Choice Based Credit System (CBCS)

Maharaja Ganga Singh University

B.A. (Honors) Geography (Semester) 2023-24

Department of Geography

Undergraduate Programme
(Effective from Academic Year 2023-24)



SYLLABUS SCHEME OF EXAMINATION AND COURSES OF STUDY

Submitted by:

Prof. Pushpendar Singh Convenor, Board of Studies for Geography Maharaja Ganga Singh University

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Preamble

Considering the curricular reforms as instrumental for desired learning outcomes, Maharaja Ganga Singh University made a rigorous attempt to revise the curriculum of postgraduate and undergraduate programmes in alignment with National Education Policy-2020 and UGC Quality Mandate for Higher Education Institutions. The process of revising the curriculum could be prompted with the adoption of "Comprehensive Roadmap for Implementation of NEP". The roadmap identified the key features of the Policy and elucidated the Action Plan with well-defined responsibilities and indicative timeline for major academic reforms. The University Grants Commission (UGC) has devised a series of regulations and directives over time with the intention of enhancing the higher education system's quality and enforcing minimum standards in Higher Educational Institutions (HEIs) throughout India. The recent academic reforms suggested by the UGC have contributed to an overarching enhancement of the higher education system.

With NEP-2020 in background, the revised curricula articulate the spirit of the Policy by emphasizing upon- integrated approach to learning; innovative pedagogies and assessment strategies; multidisciplinary and cross-disciplinary education; creative and critical thinking; ethical and constitutional values through value-based courses; 21st century capabilities across the range of disciplines through life skills, entrepreneurial and professional skills; community and constructive public engagement; social, moral and environmental awareness; exposure to Indian knowledge system, cultural traditions and classical literature through relevant courses offering 'Knowledge of India'; fine blend of modern pedagogies with indigenous and traditional ways of learning; flexibility in course choices; student-centric participatory learning; imaginative and flexible curricular structures to enable creative combination of disciplines for study; offering multiple entry and exit points, integration of extracurricular and curricular aspects; exploring internships with local industry, businesses, artists and crafts persons; closer collaborations between industry and higher education institutions for technical, vocational and science programmes; and formative assessment tools to be aligned with the learning outcomes, capabilities, and dispositions as specified for each course. The University has also developed consensus on adoption of Blended Learning with component of online teaching and face to face classes for each programme.

Choice Based Credit System (CBCS)

The Choice Based Credit System (CBCS), a part of academic reform process to enhance quality of education and facilitate transferability of students from one University/institution to another at the national and international level, provides substantive autonomy to teachers to formulate their own curricula and enable them to introduce innovations in teaching and learning process and upgrade overall quality of higher education. The CBCS provides scope for Comprehensive and Continuous Evaluation (CCE) of students and encourages them to learn. The CBCS provides a cafeteria type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

The grading system is widely regarded as an improvement over the traditional marks system, which is why leading institutions in India and abroad have adopted it. Thus, there's a strong rationale for establishing a consistent grading system. This would facilitate seamless student mobility among institutions within the country and abroad, while also allowing prospective employers to accurately assess students' performances. To achieve the desired standardization in the grading system and the method for calculating the Cumulative Grade Point Average (CGPA) based on students' examination results, the UGC has devised these comprehensive guidelines.

Outline of Choice Based Credit System (https://www.ugc.gov.in/pdfnews/8023719_guidelines-for-cbcs.pdf)

- 1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
 - Discipline Specific Core Course Theory (DSCCT)
 - Discipline Specific Core Course Pracatical (DSCCP)
 - Discipline Specific Core Course Subsidary (DSCCS)
- 2. Ability Enhancement Courses (AEC): The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; i. Environmental Science and ii. English/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

Ability Enhancement Compulsory Courses (AECC): Environmental Science, English Communication/MIL Communication.

Skill Enhancement Courses (SEC): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge.

Ability Enhancement Compulsory Courses (AECC): - (10 Credits)

- AECC I (Semester I) General English 2 Credits
- AECC II (Semester II) General Hindi 2 Credits
- AECC III (Semester III) Environmental Studies 2 Credits
- AECC IV (Semester IV) Computer Application 2 Credits
- AECC V (Semester V) Our Constitution 2 Credits

Skill Enhancement Courses (SEC) (Semester -VI): These -2 Credits

B.A. (HONORS) GEOGRAPHY

Eligibility for admission in First Year of BA (Honors) Geography is 10+2 examination of any Board with at least 48% marks. With regard to admission on reserved category seats government rules will be applicable.

SCHEME OF EXAMINATION

The number of the paper and the maximum marks for each paper together, with the minimum marks required to pass are shown against each subject separately. It will be necessary for a candidate to pass in the theory as well as the practical part of a subject/paper, wherever prescribed, separately.

Classification of successful candidates shall be as follows:

First Division 60% of the aggregate marks prescribed in Semesters I to VI taken together Second Division 50%

All the rest shall be declared to have passed the examination.

- For passing a candidate shall have to secure at least 40% marks in each course (Theory and Practical separately).
- No division shall be awarded in Semesters I to V.
- Whenever a candidate appears for a due paper examination, she will do so according to the syllabus in force.
- A candidate not appearing in any examination/absent in any paper of term end examination shall be considered as having DUE in those papers.

Program Outcome

The B.A. (Honors) Geography undergraduate program is designed to achieve the following outcomes-

- 1. To provide opportunities for the holistic development of the students and to enable them to make an effective contribution to the community, society and nation
- 2. To strive for scholastic excellence, instill moral values, create responsible citizens and to build global competencies
- 3. To create a conducive environment for experiential learning
- 4. To instill the core values of faith, integrity, accountability and creativity
- 5. To enable the students to contribute in building a more sustainable and equitable world
- 6. To enhance historical, political, environmental, spiritual, moral andethical consciousness
- 7. To develop analytical and critical thinking skills in the field of research
- 8. To sensitize young minds through education towards social, cultural, psychological and economic well-being and to reach out to the underprivileged
- 9. To integrate and interlink knowledge, skills, values and attitudes to action.
- 10. To provide a general understanding of the concepts and principles of selected areas of study thus enabling the students to decide upon specialized professional choices
- 11. To mould young girls into mature, responsible, just and empoweredwomen.

Program Specific Outcome

On successful completion of the Program the student shall be able to:

- 1. Demonstrate proficiency in knowledge of essential concepts of geography about man and environment; nature and society to exhibit their awareness and responsibility towards environment and society atlarge.
- 2. Identifying, interpret and analyze human and environmental issues from local to global scales by critically assessing their various perspectives to promote sustainable development of humanity.
- 3. Develop integrated geographical knowledge to avail a plethora of opportunities in the field of town planning, urban management, cartography, tourism, civil services, teaching, survey, wild life, defense, population, community development etc.

