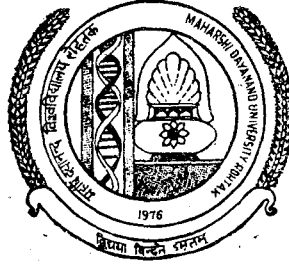


Maharshi Dayanand University Rohtak



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Ordinances, Syllabus and Courses of Reading for M.Phil. Geography Examination

Session—1999-2000

Available from :

Deputy Registrar (Publication)

Maharshi Dayanand University

Rohtak-124 001 (Haryana)

Price :

At the Counter : Rs. 50/-

By Regd. Parcel : Rs. 75/-

By Ordinary Post : Rs. 60/-

ORDINANCE : MASTER OF PHILOSOPHY EXAMINATION

1. The duration of the course of instruction for the M. Phil. examination shall be one year. The examination shall ordinarily be held annually in the month of April on the date fixed by the Vice-Chancellor. The dates fixed under this clause shall be notified to the respective Heads of the Departments.

A special examination will be held in September/October or on such date fixed by the Vice-Chancellor for those candidates who get re-appear after appearing in the M. Phil. Exam. or fail or want to improve their score. However, total number of chances will not exceed as given in the Ordinance.

2. The last date for the receipt of admission form and fee, without late fee as fixed by the Vice-Chancellor, shall be notified to the Heads of the University Teaching Departments.
3. A candidate's admission form and fee may be accepted after the last date on payment of late fee of Rs. 105/- upto the date notified by the University.

Note : No late fee shall be charged if the admission form and fee are received within three working days of grace after the last date for the receipt of the same without late fee.

4. A person who has passed Master's Degree in a relevant subject of the M.D. University or an examination recognised as equivalent thereto with atleast second division (50% marks or Grade 'C' in the seven point scale) shall be eligible to seek admission to M. Phil. Course.
5. The examination in M.Phil. shall be open to a student whose name is submitted to the Registrar/ Controller of Examinations by the concerned Head of the University Department, he has most recently attended and produced the following certificates signed by the Head of the University Department :-
 - i) of having remained on the rolls of the University Department for the academic year preceding the examination;

- ii) of having attended not less than 65% of lectures delivered (the course to be counted upto the last day when the classes break up for the preparatory holidays) and having attended and participated in at-least six seminar organised by the Department during the academic year.
6. A candidate shall submit his admission application on the prescribed form with the required certificate duly countersigned by the University Head of the Department.
7. The amount of the admission fee for the Examination to be paid shall be as under:-

	Regular Students	Ex-Students
M.Phil. Arts	Rs. 100/- Plus (Rs. 100/-Dissertation and Rs. 25/- practical)	Rs. 115/-
M.Phil. Science	Rs. 110/- Plus (Rs. 100/- Dissertation and Rs. 25/- practical)	Rs. 125/-
M.Phil. Commerce	Rs. 100/- Plus (Rs. 100/- Dissertation and Rs. 25/- practical)	Rs. 115/-

A candidate reappearing in paper(s) shall pay fee as for the whole examination.

8. The medium of instructions shall be English except in case of Hindi where it shall be Hindi and in case of Sanskrit it shall be English or Hindi or Sanskrit.

The medium of Examination shall be as under :-

The questions paper shall be set in English Except in case of Hindi where these shall be set in Hindi and in case of Sanskrit where these shall be set in English or Hindi or Sanskrit. The candidates shall write their answer as under :-

- i) The subject under the Faculty of Social Sciences :-
Hindi or English
- ii) Faculty of Humanities
 - a) In case of English : English
 - b) In case of Hindi : Hindi
 - c) In case of Hindi/Sanskrit/English
Sanskrit

(In the case of dissertation of M.Phil. (Sanskrit), the option of writing the same in English, Hindi or Sanskrit may be allowed irrespective of the option the candidates may have offered for the theory papers.

- iii) The subjects under the Faculties of : English
Physical Sciences, Life Sciences
and Commerce & Business
Management
- iv) Faculty of Education : English/Hind

9. The examination for M.Phil shall consist of papers of 100 marks each and there shall be 150 marks for dissertation and 50 marks for viva-voce.

