fee of Rupees 250/- per paper shall be charged from such candidates. Duly forwarded application of such candidates by the teacher concerned shall be submitted to HOD who may permit the candidate to appear in the internal assessment after depositing the defaulter improvement fee. A record of such candidates shall be kept in the Department.

8. Following rules are recommended for Semester Assessment or External Assessment:

(a) The external assessment shall be of three hours duration for each theory paper and five to ten hours duration for practical paper as per the requirement of the subject and courses of practical. The practical examination shall be taken by the panel of at least one external and one internal examiner at the end of each semester.

(b) The syllabus for each theory paper is divided into five independent units and theory question paper will be divided into two sections as mentioned ("NEP-2020 based Curricula and Examination Scheme, University of Kota, Kota 2023")below:

Section –AThere will be one question with 10 parts having two parts from each unit with no internal choice. The weightage of each part is 2 marks hence the total weightage of this section is 20 marks (20x1) .This section will be compulsory in the paper.

Section-BThere will be five questions with one question from each unit with internal choice (may have subdivisions). The weight of each question of 16 marks hence the total weightage of the section is 50 marks (10x5).

09. Minimum pass marks and Rules regarding Determination of result are recommended as follows:

(i)The candidate shall be declared as pass in a semester examination if he/she secure at least 40% marks in each theory paper separately in external & internal examination and assignment assessment50% marks in each practical paper and at least 50% marks in project/dissertation with 50% aggregate marks in that semester(As per policy).

(ii)A candidate declared as fail/absent in one or more papers at any odd semester examination shall be permitted to take admission in the next higher semester (even semester)of the same academic session.

(iii)A candidate may be promoted in the next academic session(odd semester)if he/she has cleared collectively at least 50% of the paper of both semesters of previous academic session with 50% of the aggregate marks .The candidate who does not fulfil the above condition will

remain as an ex-student and will reappear in the due papers along with the next odd/even semester exam.

(iv)If any student who is provisionally admitted in higher odd semester but could not secure prescribed minimum marks in previous semester will be treated as ex-student and his/her admission fee will be carry forwarded to the next odd semester of forth coming academic session.

(v)If a candidate,who is declared as pass, wishes to improve his/her performance in theory papers of previous semester .he/she may re –appear only one time in these paper in next odd/even semester examination.

(vi)Candidate shall not be permitted to re-appear or improve the marks obtain in the external examination of practical/dissertation in any condition.

(vii)If the number of papers prescribed in a semester examination is an odd number. It shall be increased by one for the purpose of reckoning 50% of the papers for considering the student pass/fail.

(viii)A candidate may be given only two additional chances for passing semester thus maximum tenure for completing the two years, postgraduate course will be limited to four years,for three years postgraduate programme up to five years and so on.

10. Classification of successful Candidates after Last semester Examination is recommended as follows:

As Per "NEP-2020 based Curricula and Examination Scheme, University of Kota, Kota 2023"

As per policy, it is proposed to calculate SGPA (Semester Grade Point Average) and CGPA (Cumulative Grade Point Average) as per following grade point calculation as:

Letter Grade	Grade Points	Description	Rank of Marks (%)
O	10	Outstanding	90-100
A+	9	Excellent	80-89.99
A	8	Very Good	70-79.99
B+	7	Good	60-60.99
B	6	Above Average	50-50.99
C	5	Average	45-49.99
P	4	Below Average/ Pass	40-44.99
F	0	Fail	0-39.99
U	0	Unfair Means	--
W	0	Withdrawn	--
Ab	0	Absent	Absent

Paper Scheme(GEO-----P):"NEP-2020 based Curricula and Examination Scheme, University of Kota, Kota 2023"

Year / Semester	Serial Number, Code & Nomenclature of Paper				Duration of Exam.	Teaching Hrs/Week & Credit			Distribution of Marks			Min. Pass Marks	
	Number	Code	Category	Nomenclature		L	P	C	Conti. Assess.	Sem. Assess.	Total Marks	Conti. Assess.	Sem. Assess.
I Year Semester I	1.1	GEO 101	DCC	Evolution of Geographical Thought- Ancient& Classical	3 Hrs	4		4	30	70	100	12	28
	1.2	GEO 102	DCC	Advanced Economic Geography	3 Hrs	4		4	30	70	100	12	28
	1.3	GEO 103	DCC	Advanced Geomorphology	3 Hrs	4		4	30	70	100	12	28
	1.4	GEO 104	DCC	Advanced Geography of Environment	3 Hrs	4		4	30	70	100	12	28
	1.5	GEO 105	DCC	Geography Practical	6 Hrs		16	8	--	200	200	--	100
	Total					**16**	**16**	**24**	**120**	**280**	**600**		
I Year Semester II	2.1	GEO 201	DCC	Evolution of Geographical Thought- Growth of Modern Geography	3 Hrs	4		4	30	70	100	12	28
	2.2	GEO 202	DCC	Resource Geography	3 Hrs	4		4	30	70	100	12	28
	2.3	GEO 203	DCC	Advanced Climatology & Oceanography	3 Hrs	4		4	30	70	100	12	28
	2.4	GEO 204	DCC	Environment& Sustainable Development	3 Hrs	4		4	30	70	100	12	28
	2.5	GEO 205	DCC	Geography Practical	6 Hrs		16	8	--	200	200	--	100
		GEO 206 (A)	CBCS	CBCS(as per choice of student)		**2**		**2**	**50**		**50**		**20**
						18	**16**	**26**	**170**	**280**	**650**		