End Semester DCCT Paper Examination Pattern

Maximum Marks : 60

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Section A

Contains 10 Questions of 1 mark each and all are compulsory. Three questions from each unit and one extra question from any one unit.

Section B

Section C

Contains 5 questions with internal choice (Two questions from eac unit). (5 Questions of 4 marks each) A student has to attempt 5 questions, choosing at least one question from each unit.

Contains 3 questions with internal choice (Two questions from each unit). Each Question carries 10 marks. A Student has to attempt 3 questions, choosing at least one question from each unit.

End Semester DCCS Paper Examination Pattern

Maximum Marks : 60

Contains 10 Questions of 1 mark each and all are compulsory. Three questions from each unit and one extra question from any one unit.

Contains 5 questions with internal choice (Two questions from eac unit). (5 Questions of 4 marks each) A student has to attempt 5 questions, choosing at least one question from each unit.

Contains 3 questions with internal choice (Two questions from each unit). Each Question carries 10 marks. A Student has to attempt 3 questions, choosing at least one question from each unit.

End Semester DCCP Practical Examination Pattern

Maximum Marks : 60

Note:

- 1. A Laboratory Exercise File should be prepared by each student for practical paper and should be submitted during practical examination.
- 2. One external examiner shall conduct one practical exams, in a day, of a batch of 40 students.
- 3. Duration of practical exam is 3 hours.
- 4. Practical of 60 marks distribution is as under. Written test 25 marks, recorde work 15 marks, viva-voice 10 marks and field work 10 marks

Section A

 $5 \times 4 = 20 \text{ marks}$ Section **B**

 $3 \times 10 = 30$ marks Section C

Duration : 3 Hrs.

 $10 \ge 1 = 10$ marks

 $5 \times 4 = 20 \text{ marks}$

 $3 \times 10 = 30$ marks

 $10 \ge 1 = 10$ marks

Duration:3 Hrs.

Duration:3 Hrs

Structure of Programme: B.A. (Honors) Geography

Semester-I										
Paper Code	Paper Name	Code	L			Total Credits	Maximum Marks			Minimum Passing
				Т	Р		Internal Marks	External Marks	Total marks	Marks Non-CGPA <mark>S/NS</mark> *
GEO4.5AECCT11	General English	AECC	2	0	0	2		100	100	40
GEO4.5DCCT12	Physical Geography - I	DCC	2	1	0	3	20	60	80	32
GEO4.5DCCT13	Fundamental of Remote Sensing	DCC	2	1	0	3	20	60	80	32
GEO4.5DCCT14	Rajasthan of Geography	DCC	2	1	0	3	20	60	80	32
GEO4.5DCCS 15 A1	Concepts of Economic	DCC	2	1	0	3	15	60	75	19
GEO4.5DCCS 16 A2	Economy of Rajasthan	DCC	2	1		3	15	60	75	19
OR										
GEO4.5DCCS15 B1	History of India from earliest times to 300 AD	DCC	2	1	0	3	15	60	75	19
GEO4.5DCCS 16 B2	World History (1453 to 1870 AD)	DCC	2	1		3	15	60	75	19
GEO4.5DCCP17	Practical	DCC	1	0	2	3		60	60	24
	Total Credits					20				
Total Marks							90	360	450	
		Sem	est	er	-II		1	L	1	
GEO4.5AECCT21	General Hindi	AECC	2	0	0	2		100	100	40
GEO4.5DCCT 22	Climatology	DCC	2	1	0	3	20	60	80	32
GEO4.5DCCT 23	Geographical Information System	DCC	2	1	0	3	20	60	80	32
GEO4.5DCCT 24	Geography of India	DCC	2	1	0	3	20	60	80	32
GEO4.5DCCS 25 A1	Macro Economic	DCC	2	1	0	3	15	60	75	19
GEO4.5DCCS 26 A2	Indian Economy	DCC	2	1	0	3	15	60	75	
OR										
GEO4.5DCCS 25 B1	History of India (300 AD to 1200 AD)	DCC	2	1	0	3	15	60	75	19
GEO4.5DCCS 26 B2	An Outline of the History of Rajasthan	DCC	2	1	0	3	15	60	75	19
GEO4.5DCCP 27	Practical	DCC	1	0	2	3		60	60	24
Total Credits20										
Total Marks						90	360	450		

Course Structure in Semester – I GEO4.5AECC11: General English

Max. Marks: 100

Credits: 02

Learning Outcomes

On the Successful completion of the course, the students shall be able to:

- Heighten their awareness of correct usage of English grammar in writing and speaking.
- Improve their understanding of phonetics and stress patterns.
- Give oral presentations and receive feedback on their performance
- Develop reading skills and comprehension of academic articles.
- Review the grammatical forms of English and the use of these forms in specific.
- communicative contexts. Attain and enhance competence in the four modes of literacy: writing, speaking, reading and
- listening Develop their ability as critical readers and writers.

Unit I

Phonetics and Morphology Introduction to Phonetics, Symbols, Stress Patterns, Sound and Word Stress, Intonation, Prefixes and Suffixes, Parts of speech (Identification, Kinds and Usage)

Unit II

Grammar Sentence Patterns, Determiners, Tenses, Modals, Concord

Unit III

Transformation Active passive, Direct –Indirect, simple to complex/compound, Declarative to negative /interrogative

Unit IV

Comprehension Comprehension of unseen prose- passage, Reading and Paraphrasing a poem, Expansion of an idea (idiom, proverb, statement)

Unit V

Writing Skills Technical /Scientific Writing, Content Writing, e mails, Blogs, Dialogue Writing, Report writing.