The evaluation of dissertation and viva-voce examination shall be done/conducted by the Board of Examiners consisting of one external examiner, the supervisor of the candidate. In case there is a dispute, the Head of the Deptt. will act as moderator and his decision will be final.

10. The evaluation of seminar may be held internally by the Dept. before the end of the Academic Year and the evaluation of select reading may be done at the time of viva-Voce or

dissertation by the external examiner. The Board of Examiners for evaluating the seminar shall be appointed by the Head of the Deptt. and shall consist of the supervisor of the candidate and two more teachers of the Deptts. participating in M.Phil. Course.

11. A candidate who has failed in one or more paper(s) or having been eligible fails to appear in M.Phil. Examination, for valid reasons, may be allowed on the recommendations of the Head of the Dept. concerned, to appear/reappear in the paper(s) within the period of three years of his admission to the course. Such a candidate shall be exempted from reappearing in the paper(s) in which he may have obtained at least 50% marks.
12. A candidate who does not complete the requirements for the award of degree within the period of three years of his admission to the course shall be declared to be unfit for M.Phil course of this University in the subject concerned. This is however, subject to Clause 15 below.
13. A candidate who has passed the M.Phil. examination obtaining less than 60% marks may reappear once in the next two years of passing the M.Phil Examination in one or more theory paper(s) to improve the grade.
14. The subject of Dissertation/Project Work/Design Work of a candidate shall be approved by the Departmental M.Phil. Committee, consisting of the teachers participating in the M.Phil. teaching. The applications regarding the same and the synopsis thereof shall reach the Head of the Deptt. concerned by the dates to be notified by him for the purpose.

The Departmental M.Phil. Committee shall consider the topic/synopsis and approve the same with such modification as it may deem fit. The Head of the Deptt. shall also appoint Supervisor(s) for the dissertation.

15. The candidates will be required to submit the dissertation in the office of the Registrar/Controller of Examinations by the end of the academic year. However, the Head of the Deptt.

may grant a candidate, on genuine grounds, extension upto six months to submit the dissertation. The Vice-Chancellor may allow further extension in case the student is not able to complete his dissertation in the extended time. The dissertation in such cases, will be considered for the award of Degree in the next academic year.

16. The Examination shall be held according to the syllabus prescribed by the Academic Council . A candidate who fails in an examination, or having been eligible, fails to appear in an exam. who takes the Examination under Clause-11 shall unless approved otherwise by the Academic Council take the examination as an ex-student ,according to the syllabus prescribed for regular students appearing for that Examination, provided that the syllabus for the candidates appearing in the supplementary examination to be held, in September/October shall be the same as was in force for the regular students in the last annual examination.
17. The minimum number of marks required to pass the M.Phil. Examination shall be as under:-
- i) 45% marks in each written paper/ practical .
 - ii) 50% marks in seminars/select reading.
 - iii) 50% marks in the aggregate.

Further the dissertation including viva-voce shall be adjudged as under:-

<u>Grade</u>	<u>Numerical value</u>
A+	9
A only	8
B+	7
B only	6
C+	5
C only	4
F	Fail

The result of a candidate shall be declared only if his dissertation etc. has been evaluated minimum as grade 'C' only.

The list of the successful candidates shall be arranged as under:-

- a) A candidate who have secured 60% or above marks shall be considered to have passed in the First Division.
 - b) Candidates who have secured 50% or above but below 60% shall be considered to have passed in second division.
 - c) The grade obtained by a candidate in dissertation and viva-voce shall be mentioned separately .
 - d) Candidates who have secured less than 50% marks in written papers etc. and grade 'F' in dissertation and viva-voce shall be considered to have failed in the Exam.
18. The tuition fee for the student of M. Phil. Course shall be the same as for the M.A. student. Tuition fee for M. Phil course shall not be charged from the teachers in the University or its affiliated colleges.
 19. A successful candidate may, if permitted by the Head of the Deptt. publish wholly or in part his Dissertation as a paper in journals of repute.
 20. The Ordinance in force at the time a student joins the course shall hold good only for the examination held during or at the end of academic year and nothing in this Ordinance shall be deemed to debar the University from amending the Ordinance and the amended Ordinance, if any, shall apply to all students, whether old or new.
 21. Candidates admitted to the M.Phil. course in 1990-91 or earlier shall be governed by the old rules. The new rules shall be applicable w.e.f. the admission of the academic session 1995-96.