Year / Semester	Serial Number, Code & Nomenclature of Paper				Duration of Exam.	Teaching Hrs/Week & Credit			Distribution of Marks			Min. Pass Marks	
	Number	Code	Category	Nomenclature		L	P	C	Conti. Assess.	Sem. Assess.	Total Marks	Conti. Assess.	Sem. Assess.
II Year Semester III	3.1	GEO 301	DCC	Advanced Geography of India	3 Hrs	4		4	30	70	100	12	28
	3.2	GEO 302	DCC	Urban Geography	3 Hrs	4		4	30	70	100	12	28
	3.3	GEO 303	DSE	(A) Agricultural Geography (B) Advanced Industrial Geography	3 Hrs	4		4	30	70	100	12	28
	3.4	GEO 304	DSE	(A) Bio Geography (B) Geography Of Tourism	3 Hrs	4		4	30	70	100	12	28
	3.5	GEO 305	IOJ	Practical	6 Hrs		16	8	--	200	200	--	100
		GEO 306 (B)	CBCS	CBCS (as per choice of student)		**2**		**2**	**50**		**50**		20
				Total		**18**	**16**	**26**	**170**	**280**	**650**		
II Year Semester IV	4.1	GEO 401	DCC	Geography of Rajasthan	3 Hrs	4		4	30	70	100	12	28
	4.2	GEO 402	DCC	Population Geography	3 Hrs	4		4	30	70	100	12	28
	4.3	GEO 403	DSE	(A)Geography of Transport and Marketing (B) Regional Planning (C) Geoinformatics	3 Hrs	4		4	30	70	100	12	28
	4.4	GEO	DSE	(A) Political Geography	3 Hrs	4		4	30	70	100	12	28

		404		(B) Research Methodology									
	DISSERTATION:-			Dissertation (in lieu of Paper GEO-403 or GEO-404)									
	4.5	GEO 405	IOJ	Practical	6 Hrs		16	8	--	200	200	--	100
						16	**16**	**24**	**120**	**280**	**600**		

GEO-101	**Evolution of Geographical Thought-Ancient& Classical**

UNIT – I
Definitions, scope, nature and purpose of Geography,and its relation with other social sciences, Basic Concepts of Geography, Branches of Geography.

UNIT – II
Geographical knowledge in Ancient Times, Cosmogony and Cosmology in Ancient India, Puranic Geography- Deeps, Sea/Oceans, Mountains & Rivers, Geography of Vedic Times.

UNIT – III
Geographical knowledge in Classical Times – Greek Geographers.

UNIT – IV
Contribution of Roman Geographers.

UNIT – V
Dark Age & Contribution of Arab Geographers.

Books Recommended :

1. Minshull, Roger : The Changing Nature of Geography.
2. Hartshorne, Richard : Perspectives on the Nature of Geography. The Association of American Geographers, Hutchinson University Library, London.
3. Dikshit, R.D. : Geographical Thought A Contextual History of Ideas, Prentice Hall of India Pvt.Ltd.
4. Wooldridge &East : The Spirit and Purpose of Geography, Hutchinson University Library, London.
5. Dikshit, R.D. : The Arts Science of Geography, Integrated Readings. Prentice Hall of India, New Delhi, 1994.
6. Saxena, D.P. : Regional Geography of Vedic India, GranthanRambag, Kanpur.
7. Harvey &Holly : Themes in Geographic Thought, Rawat Publications, Jaipur.
8. Husain, Majid : Evolution of Geographical Thought, Rawat Publications, Jaipur.
9. Haggett, P. – Geography : A Modern Synthesis, Harper International Ed.
10. Ali, S.M. : Geography of Puranas, Allied Punlishers, Bombay/Peoples Publishing House, New Delhi.
11ण हुसैन, माजिद : भौगोलिकविचारधाराओं का इतिहास, रावतपब्लिकेशन्स, जयपुर।
12ण्कौशिक, एस.डी. : भौगोलिकविचारधारायें एवंविधि तंत्र।
13ण्जैन, एस.एम. : भौगोलिकचिन्तन व विधि तंत्र, साहित्य भवन, आगरा।
14ण्अग्रवाल : भौगोलिकविचारधारायें राजस्थानहिन्दीग्रन्थअकादमी, जयपुर, ।

GEO-102	Advanced Economic Geography

Unit - I

Nature and Scope of Economic Geography, approaches and recent trends in economic geography, location of economic activities and spatial organization of economies. Simple model and spatial structure of economy.

Unit – II

Classification of economies, sectors of economy: primary, secondary and tertiary, Transportation Spatial variation in transport and production costs: labour, capital, Decision making process technical knowledge, location impact.

