

SCHEME OF EXAMINATION
M.A./M.Sc. PREVIOUS GEOGRAPHY
(2015-16)

Each Theory Paper

3 Hrs. Duration

100 M

1. The number of papers and the maximum marks for each paper/practical shall be shown in the syllabus for the subject concerned. It will be necessary for a candidate to pass in the theory part as well as in the practical part (wherever prescribed) of a subject/ paper separately. Previous and final each will be of 500 marks Total = 1000 Marks.
2. A candidate for a pass at each of the Previous and the final Examinations shall be required to obtain (i) at least 36% marks in the aggregate of the papers prescribed for the examination and (ii) at least 36% marks in practical (s) wherever prescribed at the examination, provided that if a candidate fails to secure at least 25% marks in each individual paper at the examination and also in the test dissertation/ survey report/field work, wherever prescribed, he shall be deemed to have failed at the examination notwithstanding having obtained the minimum percentage of marks required in the aggregate for the examination. No division will be awarded at the previous examination. Division shall be awarded at the end of the Final Examination on the combined marks obtained at the previous and the Final Examinations taken together, as noted below.
First Division 60% of the aggregate marks taken together at
Second Division 48% the Previous and the Final Examination
3. If a candidate clears any Paper(s)/Practical(s) Dissertation prescribed at the Previous and / of Final Examination after a continuous period of three years, then for the purpose of working out his division the minimum pass marks only viz.
25% (36% in the case of practical) shall be taken into account in respect of such Paper(s) Practical(s)/ Dissertation are cleared after the expiry of the aforesaid period of three years, provided that in case where a candidate requires more than 25% marks in order to reach the minimum aggregate as many marks out of those actually secured by him will be taken into account as would enable him to make up the deficiency in the requisite minimum aggregate.
4. The Thesis/ Dissertation/ Survey Report/ Field Work shall be typewritten and submitted in triplicate so as to reach the office of the Registrar at least 3 weeks before the commencement of the theory examinations. Only such candidates shall be permitted to offer Dissertation/ Field Work/ Survey Report/ Thesis (if provided in the scheme of examination) lieu of a paper as have secured at last 55% marks in the case of annual scheme and I and II semester examinations taken together in the case of semester scheme, irrespective of the number of papers in which a candidate actually appeared at the examination.

MA/M.Sc. GEOGRAPHY

Their will be four theory papers and a practical each in previous and final Examination, Each of the theory papers will be of 100 Marks. Each of the theory paper will be of three hours duration. Candidates will be required to press of both in Theory and Practical separately.

Note : -

1. Each theory paper is divided into three independent units. The question paper is divided into three parts, Part –A, Part-B and Part-C
2. Part – A (20 marks) is compulsory and contains 10 question (20 words), at least three questions from each unit, each question is of 2 marks.
3. Part – B (20 marks) is compulsory and contains four questions, at least one from each unit. Candidate is required to attempt all four questions. Each question is of 5 marks (50 words).
4. Part – C (60 marks) contains six question, two from each unit. Candidate is required to attempt three questions from each unit. Each question is of 20 marks (400 words).

MA/M.Sc. Previous

All four papers are compulsory.

Paper I : Evolution of Geographical thought. 100 Marks

Pater II : Structural and Dynamic Geomorphology. 100 Marks

Paper III : Principles and Theory of Economic Geography. 100 Marks

Pater IV :Any one of the following – 100 Marks

(a) Quantitative Techniques in Geography

(b) Geography of South Asian Countries (Bangladd, Nepal, Shri Lanka, Pakistan and Bhutan)

(c) Regional Planning.

Practical : 100 Marks

Total 500 Marks

N.B. : 12 hours of teaching practical be provided per batch of 15 students per week.

Note : A weekly seminar is to be arranged for M.A. Previous & Final Students.

MA/ M.Sc. Final

PAPER V & VI are compulsory

Paper V : Advanced Geography of India. 100 Marks

Pater VI : Urban Geography. 100 Marks

Paper VII :Anyone of the following- 100 Marks

(a) Bio-Geography

(b) Agricultural Geography

(c) Population Geography.

Paper VIII : Anyone of the following

100 Marks

(a) Political Geography

(b) Climatology and Oceanography.