3. Social Transformation in India

Social Transformation in India with special reference to the role of education; nature of educational Development and Regional disparity in the levels of educational attainment; Regional dimensions of inequities in the levels of literacy in India; a geographical perspective on social tension and conflict in Indian society.

Note : The paper shall contain eight questions in all, including two questions from Section 1 and three questions each from Section 2 and 3. Candidates shall attempt four questions in all, selecting atleast one question from each section.

Reading List

1. D.E. Sopher (1980), " The Geographic Patterning of culture in India" in D.E. Sopher (ed.) *An Exploration of India* : Cornell University, Ithaca.
2. "Sex-Disparity in Indian Literacy" in D.E. Sopher (ed.) *an Exploration of India*, Cornell University, Ithaca, 1980.
3. E.Jones and J. Eyles (1977) *An Introduction to Social Geography* Oxford University Press, London.
4. P. Jackson and S.J. Smith (1964) *Exploring Social Geography*, George Allen & Unwin, London.
5. P.Jackson (1980) " A plea for Cultural Geography" , *Area*, Vol. 12 pp. 110-13.
6. P. Knox (1962) *Urban Social Geography : An Introduction*, Longman London.
7. P.Mason (1967) *India and Cylon, Unity & Diversity*, Oxford University Press, London.
8. G.P. Murdok (1949) *Social Structure*. The Free Press, New York.
9. P.M. Balu (1976) *Approaches to the supply of Social Structure*, Open Books, London.
10. Y.Singh (1973) *Modernisation of Indian Tradition*, Thomson Press Limited, Delhi.

11. M.Raza and Y.P. Aggarwal (1984) "Inequities in the levels of Literacy in India. The Regional Dimension, in M.Shafi and Raza (eds.) *Spectrum of Modern Geography Concept*, N.Delhi.
12. A. Ahmed (1984) " Socio-cultural change in a Developing Society. The case of India" In M.Shafi and Raza (eds.) *Spectrum of Modern Geography*, concept, New Delhi.
13. M.Shafi (1984) "Economic Development and Social Tension with special reference to India", In M.Shafi and Raza (eds.) *Spectrum of Modern Geography*, concept, New Delhi.
14. R.P. Misra (1988) "Social Dimensions of *Regional Development*" in M.Raza (ed.) *Regional Development, Heritage*, New Delhi.
15. D. E. Sopher (1977) " Rohilkhan and Qudh : An exploration of social Gradients across a Political Frontier" in Fox (ed.) *Realm and Regionalism in Traditional India*, Vikas, N.Delhi.
16. M.L. Sharma and T.M. Dak (1989) *Green Revolution and Social Change Ajanta*, New Delhi.
17. Govt. of India, (1989) *Trends in Literacy in India* Published by the Registrar General of India, Ministry of Home Affairs New Delhi.
18. R. Chhabra, (1982) "Status of Women in India" in *Population of India*, Monograph No. 10 of the United Nations, New York.
19. R.C. Chandna (1989) *Spatial Dimensions of Scheduled Castes in India*, Intellectual Publishers House, New Delhi.
20. B.K. Roy (1989) " Census Based Trends in Religions of India" S.N. Singh et al (eds.) *Population Transition in India*. Vol. 2, B.R. Publishing House, New Delhi.
21. L.M. Khubchandani (1989) " Language and Population" in S.N. Singh et al. (eds.) *Population Transition in India*, Vol. 2, B.R. Publishing House New Delhi.