Unit – III

Types of agriculture: Subsistence: Tropical plantation,Mixed farming,Commercial grain farming and Mediterranean. Production and distribution of Wheat, Rice, Cotton, Sugarcane, Tea and Coffee in the world.

Unit – IV

Theories of Agricultural Location-Von Thunen, Sinclair and Jonasson.Theories of Industrial Location – Alfred Weber, Losch, Walter Isard and Smith.

Unit – V

Agricultural and Industrial Regions of the World pattern of Rail and water transportation including inland water transportation.

Books Recommended :

1. Alexander, J. W., Economic Geography, Prentice Hall of India, New Delhi
2. Alien, S. W. and Leonard, J. W., Conserving Natural Resources, McGraw Hill
3. Bengston, N. A. and M. W. Royen, Fundamentals of Economic Geography, Prentice Hall
4. Berry J. L. Geography of Market Centres and Retail Distributions, Prentice Hall, New York,1967
5. Berry, B. J. L., et al, D.M, Economic Geography, Prentice Hall
6. Boesch, H., A Geography of World Economy, D. Van, Nostrand
7. Chatterjee, S. R, Economic Geography of Asia, Allied Book Agency, Calcutta, 1984
8. Chisholm, M., Geography and Economy, G. Bell, London
9. Chorley, R. J. and P. Haggett (ed.), Network Analysis in Geography, Arnold, 1969
10. Chorley, R. J., Water, Earth and Man, Methuen
11. Dreze, J. and A. Sen, India: Economic Development and Social Opportunity, Oxford University Press, New Delhi, 1996
12. Eckarsley, R. (ed.), Markets, the State and the Environment, McMillan, London, 1995
13. Garnier. B. J. and A. Delobez, A Geography of Marketing, Longman, London, 1979
14. Guha and Chatterjee, A New Approach to Economic Geography of Resources
15. Hamilton, F. E. I. (ed.), Resources and Industry, Oxford University Press, New York, 1992
16. Hamilton, F. E. I., Spatial Perspectives on Industrial Organisation and Decision Making, John Wiley, New York, 1974
17. Hurst, E., Transport Geography: Comments and Readings, McGraw Hill, New York, 1974
18. Janaki, V. A., Economic Geography, Concept Publishing Co., New Delhi
19. Jarret, H. R., A Geography of Manufacturing, MacDonald & Evans
20. Jones, G. G. and C. F. Darkenwald, Economic Geography, Mac Milan
21. Learmonth, T. A., Mysore State: Regional Synthesis, Asia Pub. House
22. Lloyd, P. and P. Dicken, Location in Space: A Theoretical Approach to Economic Geography, Harper and Row
23. Me-Carty, M. H. and J. B. Luidberg, A Preface to Economic Geography, Prentice Hall
24. Morgan, W. B. and R. J. C. Munton, Agricultural Geography, Methuen, London, 1977
25. Pachuri, R. K., Energy and Economic Development in India, Praeger, New York, 1977
26. Paterson, J. H., Land Work and Resources: An Introduction to Economic Geography, Arnold Heineman
27. Robertson, D. (ed.), Globalisation and Environment, E. Elgar Co., U.K., 2001.

28. Robinson, H., Economic Geography, MacDonald and Evans
29. Zimmermann, E. W., World Resources and Industries, Harber
30ण्श्रीवास्तव, वी. के. एवंराव, बी. पी. : आर्थिकभूगोल के मूलतत्व (वसुन्धराप्रकाशन, गोरखपुर)
31ण्जैन, हरकचन्द : सैद्वान्तिकआर्थिकभूगोल (कमलेश प्रकाशन, भीलवाडा)
32ण् रजा, एम. एवं सिंह, ए. : संसाधनभूगोल
33ण्नैगी, बी. एस. : संसाधनभूगोल
34णसिंह एवं सिंह : आर्थिकऔरसंसाधनभूगोल
35ण् सक्सैना, अग्रवाल, सक्सैनाः आर्थिकभूगोल, राजस्थानहिन्दीग्रन्थअकादमी, जयपुर, 2020

GEO-103	Advanced Geomorphology

UNIT-1

Geomorphology: Development of geomorphology, Fundamental concepts, Factors, processes and theories of landform development: Endogenetic and Exogenetic forces. Interior of the earth, Magnetism of earth, Paleomagnetism.

UNIT-II

Isostasy, Continental Drift, Sea floor spreading and Plate Tectonics, Denudation process: Weathering and Erosion, mass movements, Geosynclines, Earth movements:-Folds and Faults, Orogenesis:- types of mountains, major phases of mountain building, theories of mountain building.

UNIT-III

Concept of Geomorphic Cycle:- Davis and Penck , Rejuvenation and polycyclic landforms Landforms associated with fluvial, glacial, arid, coastal, Karst and peri-glacial topography. Volcano:- types, world distribution and volcanic landforms. Earthquake:-cause, effect and world distribution.

UNIT-IV

Concept of slope:- Introduction,Elements of slope, Classification of slopes, approaches to study of slope. Models of slope development. Peneplain and panplain. Development of river valleys, Channel morphology, Morphometry, drainage system and pattern.