(c) Remote Sensing & G.I.S.

Dissertation : In lieu of paper VII & VIII.

Practical :

100 Marks

Total

500 Marks

N.B. : 12 hours of teaching practical be provided per batch of 15 students per week.

Instruction for Geography Practical Examination :

1. Record work of minimum 20 sheets must be prepared by students and checked & signed by teacher with date, otherwise students will be responsible. Students must write his/her name on every sheet. The teacher should give fresh exercise every year, so that the students may not undertake tracing of old exercise.
2. Viva-voce Examination be held to Judge the real knowledge the students and to examine the authenticity of the record work, the marking on record work and viva-voce based on the original work of the candidate and not merely producing the record work get done by any other agency. Marks will be deducted for the part of the syllabus not covered.
3. On an average about 15 students be examined in one day in MA Previous. As far as possible in one practical exercise be set to judge the Practical skill.
4. The external examiners, be provided syllabus and detailed instruction at the time of obtaining his consent. For M.A. / M.Sc. Previous & Final a minimum of 2 days each be fixed to conduct the examination.

Note : A Copy of the instructions is sent to the examiners for their information.

MA/Msc. PREVIOUS

PAPER-I : EVOLUTION OF GEOGRAPHICAL THOUGHT

3hr. duration

Max. Marks :100

Note :-

1. Each theory paper is divided into three independent units. The question paper is divided into three parts, Part –A, Part-B and Part-C
2. Part-A (20 marks) is compulsory and contains 10 questions (20 words), at least three questions from each unit, each question of 2 marks.
3. Part-B (20 marks) is compulsory and contains five questions, at least one from each unit. Candidate is required to attempt all five questions. Each question is of 5 marks (50 words).

4. Part-C-(60 marks) contains six questions, two from each unit Candidate is required to attempt three questions one from each unit. Each question is of 20 marks (400 words)

Course Contents :

Unit – I

Meaning and definition, nature, aims and purpose, approaches and concepts of Geography, Geography as a social and natural science. Interdisciplinary trends, Post war, modern and recent trends in geography. Development of modern Geography in India.

Pre-scientific geographical ideas in ancient and medieval times : Indian influence. Geography – the Vedic age and Geography of Purana's (first four chapters of geography of Purana's by S.M. Ali), Detail study of Jambu Dwip.

Unit – II

Contribution by Greek, Roman and Arab Geographers, Al-Barauni and Ibn-Batuta. The emergence of scientific geography in the 18th and 19th centuries. Development of geographical ideas during 20th century. Founders of modern Geography – Humboldt, Ritter, Leaders of the first generation after Ratzel, Richthofen, Hettner, Contributions of Vidal-de-Blache, Brunhes, Demangeon and Blanchard. Contribution of Mackindre, Herbertson, Miss Semple, Huntington and Davis, Russian School of Geography.

Unit – III

Dualism in geography : Physical & human geography, Determinism & Possibilism, Regional & systematic geography, Qualitative & quantitative geography, Theoretical & applied geography, Analytical & synthetically geography, Myth and reality about dualism.

Positivism, functionalism, Idealism and realism in geography.

Behaviorism in Geography. Radical geography, Humanistic geography, Welfare geography and Feminist Geography, Postmodernism in Geography.

Books Recommended :

1. Minshull, Roger : The Changing Nature of Geography.
2. Hartshorne, Richard : Perspective 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 and 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, Grantham Rambhag, Kanpur.
7. Hussain, Majjid : Evolution of Geographical Thought, Rawat Publication, Jaipur.
8. Hagget, P. : Geography – A Modern Synthesis, Harper International Ed.
9. हुसैन मजिद : भौगोलिक विचारधाराओं का इतिहास रावत पब्लिकेशन्स, जयपुर।