22. R.B. Bhagat (1989) "Characteristics of Family and Female Age at marriage", Journal of Family Welfare, June, 1989.

Paper-III (Part-A) Fundamental of Research Organisation in Geography

Max. Marks :50

Time : 3 Hours

- I. **Meaning of Research** : Definition, objectives and Types of Research, Brief Overview of the Research Process, techniques involved in defining a Research Problem.
- II. **Research Design** : Meaning and Significance of Research Design; major categories of Research Designs.
- III. **Sampling Design** : Pre-requisites of sampling Design, classificatory Frame of Sample Designs.
- IV. **Methods of Data Collection**: Collection of Primary Data- Field observation, Interview, questionnaire and schedule methods, Collection of Secondary Data.
- V. **Problem of Scaling** : Meaning of Scaling, Important Scaling Techniques-Rating and Ranking Scales.
- VI. **Processing and Analysis of Data** : Processing Operation Inter-distribution Classification-(i) By Mean and Standard Deviation Measures, (ii) By Partitioned value measures (Quartiling and Pentiling) Measures of Skewness, Measures of Relationship-Co-efficient of Correlation (Spearman's & Karl Pearsons Co-efficients, Simple Regression Analysis.
- VII) **Testing of Hypothesis** : Meaning and Importance of Hypothesis, Statistical Hypothesis, Null Hypothesis, Level of Significance, procedure of testing the Hypothesis.
- VIII) **Research Report Writing** : General Format of the Research Report writing, Types of Research Reports (Technical and Popular), Structural Facts of Assignment Writing Headings, Quotations, Foot Notes, References and Abbreviations.

Note : The question paper shall contain nine questions in all, including two questions from Unit six and one question each from the remaining seven units. Candidates shall attempt four questions in all.

Reading List

1. C. R. Kothari, *Research Methodology-Methods and Techniques*, Willey Eastern Ltd., New Delhi, Fourth Reprint 1989 (First Published in 1985).
2. M.R. Kohen and E. Nagal, *Introduction to Logic and Scientific Method*, MDUL, 1986.
3. C.R. Moser, and G.Kalton, *Survey Methods in Social Investigation* Gower, 2nd Edition, Aldrshot, 1986.
4. I.M. Sheskin, *Survey Research for Geographers*, Scientific Publishers, 1985.
5. J.Anderson, B.H. Durston and M.Poolo, *Thesis and Assignment writing* Willey Eastern Ltd., New Delhi, Second Reprint 1977. (First Published 1970).
6. Hans Raj, *Theory and Practice in Social Research*, Surjeet Publications, Delhi, Reprint 1988.
7. P.V. Young, *Scientific Social Surveys and Research*, Prentice Hall of India Pvt. Ltd. New-Delhi, 4th Reprint 1977 (1st Published 1968).
8. R.K. Verma and G.Verma, *Research Methodology*, Commonwealth Publishers, New Delhi, 1989.
9. R.P. Misra, *Research Methodology*, Concept Publishing Co., New Delhi, 1989.
10. R.C. Sharma, *Regional Planning for Social Development*, Criterion Publications, New Delhi, 1989.
11. R. Lamgley *Practical Statistics*, Pan Books, Ltd. London, Revised Edition, 1970 (First Published 1968).
12. M.S. Hay Slott, *Statistics Made Simple*, W.H. Allen, London 3rd Revised Edition 1974 (First Published 1968).
13. Spiegel, M.R. -*Theory and Problems of Statistics*, Mc. Graw Hill Book Company, New York, 3rd Edition, 1987.
14. S.P. Gupta, *Statistical Methods*, Low Cost University Edition (LCUE) India, Sultan Chand & Sons, New Delhi, Eight Thoroughly Revised Edition 1976 (First Published 1969).

M.Phil Geography-1999-2000
(Out lines of Test)

The M.Phil programme shall be of one year duration on Annual system of Examination. The Scheme of Examination shall be as follows :-

Paper-I Background to Research on the Geography of Economic and Regional Development in India.

Max. Marks : 100

Time : 3 Hours

Paper-II Background to Research on the Geography of Indian Society and Culture

Max. Marks : 100

Time : 3 Hours

Paper-III (Part-A) Fundamental of Research Organisation in Geography.