Suggested Readings:

- A. J. Thomson, Martinet, Practical English Grammar, Oxford; Fourth Edition: 1986 (1 October 1997)
- Business English, Pearson, Delhi, 2008
- English at the Workplace Part I, Macmillan, Delhi, 2008
- Fluency in English Part I, Macmillan, Delhi, 2005
- Language, Literature and Creativity, Orient Blackswan, 2013
- Martin Hewing, Advanced English Grammar, Cambridge University Press, New Delhi, 2010,
- Meenakshi Raman, Technical Communication: Principles and Practice, Oxford University Press, 2017
- Michael Swan, Practical English Usage, Oxford University Press, 2016
- R.P. Bhatnagar A Textbook of General English, Popular Book Depot, Delhi, 2016
- Raymond Murphy, Intermediate English Grammar, 2nd Ed, Cambridge University Press, Cambridge, 2012,
- S. D. Sharma, Textbook of Scientific and Technical Communication Writing for Engineer and Professionals Ivy Publishing House Delhi, 2008
- Sanjay Kumar and Pushplata, Communication Skills, Oxford University Press, New Delhi, 2011

Min. Marks: 40 Duration: 3 hrs

GEO4.5DCCT12: PHYSICAL GEOGRAPHY

(Elements of Geomorphology)

Max. Marks: 60 Credits: 03 Min. Marks: 24 Duration: 3 hrs

Unit I

Origin, Age and Geological History of the Earth: Big Bang Theory; Earth's interior: Structure and Zoningof the Earth's interior;

Unit II

Forces of the Earth: Endogenetic and Exogenetic; Folds and Faults. Origin of Continents and Oceans: Wegner's Continental Drift Theory, Platetectonics, Sea-floor spreading;

Unit III

Mountain and Mountain Building of Theories: Kober Geosynclinal Oraogen, Jeffreys Thermal Contraction, Daly Sliding Continent, Holmes convection Current and Joly Radioactivity; Denudation: Weathering and its types,

Unit IV

Cycle of Erosion, Rejuvenation and Polycyclic; Davisian Cycle of erosion and Concpet of Penk.

Unit V

landforms: Work and Resultant Topography, River, Glacier, Wind (arid and semi-arid), Ground Water and Karst and Sea Water.

- Bloom, A. L. (2003). Geomorphology: A Systematic Analysis of LateCenozoic Landforms. New Delhi: Prentice-Hall of India.
- Bridges, E. M. (1990). World Geomorphology. Cambridge: CambridgeUniversity Press.
- Christopherson, Robert W. (2011). Geosystems: An Introduction toPhysical Geography 8 Ed. England: Macmillan Publishing Company.
- Ernst, W.G. (2000). Earth systems: Process and Issues. Cambridge: Cambridge University Press.
- Gautam, A. (2010). Bhautik Bhugol. Meerut: Rastogi Publications.
- Kale, V and Gupta, A. (2001). Elements of Geomorphology. Calcutta: Oxford University Press.
- Kale, V. S. and Gupta, A. (2001). Introduction to Geomorphology. Hyderabad: Orient Longman.
- Knighton, A. D. (1984). Fluvial Forms and Processes. London: EdwardArnold Publishers.
- Richards, K. S. (1982). Rivers: Form and Processes in AlluvialChannels. London: Methuen.
- Selby, M.J. (2005). Earth's Changing Surface. United Kingdom: OUP.
- Singh, S. (2022). Bhautik Bhugol ka Swaroop, Pravalika Publication Prayagraj. U.P.
- Skinner, Brian J. and Stephen, C. (2000). The Dynamic Earth: AnIntroduction to physical Geology. John Wiley and Sons.
- Steers, J.A. (1964). The Unstable Earth, Some recent views ingeography. New Delhi: Kalyani Publishers.
- Strahler, A.N. and Strahler, A.H. (2005). Modern Physical Geography. John Wiley & Sons. Revised edition.
- Thornbury, W. D. (1968). Principles of Geomorphology. Wiley.
- Tikkaa, R. N. (1989). Bhautik Bhugol ka Swaroop. Meerut: KedarnathRam Nath.

GEO4.5DCCT13: FUNDAMENTAL OF REMOTE SENSING

Max. Marks: 60

Credits: 03

Min. Marks: 24

Duration: 3 hrs

Unit - I

Remote Sensing and Earth Observation; Remote Sensing Meaning and Basic Principles; Stages of Remote Sensing; Basic Principles of Thermal Remote Sensing: Electro Magnetic Spectrum; EMR Interaction with Atmosphere and Earth Surface.

Unit - II

Remote Sensing Satellite Platforms and Sensors; Satellite Orbits; Indian Space Program; Indian and Foreign Satellites

Unit - III

Image Interpretation: Elements of Visual Interpretation, Ground verification; Image Resolutions - Spatial, Spectral and Temporal resolution.

Unit - IV

Digital Image Processing: Types of Image; Advantage of Digital Image and Photographic Image; Digital Image Processing; Image Processing Techniques: Restoration, Enhancement.

Unit - V

Application of Remote Sensing for Mapping and Detecting Changes in - Agriculture land-use, urban land-use, Forest-cover, Snow-cover, Water-bodies, Surface Temperature.

- Bhatta, B. (2008) Remote Sensing and GIS, Oxford University Press, New Delhi.
- Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press
- Chauniyal, D. (2010) Sudur SamvedanaAvam Bhaugolik Suchna Pranali, Sharda Pustak Bhawan, Allahabad.
- Jensen, J. R. (2005) Introductory Digital Image Processing: A Remote Sensing Perspective, Pearson Prentice-Hall.
- Joseph, G. 2005: Fundamentals of Remote Sensing, United Press India.
- Lillesand T. M., Kiefer R. W. and Chipman J. W., 2004: Remote Sensing and Image Interpretation, Wiley. (Wiley Student Edition).
- Li, Z., Chen, J. and Batsavias, E. (2008) Advances in Photogrammetry, Remote Sensing and Spatial Information Sciences CRC Press, Taylor and Francis, London
- Klaus Tempfi, Norman Kerle, Gerrit C. Huurneman and Lucas L.F. Janssen (2009). Principles of remote Sensing: and introductory textbook, 4th Edition, ITC Educational Textbook Series;2)
- Karela Bhanwar, Remote Sensing, A.k. Publication New Delhi. (2022)
- Mukherjee, S. (2004) Textbook of Environmental Remote Sensing, Macmillan, Delhi.
- Nag P. and Kudra, M., 1998: Digital Remote Sensing, Concept, New Delhi.
- Singh R. B. and Murai S., 1998: Space-informatics for Sustainable Development, Oxford and IBH Pub.

GEO4.5DCCT14: RAJASTHAN GEOGRAPHY

Max. Marks: 60

Credits: 03

Min. Marks: 24 Duration: 3 hrs

Unit - I

Introduction: Formation and administrative setting of the state, Geological structure, Relief, Physiographic regions, Drainage, Climate, Soils, Natural vegetation.

Unit - II

Agricultural and economic aspects of the state: Food and commercial crops, Main irrigation sources, types and their intensity, waste land and desert land development programmes, Livestock and dairy development.

Unit - III

Power and energy resources: Hydro based, Thermal, Atomic, Solar, Biogas; Mineral resources and industries.

Unit - IV

Demographic structure: growth, distribution, density, urban- rural, occupational structure, literacy; Tribes of Rajasthan: Bhil and Grasia; Factors affecting the development of transportation and trade in the state.