UNIT – V

Climatic Geomorphology and Morphogenetic regions. Regional Geomorphology, Climate change and quarternary geomorphology, Environmental, Anthropogenic and Applied Geomorphology.

Books Recommended :

1. Dayal, P., A Text Book of Geomorphology, Shukla Book Depot, Patna, 1996
2. Dury, G. H., The Face of the Earth, Penguins, 1980
3. Ernst, W.G., Earth Systems: Process and Issues, Cambridge University Press 2000
4. Hugget, Richard, Fundamentals of Geomorphology, Routledge, Taylor & Francis Group, New York, 2007
5. ICSSR, A Survey of Research in Physical Geography, Concept, New Delhi, 1983
6. Kale, V. and A. Gupta, Elements of Geomorphology, Oxford University Press, Calcutta, 2001
7. King, C. A. M., Beaches and Coasts, E. Arnold, London, 1972
8. Leopold, L. B. et al, Fluvial Processes in Geography, Eurasia Publishing House, New Delhi
9. Pike, R.J., I.S. Evans and T. Hengl, Geomorphometry: A Brief Guide, Developments in Soil Science, Volume 33, Elsevier B.V., 2009

10. Pitty, A., Introduction to Geomorphology, Methuen, London, 1974
11. Ritter, D.F., R.C. Kochel and J.R. Miller, Process Geomorphology, 4th edition, McGraw Hill, New York,2002
12. Sharma, H. S., Tropical Geomorphology, Concept, New Delhi, 1987
13. Shepard, F. P., Submarine Geology, Harper & Sons, New York, 1948
14. Singh, S., Geomorphology, PrayagPustakalaya, Allahabad, 1998
15. Small, R. J., The Study of Landforms, McGraw Hill, New York, 1985
16. Sparks, B. W., Geomorphology, Longmans, London, 1960
17. Strahler, A. H., Introducing Physical Geography, 5th Edition, John Wiley & Sons, 2009
18. Summerfield, M. A., Global Geomorphology, Longman, 1991
19. Thornbury, W. D., Principles of Geomorphology, Wiley Eastern, l969

GEO-104	Advanced Geography of Environment

UNIT – I

Concept of environment, Nature and scope of the Geography of environment, Concept of ecology , eco-system-definition. Biomes, Components of environment and Ecology, Ecological Pyramids.

UNIT – II

Energy flow in eco-system, Productivity in eco-system, Food Chain- Food Web,Human impact on natural environment Types of eco-system.

UNIT – III

Man-environment relationships, Degradation and conservation of Environment, Development vis-a-vis ecological crisis. Perception of environment and its quality.

UNIT – IV

Environmental Pollution – Water, Air, Noise, Soil and Radio-activity, causes, impact and measures of control with Indian examples. Population and ecological crisis.

UNIT – V

Global Environmental Issues : Climate Change - Ozone depletion, Green House effect and Global warming, Desertification, Biodiversity.

Books Recommended :

1. Batel, B. (Ed.) – Management of Environment, Wiby Eastern Ltd., New Delhi, 1980.
2. DeshBandhu (Ed.) – Environmental Management, Indian Environment Society, New Delhi.
3. Singh & Singh (Ed.) – Geography of Environment Concept, New Delhi.
4. Saxena, H.M. – Environmental Geography, Rawat Pub., Jaipur, 2019.
5. Savinder Singh – Geography of Environment, Allahabad.
6 Murdock, W. (Ed.)- Environment Resources, Pollution and Society, Sin over Association Inc.
7. Gupta &Gurjar - Sustainable Development, Rawat Pub., Jaipur.
8. Strahler, A.N. – Geography and Man's Environment, John, Willey.
9. Khan, M.Z.A. & S.K. Agarwal – Environmental Geography, APH Publishing House, New Delhi,2004.
10.Centre for Science :The State of Indian Environment : A Citizen's Report 1982, Environment1985, New Delhi.
11 सविन्द्र सिंह –पर्यावरणभूगोल, इलाहाबाद।

12.वी.के. श्रीवास्तव : पर्यावरणीय, भूगोल एवंपारिस्थितिकीविकास, वसुन्धरा, गोरखपुर।
13.एच.एम. सक्सैना–पर्यावरण एवंपरिस्थितिकीभूगोल, राज. हिन्दीग्रन्थअकादमी, जयपुर।
14. सक्सैना–पर्यावरणभूगोल, रावतपब्लिकेशन, जयपुर।

GEO-105	Geography Practical

Surveying / laboratory Work: ***Total 200 Marks***

1. Laboratory work test	(3 hrs duration)	80 Marks
2. Record work & viva-voce	(50+20) 1½ hrs	70 Marks
3. Survey Project Report comp& viva voce	(30+20) 1½ hrs	50 Marks

Note: **16 hrs of teaching- practical be provided to students per week .**

UNIT – I

Definition , Nature and scope of cartography , The Art and Science of Cartography, Maps: History of Maps,Indian contribution to cartography. Materials, techniques, Types and Preparation of Maps.