10. कौशिक, एस.डी. : भौगोलिक विचारधारा एवं विधि तंत्र, रस्तोगी प्रकाशन, मेरठ।

11. जैन, एस.एम. : भौगोलिक चिन्तन का विकास, साहित्य भवन, आगरा।

PAPER-II : STRUCTURAL AND DYNAMIC GEOMORPHOLOGY

3hr. duration

Max. Marks :100

Note :-

1. Each theory paper is divided into three independent units. The question paper is divided into three parts, Part –A, Part-B and Part-C
2. Part-A (20 marks) is compulsory and contains 10 questions (20 words), at least three questions from each unit, each question of 2 marks.
3. Part-B (20 marks) is compulsory and contains five questions, at least one from each unit. Candidate is required to attempt all five questions. Each question is of 5 marks (50 words).
4. Part-C-(60 marks) contains six questions, two from each unit Candidate is required to attempt three questions one from each unit. Each question is of 20 marks (400 words)

Course Contents :

Unit – I

Nature and scope of Geomorphology, Fundamental concept, Geological structures and landforms, uniformitarianism, concept of threshold, earth's interior, isostasy. Earth movements – epeirogenetic and orogenetic movement. Forces of crustal instability, plate tectonics, seismicity, vulcanicity, orogenetic structures with reference to the evolution of the Himalaya.

Unit – II

Earth sculpturing processes. Concept of gradation, Agents and processes of gradation, causes, types and classification of weathering. Mass movement, erosional and depositional processes, resultant landforms and soil formation. Dynamic geomorphic processes; fluvial, glacial, Aeolian, marine and karst processes and resulting landforms. Complexities in geomorphological processes. Erosion surfaces, techniques of identification and correlation. Slope evolution different views and models.

Unit – III

Geomorphology of ocean bottoms – Pacific, Indian and Atlantic ocean. Coral reefs and their theories. Coastal Geomorphology with special reference to India. Applied Geomorphology – application of geomorphic mapping terrain evaluation. Digital Elevation Model (DEM) and Triangulated Irregular Network (TIN) unit, land capability and land suitability classification, hydro-geomorphology, urban geomorphology, environmental geomorphology, geomorphic hazards.

Suggested Books :

1. Ahmed, E. : Coastal Geomorphology of India, New Delhi.
2. Chorley, R.J. : Spatial Analysis in Geomorphology, Methuen, London, 1972.
3. Cooke, R.U. and Doornkamp, J.C. : Geomorphology in Environmental Management – Aintroduction, Clarendon Press, Oxford, 1974.

4. Cotton, C.A. : Geomorphology, John Willey & Sons, New York.
5. Dayal, P. : A Test Geomorphology.
6. Dury, G.H. : The Face of the Earth, Penguin Harmondsworth, 1959.
7. Fairbridge, R.W. : Encyclopedia of Geomorphology, Reinholdts, New York, 1968.
8. Goudie, A : The Nature of the Environment, Oxford & Blackwell London, 1993.
9. Garner, H.F. : The origin of landscap – A Synthesis of Geomorphology Oxford University Press, London, 1974.
10. Jefferys. H. : The Earth – Its Origin, History & Physical Constitution.
11. John, Pity : Introductions to Geomorphology.
12. Kale, V.and Gupta, A : Element of Geomorphology.
13. King and Embleton, C.A.M. : Glacial and Pre-Glacial Geomorphology, Arnold.
14. Lobeck, A.K. : Geomorphology, McGraw hill Book co., New York.
15. Mitchell, C.W. : Terrain Evaluation, Longman, London, 1973.
16. सविन्द्र सिंह : भू-आकृति विज्ञान, वसुन्धरा प्रकाशन, गोरखपुर।
17. कौशिक, एस.डी.: भू-आकृति विज्ञान, रस्तोगी प्रकाशन, मेरठ।
18. नेगी, बी.एस. : भू-आकृति विज्ञान, रस्तोगी प्रकाशन, मेरठ।

PAPER-III : PRINCIPLES & THEORY OF ECONOMIC GEOGRAPHY

3hr. duration

Max. Marks :100

Note :-

1. Each theory paper is divided into three independent units. The question paper is divided into three parts, Part –A, Part-B and Part-C
2. Part-A (20 marks) is compulsory and contains 10 questions (20 words), at least three questions from each unit, each question of 2 marks.
3. Part-B (20 marks) is compulsory and contains five questions, at least one from each unit. Candidate is required to attempt all five questions. Each question is of 5 marks (50 words).
4. Part-C-(60 marks) contains six questions, two from each unit Candidate is required to attempt three questions one from each unit. Each question is of 20 marks (400 words)

Course Contents :

Unit – I

Definition, scope, concepts and recent trends in economic geography, relation for economic geography with economics. Simple model of economy, spatial structure of economy, Location of economic activities and spatial organization of economy, sectors of economy – primary, secondary and tertiary; Economic region – concept and methods of delimitation

Factors of location of economic activities : physical, social, economic and cultural.