Unit - V

Geographical regions of Rajasthan, Detailed study of Marusthali, Aravalli, Hadoti and Eastern Plain

- Mishra, VC: Geography Rajasthan, National Book Trust, New Delhi, 1967.
- Sharmas H.S. & M.L.: Geographical Facts of Rajasthan.
- Bhalla L R: Rajasthan ka Bhoogol, Kuldip Prakashan, Ajmer.
- Sharm & Sharma: Rajasthan ka Bhoogol, Pancheel Prakashan, Jaipur.
- Saxena, H M: Rajasthan ka Bhoogol, Rajsthn Hindi Granth Academy, Jaipur.
- Sharma Dinesh Chandra & Puspa Sharma: Rajasthan Aaj Tak.

GEO4.5DCCS15 A1: CONCEPTS OF ECONOMICS

Max. Marks: 60

Credits: 03

Min. Marks: 24

Duration: 3 hrs

UNIT – I

Nature and scope of Economics, Economic theory method and methodology, Micro-Macro, Positive – normative, Static and dynamic Analysis , Techniques of Economic Analysis.

UNIT-II

Basic Economic Problems, Functions of an economic system, various forms of economic systems, Price system, Demand and law of demand, Elasticity of demand.

UNIT – III

Circular flow of Income, Concept of National Income-GDP,GNP, NNP, Measurement of National Income, Stock and flow variables.

UNIT-IV

Money – Nature, functions and importance of money, Concept of currency and credit, Inflation and deflation, Demand pull- cost push inflation, Quantitave theory of Money- Fisher and Cambridge version.

UNIT-V

Meaning and scope of Public Finance, Distinction between Private and Public Finance, Public and Private Goods, Meaning of Public Expenditure, Distingue between Public and Private Expenditure, Taxation, Public Debts and Budget Deficits and Deficit financing.

- Surender Ahlawat Basic Concepts of Economics.
- एल. एन. नाथूरामका : मुद्रा, बैंकिंग एवम राजस्व।
- एन. सी. त्रिपाठी एवं जे. वी. पाल : व्यष्टि अर्थशास्त ।
- एल. एन. नाथूरामका : व्यष्टि अर्थशास्त ।

GEO4.5DCCS16 A2: ECONOMY OF RAJASTHAN

Max. Marks: 60 Credits: 03

Min. Marks: 24 Duration: 3 hrs

UNIT I

DEMOGRAPHY

Position of Rajasthan in Indian economy-Area, Population, Agriculture, Industry and Infrastructure, Economic Growth. Population of Rajasthan- Population size and growth. Human resources development (Literacy, health and nutrition indicators), Problem of poverty and unemployment.

UNIT II

NATURAL RESOURCE

Natural resource endowments; land, water, livestock, Energy, forests and minerals; state domestic products and its trends. Environmental pollution and the problems of sustainable development.

UNIT III

AGRICULTURE

Agriculture land utilization, Major crops and cropping pattern. Land Reforms- Rajasthan Tenancy Act, ceiling of land and distribution of land, Green Revolution. Animal husbandry-Importance of livestock, dairy development programme. Irrigation and power infrastructure in the state.

UNIT IV

INDUSTRY

Industrial development in Rajasthan. Development of Cottage Industry, Small scale Industries and Handicrafts. Industrial policy. Role of RFC, RSMDC and RIICO in the industrial development of Rajasthan.

UNIT V

DEVELOPMENT PROGRAMMES

Tourism development in Rajasthan, Special Area Development Programmes (DPAP), Desert Development, Tribal Area Development and Aravallies development programme, Rural Development Planning in the state- Objectives and achievements. Constraints in the economic development of Rajasthan.

- Nathuramka L.N. Economy of Rajasthan
- Sharma O.P. Economy of Rajasthan
- Pangaria Economy of Rajasthan
- Ojha B.L.- Economy of Rajasthan
- Economic Survey of Rajasthan.

GEO4.5DCCT15 B1:HISTORY OF INDIA FROM EARLIEST TIMES TO 300 A.D.

Max. Marks: 60 Credits: 03

Min. Marks: 24 Duration: 3 hrs

Unit – I

Sources of Ancient Indian History; Palaeolithic, Mesolithic, Neolithic and Chalcolithic Cultures. The Indus-Saraswati civilization: origin, extent, main sites, town-planning and architecture, economy, religion, art, decline, devolution and continuity. Relationship of Indus – Saraswati civilization and Vedic civilization. Late Harappan cultures with special reference to Kalibanga & Banas river civilization.

Unit – II

Content and Classification of Vedic literature Vedic Saraswati river and evidence for its historicity. Early Vedic culture – society, economy, polity and religion Later Vedic culture – society, economy, polity, religion and philosophy New religious movements in north India. Social Impact of Buddhism and Jainism Social and economic condition of India in sixth century B.C. Mahajanapadas and Republics, Rise of Magadhan imperialism – Haryanka, Sisunaga, and Nand dynasties Survery of the Iron Age cultures

Unit – III

The Mauryan Empire: Sources, Significance of Mauryan Empire. Chandragupta Maurya – conquests and extent of empire. Asoka, the Great. Classification and significance of Asokan inscriptions Kalinga War and its impact Nature of Asoka's Dhamma Mauryan Administration Administrative innovations of Asoka Decline of the Mauryan Empire and responsibility of Asoka. Mauryan art, society, economy and literature India's contact with the outside world during the Mauryan Period

Unit – IV

Pushyamitra Sunga - political and cultural achievements. Kharavela. Origin and early history of the Satavahans; Revival of Satavahana power under Gautamiptra Satkarni. Rise of the Kushanas. Kanishka- Political and cultural achievements; Chera, Chola and Pandyas in the far south.

Unit – V

The Sakas: Nahapana and Rudradaman. Economic condition of India from 200 B.C. to 300 A.D. with special reference to Foreign Trade; A Survey of the social - religious life and developments in art and architecture, literature and education during the period 200 B.C. - 300 A.D. Different Samvat (era) prevalent (used) in Ancient Indian History

Main sources of Ancient Indian History; Different Samvat (era) prevalent (used) in Ancient Indian History; Impact of Geography on Indian History and Culture; Features of Indus-Saraswati Civilization; Society, Polity, Economy, Culture and Religion as reflected in Vedic literature; 6th Cent. B.C. and the Rise of Buddhism and Jainism; The rise of Janpadas and Republics.