UNIT – II

Scales; Types, Representation of Scales ,Enlargement, Reduction of Maps, Data: Types: Primary-Secondary , representation of Bar Diagram, histograms, Frequency Polygon, Pie/Wheel Diagram.

UNIT – III

Geographical Maps-Diagrams : Isopleths, choropleth, chorochromatic , Population- Dot Map , Population Pyramid, Sten-de-Geers and Stilgen-Baurs-Method.

UNIT – IV

Three dimensional diagrams of economic and social data, Block Pile, Sphere ,Cube, Graphs: Simple Line Graph ,Polygraph, Climatograph, Hythergraph, Taylor's/Foster's Climograph.

UNIT – V

Survey Project Report: Student will prepare a project report based on geographical ,socio-economic and environmental aspects of his/her residential area with sample survey of 10 houses under the direction of the faculty member independently of 25 pages. Batch of ten students be formed and separate topic/sub-topic should be given to each batch.

Note: Record work will comprise of a minimum of 25 exercises drawn on one fourth of a full drawing sheet File with analysis/ Explanations.

Books Recommended :

1. Robinson, A.H. etal – Elements of Geography, John Willey and Sons, U.S.A. 1995.
2. Sarkar, A.K. – Practical Geography – A Systematic Approach, Oriental Longman, Calcutta,1997.

3. Khan, Z.A. – Text Book of Practical Geography, Concept, New Delhi, 1998.
4. Monkhouse, E.J. & Wilkinson, H.R. – Maps and Diagrams, Methuen, London, 1994.
5. Singh, R.L. – Elements of Practical Geography, Kalyani Pub., New Delhi.
6. Steer, J.A. – Map Projections; University of London Press, London.
7. Lawrence, G.R.P. - Cartographic Methods, London, 1971.
8. Dickinson, G.C. – Statistical Mapping of Statistics, London.
9.जे.पी. शर्मा–प्रयोगात्मकभूगोल, रस्तोगी, मेरठ।
10. इन्द्रपाल एवंमाथुर–मानचित्र प्रक्षेप, राज. हिन्दीग्रन्थअकादमी, जयपुर।

GEO-201	Evolution of Geographical Thought- Growth of Modern Geography

UNIT – I

Founders of modern Geography-Humboldt, Ritter,Ratzel,Richthofen, Hettner, Contribution of Vidal-de-la-Blache,Brunhes, Sample, Huntington.

UNIT – II

Contribution of British and American Geographers. Growth Geographical Study in India.

UNIT – III

Dichotomies in Geography : Physical and Human Geography, Determinism and Possibalism, Regional and Systematic Geography, Qualitative and Quantitative Geography, Theoretical and Applied Geography.

UNIT – IV

Changing paradigms in Geography ; Positivism, Behaviourism, Humanistic geography, Functionalism and Idealism in Geography. Concept of cultural landscape.

UNIT – V

Nature of Modern Geography, Branches of Geography –their nature and importance. its place in natural and social science. Future of Geography.

Books Recommended :

1. Minshull, Roger : The Changing Nature of Geography.
2. Hartshorne, Richard : Perspectives on the Nature of Geography. The Association of American Geographers, Hutchinson University Library, London.
3. Dikshit, R.D. : Geographical Thought A Contextual History of Ideas, Prentice Hall of India Pvt.Ltd.
4. Wooldridge &East : The Spirit and Purpose of Geography, Hutchinson University Library,London.
5. Dikshit, R.D. : The Arts Science of Geography, Integrated Readings. Prentice Hall of India, NewDelhi, 1994.
6. Saxena, D.P. : Regional Geography of Vedic India, GranthanRambag, Kanpur.
7. Harvey &Holly : Themes in Geographic Thought, Rawat Publications, Jaipur.
8. Husain, Majid : Evolution of Geographical Thought, Rawat Publications, Jaipur.
9 Haggett, P. – Geography : A Modern Synthesis, Harper International Ed.
10. हुसैन, माजिद : भौगोलिकविचारधाराओं का इतिहास, रावतपब्लिकेशन्स, जयपुर।
11.कौशिक, एस.डी. : भौगोलिकविचारधारायें एवंविधि तंत्र।
12.जैन, एस.एम. : भौगोलिकचिन्तन व विधि तंत्र, साहित्य भवन, आगरा।

GEO-202	Resource Geography

UNIT – I

Scope, approaches and trends in resource geography; resources: concepts and classification Distribution, production and problems.

UNIT – II

Use, production and conservation of resources: iron ore and manganese, Conventional and Non-conventional Sources of Energy ,production and problems of conservation of coal, petroleum, Hydroelectricity, Solar and nuclear resources ,World Energy Crisis.

UNIT – III

Forest and water resources: distribution, utility, problems and conservation with spatial reference to India and Rajasthan.

UNIT – IV

Distribution, density and growth of human resources , Population-resource equilibrium, Problems of resource utilization and conservation of resources, Population-Resource regions of world.

UNIT – V

Locational analysis and spatial distribution of Iron and Steel, Cotton textile, Chemical, Paper and pulp industries , Development of marketing systems in the world and WTO.