Unit-II

Concept and techniques of delimitation of agricultural regions, crop combination and diversification; von Thunen's model and its modifications. Spatial distribution of energy and each source of power as supplementary to the other.

Classification of industries; Resource based and footloose industries, Theories of industrial location – Weber, Losch and Isard; Case studies of selected industries iron and Steel, Aluminum, Chemical, Oil refining and Petrochemical, Engineering, Textile etc.

Unit – III

Modes of transportation and transport cost; accessibility and connectivity : international, inter and intraregional; comparative cost advantages. Typology of markets, market network in rural societies, market system in urban economy, role of market in the development of trade and commerce, Dynamics of world trade and investment.

Economic development of India, Regional disparities, Impact of green revolution on Indian economy, Globalization and Indian economy and its impact on environment.

Suggested Books :

1. Lloyd and Dicken : Location in Space- Theoretical Approach to Economic Geography.
2. McCart and Lindberg : A Preface to Economic Geography.
3. Smith, D.E. : Industrial Location – An Economic Geographical Analysis.
4. Berry Conkling & Ray : The Geography of Economic Systems, Prentice Hall.
5. Smith, J.C. and Philip, M.O. : Industrial and Commercial Geography, Henry Holt.
6. Miller, E.W. : A Geography of Manufacturing.
7. Bengston, N.A. & Royen M.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. M.V. Royen and N.A. Bengston : Fundamentals of Economic Geography Prentice Hall, New York.
11. Remmer, T.H. & other : World Economic Geography.
12. Robson, H. : Economic Geography, M.Sc. Donald, London.
13. Thoman, R.S. : The Geography of Economic Activity, McGraw Hill, New York.
14. Zimmediman, E.W. : World Resources and Industries, Harper and Co., New York.
15. Robertson D. (ed) : Globalisation and Environment, E. Elgan Co., U.K. 2001.
16. Wheeler J.O. : Economic Geography, John Willey, New York, 1995.
17. Dreze, J. and Sen, A : India – Economic Development and Social Opportunity, Oxford University Press, New Delhi, 1996.
18. काशीनाथ सिंह : आर्थिक भूगोल के मूल तत्व, वसुन्धरा प्रकाशन गोरखपुर।
19. पुरुषोत्तम जैन : आर्थिक भूगोल, रस्तोगी प्रकाशन, मेरठ।

20. जैन. एस.सी. : सैद्धान्तिक आर्थिक भूगोल,

PAPER-IV (a) : QUANTITATIVE TECHNIQUES IN GEOGRAPHY

3hr. duration

Max. Marks :100

Note :-

1. Each theory paper is divided into three independent units. The question paper is divided into three parts, Part –A, Part-B and Part-C
2. Part-A (20 marks) is compulsory and contains 10 questions (20 words), at least three questions from each unit, each question of 2 marks.
3. Part-B (20 marks) is compulsory and contains five questions, at least one from each unit. Candidate is required to attempt all five questions. Each question is of 5 marks (50 words).
4. Part-C-(60 marks) contains six questions, two from each unit Candidate is required to attempt three questions one from each unit. Each question is of 20 marks (400 words)

Course Contents :

Unit – I

Meaning and concept of research, Research problem, meaning and identification, Hypothesis and testing of hypothesis, Research design and types of research, writing research report, Sampling frame and procedure, sampling size and error, Measure of central tendency-Mean, Median, Mode.

Unit – II

Measure of dispersion, Standard deviation and Mean deviation, Interpolation, Extrapolation, Correlation, Spearman's rank and product moment correlation, regression analysis, simple linear, Construction of regression line, Multiple regression and correlation, Regression residuals.

Unit – III

Probability : Theory of probabilities-law of addition and multiplication, probabilities of distribution : Normal, Binomial, Poisson-sampling : Basic concepts,

Hypothesis Testing : Needs and types of hypotheses-goodness of fit and significance and confidence levels, Chi-square test, binomial test, t-test, Mann-Whitney U test, F test, Analysis of Variance (ANOVA), Principles and elements of factor analysis ,principle component analysis.