- H.D.Sankaliya: Prehistory of India, Munshiram Manoharlal, Delhi.
- Bhagwan Singh: The Vedic Harappans, Aditya Prakashan, New Delhi.
- *R.C. Majumdar: The History and Culture of the Indian People, Bhartiya Vidya Bhawan,Bombay,Vol.1,2,3.*
- आर त्रिपाठी प्राचीन भारत का .एस .इतिहास, मोतीलाल बनारसीदास, दिल्ली
- ओम प्रकाश प्राचीन भारत का इतिहास, वैज्ञानिक तथा तकनीकी शब्दावली आयोग |
- द्विजेन्द्रझा एवं केप्राचीन भारत का इतिहास : श्रीमाली .एम ., हिन्दी माध्यम कार्यान्वयन निदेशालय, दिल्ली विश्वविद्यालय, नई दिल्ली।
- उर्मिला प्रकाश मिश्र भारत का इतिहास, मध्य प्रदेश हिन्दी ग्रंथ अकादमी
- किरण कुमार थपल्याल सिन्धु सभ्यताः ; उत्तर प्रदेश हिन्दी ग्रंथ अकादमी
- वाकणकर एवं चिश्री बाबा साहब आप्टे स्मारक समिति(संक्षिप्त वृतान्त) परचुरे लुप्त सरस्वती नदी शोध अभियान .ना ., नागपुर
- वी प्राचीन पांडे . सी.भारत का राजनीतिक एवं सांस्कृतिक इतिहास, खण्ड- 1, सेण्ट्रल पब्लिशिंग हाउस, इलाहाबाद।
- आरभारत का प्राचीन इतिहास -शर्मा .एस ., ऑक्सफोर्ड यूनिवर्सिटी प्रेस, नई दिल्ली।
- रोमिला थापर प्राचीन भारत, राजकमल प्रकाशन, नई दिल्ली।

GEO4.5DCCT16 B2: WORLD HISTORY (1453 TO 1870 A.D.)

Max. Marks: 60 Credits: 03

Min. Marks: 24 Duration: 3 hrs

Unit – I

Renaissance: Meaning, causes and development of art and literature; Mercantilism and Commercial Revolution; Reformation and Counter Reformation; Beginning of Colonialism; American War of Independence: Causes and Results.

Unit -II

Industrial Revolution: Causes and Results. The French Revolution of 1789 – Causes, Results and Impact. Napoleon Bonaparte – Works and Achievements; Napoleon's Downfall.

Unit-III

Vienna Congress; Concert of Europe; The Age of Metternich (1815-48). French Revolution of 1848 & Its impact.

Unit-IV

Unification of Italy; Unification of Germany. Rise of Imperialism: causes and results.

Unit-V

The Eastern Question – Extent of the Ottoman Empire; Main causes of decline of the Ottoman Empire; Serbia's Revolt; The Crimean War.

- C.J.F.Hayes: A Political and Cultural History of Modern Europe (2 Vols)
- H.M.Vinacke: A History of the Far East in Modern Time (Also in Hindi), Kalyani Publishers, Ludhiyana.
- Lee Gershoy: The French Revolution and Napoleon, Central Book Depot, Allahabad.
- जी(.अनु) गूचः आधुनिक यूरोप का इतिहास.पी., एस.लि .चांद एण्ड कं., नई दिल्ली ।
- ठाकुर भगवान सिंह वर्मा) यूरोप का इतिहास :1789–1815)
- देवेन्द्र सिंह चौहान) यूरोप का इतिहास :1815 1919), मध्यप्रदेश हिन्दी ग्रन्थ अकादमी
- बालकृष्ण पंजाबी फ्रांस की राज्य :क्रांति, मध्यप्रदेश हिन्दी ग्रन्थ अकादमी
- रितंभरी देवी विश्व का इतिहास :, बिहार हिन्दी ग्रन्थ अकादमी ।
- किशोरी सरनलाल) यूरोप का इतिहास :1815 1939)वैज्ञानिक तथा तकनीकी शब्दावली आयोग
- जैन एवं माथुरः) विश्व इतिहासः : 1500 1950), जैन प्रकाशन मन्दिर, जयपुरः ।

GEO4.5DCCT17: PRACTICAL: BASICS OF CARTOGRAPHY

Max. Marks: 60 Credits: 03 Min. Marks: 24 Duration: 3 hrs

Written Test	25 Marks
Field Work	10 Marks
Record Work	15 Marks
Viva	10 Marks

Learning Outcomes: On successful completion of the Course the student will be able to:

To develop skills and competency regarding area analysis and map making with relief features and profiles; To Hone & develop employability related skills for holistic development.

- Scales: Plain Linear, Statement, Linear : Diagonal and Comparative.
- Representation of different landforms by contours.
- Drawing of **Profiles**: superimposed, composite and projected profiles and their relevance in landform mapping and analysis.
- Chain Tap Survey

Suggested Readings:

- Misra, R.P & Ramesh. (1986). A Fundamentals of Cartography. NewDelhi: McMillan Co.
- Monkhouse, F. J. and Wilkinson, H. R. (1973). Maps and Diagrams. London: Methuen.
- Pal, S.K. (1998). Statistics for Geoscientists Techniques & Applications. New Delhi.
- *Rhind, D. W. and Taylor, D. R. F. (2000). Cartography: Past, Presentand Future. International Cartographic Association.*
- Robinson, A. H., (2009). Elements of Cartography. New York: JohnWiley and Sons.
- Robinson, A.H. (2000). Elements of Cartography. U.S.A.: John Wiley & Sons.
- Sarkar, A. K. (2005). Practical Geography: A Systematic Approach. Calcutta: Oriental Longman.
- Sharma, J. P. (2010). Prayogic Bhugol. Meerut: Rastogi Publishers.

• *Singh, R.L. and Dutt, P.K. (2010). Elements of Practical Geography.New Delhi: Kalyani Publishers.* **Pedagogy:** The elements of practical geography will be conveyed to students through charts, map and diagrams for effective learning. Stuents will be making a practical file abd will learn to use instruments available in the geography lab.