Books Recommended :

1. Lloyd &Dicken : Location in Space : Theoretical Approach to Economic Geography.
2. Mc-Cart &Lindeberg : A Preface to Economic Geography.
3. Smith, D.E. : Industrial Location – An Economic Geographical Analysis.
4. Hodder &Lee : Economic Geography.
5. Berry Conkling &Ray : The Geography of Economic Systems, Prentice Hall.
6. Smith, J.C. & Philip, M.O. : Industrial and Commercial Geography, Henry Halt.
7. Bengston, N.A. &RoyenM.V. : Fundamentals of Economic Geography, Prentice Hall, New York.
8. Alexander, J.W. : Economic Geography, Prentice Hall, New York.
9. Guha &Chatterjee : A New Approach to Economic Geography.

10. Renner, T.H. &Other : World Economic Geography.
11. Robinson, H. : Economic Geography, M.Sc. Donald, London.
12. Thoman, R.S. : The Geography of Economic Activity, McGraw Hill, New York.
13. Zimmerman E.W. : World Resources and Industries, Harper and Co., New York.
14. Robertson, D. (Ed.) : Globalization and Environment, E. Elgan Co., U.K., 2001.
15. Wheeler, J.O. : Economic Geography, John Willey, New York, 1995.
16. Dreze, J. & Sen, A. : India – Economic Development and Social Opportunity, Oxford University
Press, New Delhi, 1996.
17ण काशीनाथ सिंह, जगदीश सिंह : आर्थिकभूगोल के मूलतत्व, वसुन्धरा, गोरखपुर।
18ण पुरूषोतमजैन : आर्थिकभूगोल, रस्तोगीप्रकाशन, मेरठ।
19ण सक्सेना, अग्रवाल एवंसक्सेना : आर्थिकभूगोल, राजस्थानहिन्दीग्रंथअकादमी, जयपुर–2010 ।

GEO-203	Advanced Climatology & Oceanography

UNIT – I
Climatology : Composition and Structure of the Atmosphere, Insolation ; Heat budget of the earth, Distribution of temperature- vertical and horizontal, Atmospheric pressure and general circulation of winds, Monsoons and jet streams.

UNIT – II
Stability and instability of the atmosphere: Air-masses, Fronts, Temperate and Tropical cyclones,Types and distribution of precipitation.

UNIT – III
Classification of world climates :Kopen's and Thornthwaite's schemes, Hydrological Cycle, Climate change and Global warming.

UNIT – IV
Oceanography : Distribution of land and water, Origin of ocean basins- Major features of ocean basins, Study of Ocean Bottom relief of Indian, Atlantic and Pacific Oceans.

UNIT – V
Ocean deposits: Coral reefs, Temperature and Salinity of the Oceans,Ocean currents, waves and Tides, Impact of Humans on the marine environment, Marine Resources.

Books Recommended :
1. Anikouchine, W. A. and R. W. Sternberg, The World Oceans: An Introduction to Oceanography, Englewood Cliffs, N.J. 1973
2. Barry, R. G. and R. J. Chorley, Atmosphere, Weather and Climate, Routledge, 1998
3. Critchfield, H., General Climatology, Prentice-Hall, New York, 1 975
4. Das, R. K., The Monsoons, National Book Trust, New Delhi, 1968
5. Garrison, T., Oceanography, Wadsworth Co. USA, 1998
6. Gerald, S., General Oceanography: An Introduction, John Wiley & Sons, New York, 1980
7. King, C. A. M., Beaches and Coasts, E. Arnold, London, 1972
8. King, C. A. M., Oceanography for Geographers, E. Arnold, London, 1975
9. Lydolph, Paul E., The Climate of the Earth, Rowman and Allanheld, Totowa, N. J., 1985
10. Mather, J. R., Climatology, McGraw Hill, New York, 1974

11. Patterson, S., Introduction of Meteorology, McGraw Hill Book Co., London, 1969
12. Sharma, R. C. and M. Vatel, Oceanography for Geographers, Chetnya Publishing House, Allahabad, 1970
13. Shepard, F. P., Submarine Geology, Harper & Sons, New York, 1948
14. Strahler, A. N., Environmental Geo-Science, Hamilton Publishing, Santa Barbara, 1973
15. Stringer, E. T., Foundation of Climatology, Surjeet Publications, Delhi, 1982
16. Thurman, H. B., Introductory Oceanography, Charles Webber E. Merril Publishing Co., 1984
17. Trewartha, G. T., An Introduction to Climate, International Students Edition, McGraw Hill, New York, 1980
18. Weisberg, J. and Howard, Introductory Oceanography, McGraw Hill Book Co., New York, 1976
19.नेगी, बी. सी.: जलवायुविज्ञानतथासमुद्रविज्ञान, केदारनाथरामनाथ, मेरठ
20.बनर्जी, आर.सी. एवंउपाध्याय, डी.एस : मौसमविज्ञान (राजस्थान हिन्दीग्रन्थअकादमी, जयपुर)

GEO-204	Environment and Sustainable Development

UNIT – I

Growing environmental problems of the Modern World: Ecological crisis, Energy crisis, Desertification, Deforestation, Climate change, Decline of Bio-diversity, Ozone Depletion. Need for environmental protection.