Books Recommended :

1. David Unwin : Introductory Spatial Analysis, Methuen, London, 1981.
2. Gregory, S. : Statistical Methods and Geographer, Longman, London, 1978.
3. Hammond R and P.S. McCullagh : Quantitative Techniques in Geography : an Introduction, Clarendon Press, Oxford, 1974.
4. John P. Cole and Cuchlanie A.M. King : Quantitative Geography, Johri Wiley, London, 1968.
5. Johnston R.J. : Multivariate Statistical Analysis in Geography, Longman, London, 1973.
6. Kaustoniannis : Theory of Econometrics, Mcmillan, London, 1973.

7. Maurice Yeats : An Introduction to quantitative Analysis in Human Geography, McGraw Hill, New York, 1974.
8. PetterHaggett, Andrew D.Cliff, & Allan Frey, : Location Methods.

**PAPER-IV (b) : GEOGRAPHY OF SOUTH ASIAN COUNTRIES
(BANGLADESH, NEPAL, PAKISTAN, BHUTAN, SHRI LANKA, MALDIVE)**

3hr. duration

Max. Marks :100

Note :-

1. Each theory paper is divided into three independent units. The question paper is divided into three parts, Part –A, Part-B and Part-C
2. Part-A (20 marks) is compulsory and contains 10 questions (20 words), at least three questions from each unit, each question of 2 marks.
3. Part-B (20 marks) is compulsory and contains five questions, at least one from each unit. Candidate is required to attempt all five questions. Each question is of 5 marks (50 words).
4. Part-C-(60 marks) contains six questions, two from each unit Candidate is required to attempt three questions one from each unit. Each question is of 20 marks (400 words)

Course Contents :

Unit – I

Geographical realm of South Asia, Homogeneity and diversity, SAARC, Study of Pakistan under the following heads-geographical and political units, climate and climatic regions, vegetation, agriculture, livestock, mineral resources, power resources, industries, trade, population and natural regions, political relations.

Unit – II

Study of Bangladesh and Bhutan under the following heads-geographical and political units, climate and climatic regions, vegetation, agriculture, livestock, mineral resources, industries, trade, population, natural regions, political relations.

Unit – III

Study of Nepal, , Shri Lanka and Maldiv Islands under the following heads-geographical and political units, climate, vegetation, agriculture, livestock, industries and economy, trade, population, political relations.

Books Recommended :

1. Ahmed, N. (1958) Economic Geography of East Pakistan, Oxford University Press London.
2. Spencer, J.E. (1962) Asia East by South, John Wiley and Sons, London.
3. Kulshrtha, S.H. (1983) Simple Geography of Nepal, Educational Enterprise Pvt. Ltd. Kathmandu.
4. Rashid, R.E. (1977) Geography of Bangladesh, University Press Ltd. Bnngladesh.
5. Johnson, B.L.C. (1975), Bangladesh, Heinemann Education Books London.
6. Johnson, B.L.C. (1970) : Geography of South Asia.
7. Cooke : Ceylon.

8. Karan, P.P. The Himalyan Kingdom.

PAPER-IV (c) : REGIONAL PLANNING

3hr. duration

Max. Marks :100

Note :-

1. Each theory paper is divided into three independent units. The question paper is divided into three parts, Part –A, Part-B and Part-C
2. Part-A (20 marks) is compulsory and contains 10 questions (20 words), at least three questions from each unit, each question of 2 marks.
3. Part-B (20 marks) is compulsory and contains five questions, at least one from each unit. Candidate is required to attempt all five questions. Each question is of 5 marks (50 words).
4. Part-C-(60 marks) contains six questions, two from each unit Candidate is required to attempt three questions one from each unit. Each question is of 20 marks (400 words)

Course Contents :

Unit – I

- (A) Regional Planning : Term, Task, Scope and objective.
- (B) Specific problems : Task and scope of regional Planning in developing countries.
- (C) Principles and Determination of Regional Planning, Significance of the ecological potential of a country's region or regional planning.
- (D) importance of the density, distribution and development population for regional planning.