Course Structure in Semester – II GEO4.5AECCT 21 - सामान्य हिन्दी

पूर्णांक अंक - 100 क्रेडिट - 02

न्यूनतम अंक - 40 अवधी – 3 घंटे

उद्देश्य (Objective) :- इस पाठ्यक्रम का उद्देश्य छात्र में भाषिक दक्षता और शुद्धता सबंधी ज्ञान का सघन संचार करना है जिससे दैनन्दिन जीवन में भाषा व्यवहार के जरिये वह अपनी अद्धितीयता को स्पष्ट रूप से अभिव्यक्त कर सके। परिणाम (Out Come) - पाठ्यक्रम पूर्ण करने के पश्चात् विद्यार्थी को भाषा के जन्म, प्रकृति, लक्षण, वैशिष्टय, प्रकार आदि का बोध होगा। उसके भाषा व्यवहार में शुद्धता आयेगी सम्प्रेषण बढ़ेगा, रोजगार, लेखन, कार्यालय कार्यों में गति व प्रभाव का विस्तार होगा। वह विभिन्न प्रकार की पत्र लेखन शैलियों एवं निबंध लेखन में प्रवीण होगा। संक्षेपण एवं पल्लवन से भाषा में लाघव, संश्लेषण एवं विश्लेषण की क्षमता विकसित होगी।

इकाई - ।

भाषा से तात्पर्य, भाषा की परिभाषा, प्रकृति एवं विविध रूप हिंदी भाषा की विशेषताएं: क्रिया, विभक्ति, सर्वनाम, विशेषण एवं अव्यय संबंधी हिंदी की वर्ण व्यवस्था, शब्द भंडार

इकाई - ॥

संधि, समास, उपसर्ग, प्रत्यय

इकाई - ॥।

वाक्य रचना, वाक्य शुद्धि, शब्द शुद्धि, समानार्थक शब्द, समश्रुत भिन्नार्थक शब्द विलोम शब्द, मुहावरे लोकोक्तियाँ

इकाई - IV

इकाई - V

पत्र लेखनः शासकीय पत्र, अर्द्धशासकीय पत्र, आवेदन पत्र शिकायती पत्र व्यावसायिक पत्र प्रारूपः निविदा, विज्ञप्ति, अधिसूचना, परिपत्र

संक्षेपण, पल्लवन, निबंध

सहायक पुस्तकें:-

- हिन्दी व्याकरणकामता प्रसाद गुरु :
- मानक हिंदी का स्वरूपः भोलानाथ तिवारी
- संक्षेपण और पल्लवनः कैलाशचंद्र भाटिया तुमन सिंह /
- पत्र व्यवहार निर्देशिकाभोलानाथ तिवारी :, विजय कुलश्रेष्ठ होगी।
- राजकाज में हिन्दीहरदेव बाहरी :
- व्यवहारिक हिंदी व्याकरण एवं रचनाहरदेव बाहरी :

GEO4.5DCCT22: CLIMATOLOGY

Max. Marks: 60

Credits: 03

Min. Marks: 24

Duration: 3 hrs

Unit – I

Definition Climatology; Composition and structure of the atmosphere; Atmospheric Temperature: Vertical and Horizontal distribution of temperature;

Unit – II

Atmospheric pressure and Pressure belts; Winds: Planetary, Periodic and Local winds; Monsoons, Origine of Indian Monsoon.

Unit-III

Atmospheric Stability, Instability and Equilibrium; Atmospheric Humidity: Absolute, Relative, Specific; Fog, Types of Clouds; Tyes of Precipitation and Thunderstorm.

Unit-IV

Air masses; Fronts: Concept, classification and properties; Air masses of North America and Asia.

Unit-V

Cyclones: Tropical and Temperate cyclones; Distributation of Tropical Cyclone area; Frontogenesis; Polar Front Theoray. Climatic classification of Koppen and Thornwait.

- Grald, S. (1980). General Oceanography: An Introduction. New York: John Wiley & Sons.
- Barry, R. G. and Carleton, A. M. (2001). Synoptic and DynamicClimatology. UK: Routledge.
- Barry, R.G. & Chorley, R.J. (1998). Atmosphere, Weather and Climate. UK: Routledge.
- Critchfield, H. J. (1987). General Climatology. New Delhi: Prentice-Hall of India.
- Das, P.K(1968). The Monsoons. New Delhi: National Book Trust.
- Gupta, L. S. (2000). Jalvayu Vigyan: Hindi Madhyam Karyanvay Nidishalya. New Delhi: Delhi Vishwa Vidhyalaya.
- Lal, D. S. (2010). Jalvayu Vigyan. Allahabad: Prayag Pustak Bhavan.
- Patterson, S. (1969). Introduction of Meteorology. London: McGraw-Hill Book Co.
- Sharma, R.C. & Vatel, M. (1970). Oceanography for Geographers. Allahabad: Chetnya Publishing House.
- Shepard, F.P. (1948). Submarine Geology. New York: Harper & Sons.
- Singh, S. (2022). Jalvayu Vigyan. Prayagraj: Prvalika Publication.
- Strahler, A.N. and Strahler, A.H. (2005). Modern Physical Geography. John Wiley & Sons. Revised edition.
- Stringer, E.T. (1982). Foundation of Climatology. Delhi: SurjeetPublications.
- Trewartha, G. T. and Horne, L. H. (1980). An Introduction to Climate.McGraw-Hill.
- Vatal, M. (1986). Bhautik Bhugol. Allahbad: Central Book Depot.

GEO4.5DCCT23: GEOGRAPHICAL INFORMATION SYSYTEM

Max. Marks: 80

Credits: 04

Min. Marks: 32

Duration: 3 hrs

Unit - I

Geographical Information System (GIS): Definition and Components; Geographic Phenomenon - Discrete and Continuous; Global Positioning System (GPS); Basic Elements of GIS: People, Data, Hardware, Software, Methods.

Unit - II

Spatial Data Types – Nominal, Ordinal, Interval and, Ratio; Raster Data Structure – regular tessalations and irregular tessalations; Vector Data Structure - Point, Line, Polygon; Topology; Scale and Resolution.

Unit - III

Spatial data import; Geo-referencing of analogue maps; applying reference spheroids, datums and projections; Coordinate System; Digitizing; Linking spatial and attribute data; Spatial Queries

Unit - IV

Mapping - qualitative data; quantitative data; elevation data; time-series data; Element of map design; Color Symbology Introduction to Web Data Sources Google Earth , Bhuvan and Open Street Maps (OSM).

Unit – V

Spatial Analysis: Classification; retrieval; measurement functions; Overlay functions; Neighborhood Classification, Connectivity functions; GIS Applications: suitability analysis for finding best site for a new school or municipal water storage facility; Mapping Population Density; Flood Hazard Risk Mapping; Landslide/Earthquake Hazard Risk Mapping

- Bhatta, B. (2008) Remote Sensing and GIS, Oxford University Press, New Delhi.
- Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press
- Chauniyal, D. (2010) Sudur SamvedanaAvam Bhaugolik Suchna Pranali, Sharda Pustak Bhawan, Allahabad.
- Jensen, J. R. (2005) Introductory Digital Image Processing: A Remote Sensing Perspective, Pearson Prentice-Hall.
- Joseph, G. 2005: Fundamentals of Remote Sensing, United Press India.
- Klaus Tempfi, Norman Kerle, Gerrit C. Huurneman and Lucas L.F. Janssen (2009). Principles of remote Sensing: and introductory textbook, 4th Edition, ITC Educational Textbook Series;2)
- Singh R. B. and Murai S., 1998: Space-informatics for Sustainable Development, Oxford and IBH Pub.