UNIT – II

Environmental Management–Approaches, Management of forest, soil, wildlife, energy and mineral resources. Types of Hazards and Disasters. Causes, effects and management of Earthquakes, Tsunami, Floods, Droughts, Tropical cyclones.

UNIT – III

Impact of Industrialization. Urbanization and GlobalizationonEnvironment, Environmental Impact Assessment, Eco-Auditing. Conservation of biodiversity.

UNIT – IV

Environment: Perception, Ethics and Quality. Environment Awareness and Education, Environmental policies and programmes (international and national) , Environmental problems, planning and legislation in India.

UNIT – V

Sustainable development: Concept, importance and requirement. Governance, Geo-Politics. Role of UN agencies and International organizations in environmental protection and sustainable development.

Books Recommended :

1. Batel, B. (Ed.) – Management of Environment, Wiby Eastern Ltd., New Delhi, 1980.
2. DeshBandhu (Ed.) – Environmental Management, Indian Environment Society, New Delhi.
3. Singh & Singh (Ed.) – Geography of Environment Concept, New Delhi.
4. Saxena, H.M. – Environmental Geography, Rawat Pub., Jaipur, 2019.
5. Savinder Singh – Geography of Environment, Allahabad.

6 Murdock, W. (Ed.)- Environment Resources, Pollution and Society, Sin over Association Inc.
7. Gupta &Gurjar - Sustainable Development, Rawat Pub., Jaipur.
8. Khan, M.Z.A.&dGangwaleSonal : Global Climate change, Rawat Publications, Jaipur, 2011
9. Strahler, A.N. – Geography and Man's Environment, John, Willey.
10. Khan, M.Z.A. & S.K. Agarwal – Environmental Geography, APH Publishing House, New Delhi,2004.
11. Centre for Science – The State of Indian Environment : A Citizen's Report 1982, Environment1985, New Delhi.
12. Sharma B.L. & Puja Puar : Global Environmental Challenges, Rohini Books, Jaipur.
13.सविन्द्र सिंह –पर्यावरणभूगोल, इलाहाबाद।
14. वी.के. श्रीवास्तव : पर्यावरणीय, भूगोल एवंपारिस्थितिकीविकास, वसुन्धरा, गोरखपुर।
15. एच.एम. सक्सैना–पर्यावरण एवंपरिस्थितिकीभूगोल, राज. हिन्दीग्रन्थअकादमी, जयपुर।
16. सक्सैना–पर्यावरणभूगोल, रावतपब्लिकेशन, जयपुर।

GEO-205	**Geography Practical**

Laboratory Work: *Total* ***200 Marks***

1. Laboratory work test	(3 hrs duration),	80 Marks
2. Record work & viva-voce (50+20)	1½ hrs,	70 Marks
3. Survey Project report camp & viva - voce (30+20)	1½ hrs	50 Marks

UNIT – I

Map Projection and their classification –(Merits and Demerits)
Construction and characteristics of projections (Mathematical constructions)
Conical Projections :
(a) Equal Area with one Standard Parallel (Lambert's Projection)
(b) Equal Area with two Standard Parallel (Albert's Projection)
(c) Bonne's
(d) Polyconic
Cylindrical Projections :
(a) Cylindrical Equal Area
(b) Mercator's
(c) Gall's stereographic

UNIT – II

Zenithal Projection's
(a) Gnomonic Polar Case &. Eq-case
(b) Stereographic Polar Case &. Eq-case
(c) Orthographic Polar Case &. Eq-case
(d) Equal Area Polar Case &. Eq-case
(e) Equidistant Polar Case &. Eq-case
Conventional Projections :
(a) Sinusoidal
(b) Mollweide

UNIT – III

Scheme of symbols, Conventional Symbols, Weather Symbols, Interpretation of Weather Maps and Indian Weather Report. Space –Based on Weather information.

UNIT – IV

Computation of Mean, Median and Mode, Deviations : Standard Deviation and Mean Deviation, Correlation, Theoretical Basis of Nearest Neighbour Analysis.

UNIT – V

Survey Project Report : Report should be prepared for a topic related to any Local orregional problem. A report should be prepared in typed form minimum 25 pages with the help of

maps and diagrams. Batch of ten students be formed and separate topic/sub-topic should be given to each batch.

Note: Record work will comprise of a minimum of 25 exercises drawn on one fourth of a full drawing sheet File with analysis/ Explanations.