Unit – II

- (A) Significance of the term 'Integration' (Political, Economic, Social and Spatial) for regional Planning.
- (B) Importance of the political system for regional planning.
- (C) Significance of the factor, adaptation of development of different social classes of the population for regional planning.

Unit – III

Methods of Regional Planning :

- (a) Factor Analysis.
- (b) Comparative Cost-analysis.
- (c) Industrial complex and analysis.
- (d) Shift analysis.

GEOGRAPHY PRACTICAL

Max. Marks : 100

Laboratory Work (Total 8 hrs. per batch of 15 candidates spread over two days.)

Distribution of Marks will be as follows :

1. Laboratory and Map Work Test (4hours duration) 50 Marks
(5 problems out out of 6 problems)
2. Record work and viva-voce (20+10) (2 hour) 30 Marks

3. Research Project Report & viva-voce (15+5)(2 hour) 20 Marks
(Based on Environmental problem)

Total 100 Marks

Note : Record work of minimum 25 sheets must be prepared by students and checked & signed by teacher with date, otherwise students will be responsible. Students must write his/her name on every sheet. The teacher should give fresh exercise every year, so that the student may not undertake tracing of old exercise.

Course Content :

Laboratory and Map Work:

1. **The art and Science of cartography**, history of maps, materials, techniques and preparation of maps.
 - I. Enlargement. Reduction and Finding of Area of Maps. Use of Plan meter.
 - II. Elementary Trigonometry.
2. **Map Projections**- General principles, classification and choice of projections, construction, properties, merits and demerits, limitations and use of the following projections :

Mathematical constructions of the following projections -

I. Conical Projections :

1. Equal area with one standard parallel (Lambert's Projection)
2. Equal area with two standard Parallels (Alber's Projection)
3. Bonne's
4. Polyconic
5. International.

II. Cylindrical Projections

1. Cylindrical Equal Area
2. Mercator's
3. Gall's Stereographic

III. Zenithal Projections :

1. Gnomonic – Polar case & case.
2. Stereographic – Polar case
3. Orthographic – Polar case & Eq. case.
4. Equal area – Polar case & Eq. case.
5. Equidistant – Polar case & Eq. case.

IV. Conventional Projections :

1. Sinusoidal
2. Mollweide
3. Interrupted Mollweide and Goode's
4. Interrupted SansonFlamsteed (Homolosine)
Projections suitable for map of India.

3. Interpretation of Weather Maps & Diagrams :

Interpretation of Weather maps and weather forecast. Climograph – Taylor's / Foster's. Climatograph, Compound windrose, wind-star diagram. Rainfall dispersion diagram, water budget diagram.

4. Statistical Analysis :

Computation of data, preparation of frequency tables, graphical representation of data-histograms and Ogives, Finding skewness, computation of mean, median and mode, standard deviation and Lorenz Curve, correlation – Spearman's & Carl Pearson's, Semi-log and log graphs.

Quantitative Techniques : Theoretical basis of nearest neighbor analysis, practical exercise on nearest neighbor analysis, Network analysis, locational analysis of urban centres Coefficient of variation.

5. Maps and Diagrams :

Maps-Isopleths, choropleth, chorochromatic, isochrones and population potential surface maps, Sten-de-Geer's and Stilgen-Baur's method. Diagram-Population pyramids (all types), Value-area cartogram, Triangular diagram, Block & Sphere, Ergograph – simple and ogilvies's. (All these be computed from the statistical data, preferably based on district or tehsil unit areas)

6. Project Report :

A candidate is to prepare project report of a village area. The candidate is free to select any supervisor amongst the staff members of the project. A supervisor can take only 5 candidates. The project should be based on primary data obtained by the candidate. The data should be represented by suitable cartographic methods.

Books Recommended

1. Robinson, A.H. et.al. : Elements of Geography, John Willey and Sons, U.S.A., 1995.
2. Sarkar, AK, : 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. and Wilkinson, H.R. : Map 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. जे.पी. शर्मा : प्रायोगिक भूगोल, रस्तोगी प्रकाशन, मेरठ ।
8. इन्द्रपाल एवं माथुर : मानचित्र प्रक्षेप, राजस्थान हिन्दी ग्रंथ अकादमी ।