GEO4.55DCCT24: GEOGRAPHY OF INDIA

Max. Marks: 60

Credits: 03

Min. Marks: 24 Duration: 3 hrs

Unit - I

Physical: Physiographic Divisions, and vegetation, Soil types, their distribution. Drainage pattern.

Unit - II

Regional and seasonal variations of climate – Monsoon: Factors Affecting, Role of Jet Streams, El-Nino, La-Nina; Climatic regions of India; climate (characteristics and classification)

Unit - III

Economic: Mineral and power resources distribution and utilization of iron ore, coal, petroleum, gas; agricultural production and distribution of rice and wheat, industrial development : automobile, Information technology, cotton textile, iron, cement and petroleum.

Unit - IV

Social: Distribution of population by race, caste, religion, language, tribes and their correlates Population: distribution, growth and density; Urbanization:

Unit - V

Regionalisation of India: Physiographic (R. L. Singh), Socio – cultural (Sopher), Economic (Sengupta). Smart city concept; National Population Policy of India, Impact of Covid in India onlabour migration.

- Deshpande C. D., 1992: India: A Regional Interpretation, ICSSR, New Delhi.
- Johnson, B. L. C., ed. 2001. Geographical Dictionary of India. Vision Books, New Delhi.
- Mandal R. B. (ed.), 1990: Patterns of Regional Geography An Intenational Perspective. Vol. 3 Indian Perspective.
- Sdyasuk Galina and P Sengupta (1967): Economic Regionalisation of India, Census of India
- Sharma, T. C. 2003: India Economic and Commercial Geography. Vikas Publ., New Delhi.
- Singh R. L., 1971: India: A Regional Geography, National Geographical Society of India.
- Singh, Jagdish 2003: India A Comprehensive & Systematic Geography, Gyanodaya Prakashan, Gorakhpur.
- Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional Geography, Methuen.
- Tirtha, Ranjit 2002: Geography of India, Rawat Publs., Jaipur & New Delhi.
- Pathak, C. R. 2003: Spatial Structure and Processes of Development in India. Regional Science Assoc., Kolkata.
- Tiwari, R.C. (2007) Geography of India. Prvalika Publication, Prayagraj.
- Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur

GEO5DCCS 25 A1: MICRO ECONOMICS

Max. Marks: 60

Credits: 03

Min. Marks: 24 Duration: 3 hrs

Unit - I Consumer Behavior I

Utility Analysis- Cardinal Approach; Law of Diminishing Marginal Utility, law of Equi-Marginal utility, Consumer's Equilibrium. Giffin goods

Unit - II Consumer Behavior II

Utility Analysis- Ordinal Approach, Indifference curve analysis- Properties, Budget line, Consumer's Equilibrium, Price effect, Income effect and Substitution Effect, Consumer's Surplus.

Unit - III Concepts of Costs and Revenue

Total, Average and Marginal cost, short run and long run cost, Inter relationship between cost curves. Concept of revenue, Total, Average and Marginal revenue and its interrelationship, shape of revenue curves.

Unit - IV Production and market structure

Production function. Low of variable proportion, returns to scale. Isoquant, Expantion path, ridge lines. Market forms-perfect and imperfect, equilibrium of a firm under perfect competition. Monopoly price discrimination and monopolistic competition. Meaning of Oligopoly

Unit - V Distribution

Marginal Productivity theory of wage distribution, Rent-Scarcity, Differential and quasi rent. Concept of interest and Classical and Keynesian theories of interest, Profit - Innovation, risk and uncertainty theories.

- Stonier and Hague : A text book of Economic Theory
- *R.G.Lipsey* : An Introduction to positive economics
- P. A. Samuelson : Economics
- Gould and Ferguson : Micro Economic Theory
- M. L. Jhigan : Micro Economic Theory
- अवस्थी एवम अग्निहोत्री : आर्थिक सिंद्धांत
- एल. एम. झिंगन : सूक्ष्मआर्थिक सिंद्धांत
- टी. टी. सेठी : व्यष्टि अर्थशास्त

GEO4.5DCCS 26 A2: INDIAN ECONOMY

Max. Marks: 60

Credits: 03

Min. Marks: 24

Duration: 3 hrs

Unit - I Demography

Indian economy in the Pre-British period- Natural resources, Land, water and forest resources. Broad demographic features, Population size and growth rates, sex composition, rural urban migration, occupational distribution, problem of over-population, population policy, infrastructure development.

Unit - II Agriculture

Nature and importance, Trends, agricultural production and productivity, factors determining productivity; Land reforms; New agricultural strategy and green revolution, agriculture and WTO. Poverty and inequality; Unemployment, Problem of rising prices in Indian Economy.

Unit - III Indstry

Industrial development during the planning period, Industrial licensing policy MRTP ACT, FERA and FEMA; Industrial policy of 1991; Growth and problems of small scale industries, Role of public sector enterprises in India's industrialization.

Unit - IV Planning In India

Objectives; strategy; broad achievements and failures of Indian Planning; New economic reforms liberalization, privatization and globalization, Progress of privatization and globalization in India, Niti Ayog.

Unit - V External Sector

Role of foreign trade; Trends in exports and imports; Composition and direction of India's foreign trade; Balance of payment crisis and the New economic reforms - Exports promotion measures and the new trade policies, Foreign capital - FDI, aid, Multinational corporations (MNCs) and their impact on Indian Economy. The relevance of SWADESHI.

- Datt, R., K. P.M. Sundhram (2001), Indian Economy, S. chand& Co. Ltd., New Delhi
- A. N. Agarwal/ M.K. Agarwal- Indian Economy
- Misra, S.K. & V.K. Puri (2001), Indian Economy Its Development Experience, Himalaya Publishing House, Mumbai.
- Nathuramka L.N.- Indian Economics
- Ojha B.L.- Indian Economics
- बी. एल. ओझा: भारतीय अर्थव्यवस्था ।
- एल. एन. नाथूरामका : भारतीय अर्थव्यवस्था ।

GEO4.5DCCS25 B1: HISTORY OF INDIA (300 TO 1200 A.D.)

Max. Marks: 60

Credits: 03

Min. Marks: 24

Duration: 3 hrs

Unit – I

The Gupta empire : Sources, Origin, Political History of the Guptas - Chandragupta I, Samudragupta, Chandragupta II, Skandagupta. Gupta administration.Decline of the Guptas, Development in fields of art and architecture, religion, literature, education, science and technology.Social and economic life during the Gupta age.