Books Recommended :

1. Arthur G., Advance Practical Geography, Heinemann
2. Campbell, J., Introductory Cartography, Prentice Hall Inc., New York
3. Govt. of Rajasthan, District Census Handbooks, latest as well as of previous Census
4. Keates, J. S., Cartographic Design and Production, Longman, London
5. Loxton, J., Practical Map Production, John Wiley & Sons, New York
6. Mishra, R. P. and A. Ramesh, Fundamentals of Cartography, Concept Publishers, New Delhi
7. Monkhouse, F. J. and H. R. Wilkinson, Maps and Diagrams, Methuen & Co., London
8. Raisz, E., General Cartography , McGraw Hill Book Co., New York
9. Robinson, A. H., Elements of Cartography, Chapman & Hall
10. Sing, R. L., Elements of Practical Geography, Kalyani Publishing
11. Singh, R. N., Map Work and Practical Geography, Central Book Depo

UNIVERSITY OF KOTA

PAPER OF STUDY

UNDER CBCS

Session- 2023-24

Faculty of Social Sciences

M.A./M.Sc. Geography

Second & Third Semester Examination

UNIVERSITY OF KOTA

MBS Marg, Near Kabir Circle, KOTA (Rajasthan)-324 005

INDIA

GEO-CBCS-206	**Environmental Studies (A)**	**Cradit:02**

UNIT – I

Concept of environment, Nature and scope of the Environmental Studies, Approaches to Environmental studies, Concept of Ecology

UNIT – II

Eco-system: definition, Structure and function, Major Types; Forest, Grassland, Desert, Aquatic, Components of environment,

UNIT – III

Biodiversity, Energy flow in Eco-System, Productivity in eco-system,Ecological Pyramids.

UNIT – IV

Food Chain, Food Web,Man-environment relationships.

UNIT – V

Degradation and conservation of Environment, Development vis-a-vis ecological crisis.Human impact on natural environment.

Books Recommended :

1. Batel, B. (Ed.) – Management of Environment, Wiby Eastern Ltd., New Delhi,.
2. Desh Bandhu (Ed.) – Environmental Management, Indian Environment Society, New Delhi.
3. Singh & Singh (Ed.) – Geography of Environment Concept, New Delhi.
4. Saxena, H.M. – Environmental Geography, Rawat Pub., Jaipur.
5. Savinder Singh – Geography of Environment, Allahabad.
6 Murdock, W. (Ed.)- Environment Resources, Pollution and Society, Sin over Association Inc.
7. Gupta & Gurjar - Sustainable Development, Rawat Pub., Jaipur.
8. Strahler, A.N. – Geography and Man's Environment, John, Willey.
9. Khan, M.Z.A. & S.K. Agarwal – Environmental Geography, APH Publishing House, New Delhi.
10.Centre for Science :The State of Indian Environment : A Citizen's Report 1982, Environment 1985, New Delhi.
11 सविन्द्र सिंह – पर्यावरण भूगोल, इलाहाबाद।
12.वी.के. श्रीवास्तव : पर्यावरणीय, भूगोल एवं पारिस्थितिकी विकास, वसुन्धरा, गोरखपुर।
13.एच.एम. सक्सैना – पर्यावरण एवं परिस्थितिकी भूगोल, राज. हिन्दी ग्रन्थ अकादमी, जयपुर।
14. सक्सैना – पर्यावरण भूगोल, रावत पब्लिकेशन, जयपुर ।

GEO-CBCS-306	**Environmental Studies (B)** **Cradit:02**

UNIT – I
Natural Resources, Degradation Of Environment, Conservation ofEnvironment and Natural Resources.

UNIT – II
Environmental Pollution : Water Pollution, AirPollution, NoisePollution and Soil/Land Pollution, causes, impact and measures of control with Indian examples..

UNIT – III
Global Environmental Issues : Climate Change, Ozone depletion, Green House effect , Global Warming, Desertification. Concept Of Disaster Management

UNIT – IV
Population ; Population Explosion and its impact on environment, Perception of Environment and its Quality.

UNIT – V
National & State Environmental policies with reference to Rajasthan, Concept of Sustainable Development.

Books Recommended :
1. Batel, B. (Ed.) – Management of Environment, Wiby Eastern Ltd., New Delhi,.
2. Desh Bandhu (Ed.) – Environmental Management, Indian Environment Society, New Delhi.
3. Singh & Singh (Ed.) – Geography of Environment Concept, New Delhi.
4. Saxena, H.M. – Environmental Geography, Rawat Pub., Jaipur, 2019.
5. Savinder Singh – Geography of Environment, Allahabad.
6 Murdock, W. (Ed.)- Environment Resources, Pollution and Society.
7. Gupta & Gurjar - Sustainable Development, Rawat Pub., Jaipur.
8. Strahler, A.N. – Geography and Man's Environment, John, Willey.
9. Khan, M.Z.A. & S.K. Agarwal – Environmental Geography, APH Publishing House, New Delhi.
10.Centre for Science :The State of Indian Environment : A Citizen's Report 1982, Environment 1985, New Delhi.
11 सविन्द्र सिंह – पर्यावरण भूगोल, इलाहाबाद।
12.वी.के. श्रीवास्तव : पर्यावरणीय, भूगोल एवं पारिस्थितिकी विकास, वसुन्धरा, गोरखपुर।
13.एच.एम. सक्सैना – पर्यावरण एवं परिस्थितिकी भूगोल, राज. हिन्दी ग्रन्थ अकादमी, जयपुर।
14. सक्सैना – पर्यावरण भूगोल, रावत पब्लिकेशन, जयपुर ।