Unit – II

Huna invasion and its impact. The Pushyabhuti dynasty - sources. Harshvardhana - political and cultural achievements; administration.Agrarian structure and Emergence of Feudalism.Accounts of Fahien and Yuan-Chwang - a comparative study.

Unit – III

Rise of the Southern Dynasties –Chola, Chalukyas, Pallavas, Rashtrakutas Hoysalas.Chola administration. Rise of eastern dynasties - with special reference to Pala and Sens of Bengal, Burmans of Kamroop.

Unit – IV

Kingdom in North India : Gurjara-Pratiharas, Kalchuris-Chedis, Gahadwalas and Parmars, Chahmans of Shakambhari. Rajput administration and culture. Arab contacts –Impact of invasions of Ghajni and Gauri. Alberuni.

Unit – V

Development of art and architecture - The Temple Art and Architecture. Development of Literature; Sangam literature.Growth of Regional Languages. Religious condition: Tamil Bhakti movement, Shaivism and Vaishnavism, Shankaracharya - Vedanta. Contact with Sri-Lanka and South East Asia.

Books Recommended:

- *R.C. Majumdar: The History and Culture of the Indian People, Bhartiya Vidya Bhawan,Bombay,Vol.3,4,5.*
- Upinder Singh: A History of Ancient and Early Medieval India, Pierson Longman, Delhi.
- A.L. Basham : The Wonder that was India, London.
- S.K. Day, U.N.Ghoshal: The Cultural Heritage of India, vol.2, The Ramkrishan Mission Institute Of Culture, Calcutta.
- झा, डी.एन.. एवं श्रीमालीः प्राचीन भारत का इतिहास, हिन्दी माध्यम कार्यान्वयन निदेशालय, नई दिल्ली।
- नीलकंठ शास्ती: दक्षिण भारत का इतिहास, बिहार हिन्दी ग्रन्थ अकादमी।
- कृष्णगोपाल शर्मा एवं हुकमचन्द जैनः भारत का राजनीतिक एवं सांस्कृतिक इतिहास, भाग द्वितीय, राजस्थान हिन्दी ग्रंथ अकादमी, जयपुर.

GEO4.5DCCS26 B2: AN OUTLINE OF THE HISTORY OF RAJASTHAN

Max. Marks: 60

Credits: 03

Min. Marks: 24 Duration: 3 hrs

Unit – I

Sources of History of Rajasthan: Archaeological, Literary, Archival. Geography of Rajasthan. Pre Historic Rajasthan-With special reference to Kalibanga, Ahar and Bairath.

Unit - II

Origin of Rajputs: Major Dynasties-Guhil, Chouhan, Gurjar-Pratihar, Rathore. Extension of Muslim Power in Rajasthan with Special reference to Alauddin Khilji.

Unit - III

Mewar- Kumbha, Sanga, Pratap Marwar-Jodha, Maldeo, Chandra Sen Amer - Man Singh, Mirza Raja Jai Singh, Sawai Jai Singh Bikaner-Rai Singh, Dungar Singh, Ganga Singh

Unit - IV

Maratha Penetration and Rajput Resistance-causes and impacts, Hurda Sammelan, Treaties of 1818 between the states of Rajputana and the British : Causes and Results of these treaties; Revolt of 1857 in Rajasthan : Causes and Results.

Unit - V

Causes of Political awakening in Rajasthan. Peasant Movement: Bijolia, Shekhawati, Doodhwakhara. Tribal Movements-Govind Giri and Motilal Tejawat. Revolutionary activities-Arjun lal Sethi, Kesri Singh Barhat. Praja Mandal Movement. Formation of Rajasthan.

- D.C.Shukla : Early History of Rajasthan, Bhartiya Vidya Prakashan, Delhi.
- Dashrath Sharma : Rajasthan Through the Ages. Vol.-I, Rajasthan State Archives, Bikaner.
- S.S. Saxena and Padmaja Sharma : Bijolia Kissan Andolan Ka Ithihas, Rajasthan State Archives Bikaner, 1972.
- V.P.Menon : The Story of The Integration of the Indian States, Orient Longmans, Bombay.
- आर. पी. व्यास : राजस्थान का वृहत इतिहास, भाग प्रथम तथा द्वितीय, राजस्थान हिन्दी ग्रंथ अकादमी, जयपुर ।
- के. एम. सक्सेना : राजस्थान में राजनैतिक जनजागरण, राजस्थान हिन्दी ग्रंथ अकादमी, जयपुर ।
- डॉ. जी. एन. शर्मा : राजस्थान का इतिहास, शिवलाल अग्रवाल एंड कंपनी, आगरा।
- डॉ. एम. एस. जैन : आधुनिक राजस्थान का इतिहास, पंचशील प्रकाशन, जयपुर।

GEO4.5DCCT27: PRACTICAL: SOCIO- ECONOMIC SURVEY AND THEMETIC MAPPING, DIAGRAMS

Max. Marks: 60		Min. Marks: 24		
Credits: 03		Duration: 3 hrs		
	Written Test	25 Marks		
	Field Survey	10 Marks		
	Record Work	15 Marks		
	Viva	10 Marks		

Learning Outcomes: On successful completion of the Course the student will be able to:

Critically appraise the socio-economic scenario of the surveyed area with graphical and diagrammatic representation of the demographic and economic data to hone & develop employability related skills for holistic development.

- Methods of **Field work**: Types of data, Techniques of primary data collection:
- Sampling, Preparation of a questionnaire. Significance of field work inGeographical studies.
- Conduct a socio-economic survey of the Village Households with the help of a questionnaire. Supplement the information by personal observations and perceptions.
- Based on the results of socio-economic and land use enquiry, prepare a Field Survey
- Report for the Village. Maps, diagrams, photographs and sketches should support the report.
- Thematic Maps classification and types;
- Principles of Map Design
- Thematic Mapping Techniques Choroschematic, Chorochromatic, Choropleth, Isopleth, Dot Maps, Multiple Dot Maps (Stilgenbauer, Sten de Geer), Diagrammatic maps.
- Diagrammatic Data Presentation Line, Bar, Circle, Pyramid, Sub-Divided Circle, Block Pie, Ring.
- Cartographic Overlays Point, Line and Areal Data.
- Plane Table Survey.

Note: Geographical Field Excursion.

Pedagogy: The students will be exposed to the specific field work. They will be motivated to collect data, compile and analyse data for the understanding of socio-economic issues.