Max. Marks : 50

Time : 3 Hours

Paper-III (Part-B) Advance Research Techniques

Max. Marks : 50

Time : 3 Hours

Paper-IV Four Research Papers (each carrying 25 marks)

Max. Marks : 100

Paper-V Dissertation

Max. Marks : 200

Note :1. There shall be three main theory papers namely-

(i) Economic and Regional Development.

(ii) Society and Culture

(iii) Research Organization and techniques.

The Paper I & II shall be of 100 marks each of 3 hours duration. The paper-III has been divided into two parts i.e. paper-III Part (a) and paper-III part (b) of 50 marks each of 3 hours.

- In paper IV the candidates will be required to write four research papers (two each from paper I and II the topics of which will be assigned by the faculty committee). The submission of the research papers, the last date for which will be notified by the HOD shall be followed by presentation before the faculty.
2. There shall be an internal evaluation of the research papers by the eligible teachers of the Department.
 3. The HOD is authorised to collect the broad areas of interest of the M.Phil Students and the name of supervisors for guiding shall be decided in the DCM.
 4. The evaluation of Dissertation, Viva-Voce examination shall be conducted by the board of examiners consisting of one external and the supervisor of the candidate. In case there is a dispute, the HOD will act as a moderator and his decision will be final. A panel of four external examiners will be suggested by the Departmental PGBOS to the Vice-Chancellor on each topic of the candidates.
 5. A candidate who does not complete the requirements for the award of the degree within the period of three years of his admission to the course shall be declared to be unfit for M.Phil course at this University in the subject concerned. This is, however, subject to clause VI below.
The Dept. M.Phil committee shall consider the topics/synopsis and approve the same with such modification as it may deem fit. The HOD shall also appoint supervisor(s) for the dissertation.
 6. The candidate will be required to submit the dissertation in the Office of the Registrar/COE by the end of the session. However, the HOD may grant a candidate, on genuine ground, extension upto six months to submit the dissertation. The Vice-Chancellor may allow further extension in the case the student is not able to complete his dissertation in the extended time. The dissertation in such cases, will be considered for the award of degree in the next academic year.
 7. The examination shall be held according to the syllabus prescribed by the Academic Council. A candidate who fails

in an examination, or having been eligible, fail to appear in an examination, or who takes the examination under clause (5) shall unless approved, otherwise by the Academic Council take the examination as an-exstudent, according to the syllabus prescribed for regular students appearing for that examinations.

8. The amount of examination fee to be paid by a candidate shall be Rs. 120/- for annual Rs. 150/- as an additional fee shall be paid by a candidate for dissertation. A fee of Rs. 50/- per subject which includes practical examination shall also be paid by the candidate. A candidate reappearing in paper(s) shall pay fee as for the whole examination.
9. The name of the students submitted to the Controller of Examinations by the HOD should be with the following certificates :-
 - a) of possessing good character;
 - b) of having attended not less than 65% of lectures delivered (to be counted upto 10 days before the commencement of the examination) and having attended and participated in the presentation of four research papers organised by the Department during the session.

Syllabus & Courses of Reading

Paper-I Background to Research on the Geography of Economic and Regional Development in India.

Max. Marks : 100

Time : 3 Hours

- 1.(a) The impact of Colonial policy on Indian economy-
 moderanisation and dependency, commercialisation
 of agriculture, change in the nature of industrialisation,
 urbanisation and development of port enclaves, Colonial
 distortions in the spatial structure of Indian Economy-A
 general review.
- (b) Indian Economy Since independence : Planning process
 and economic development, Regional disparity in
 the levels of development, Regional Development
 Policy through the Five Year Plans.
- 2.(a) Development of Land Reforms since independence, Green
 Revolution its nature and regional dimensions (inter-state
 disparities); Agro climatic zones of India.
- (b) The aims and objectives of Industrial development policy
 since 1947; Regional dimensions of post-independence in-
 dustrial development; Role of Multinational corporations
 in Indian economy; Regional dispersal of industries and
 industrial developments-a balance sheet.
- 3.(a) Post independence Development of the Tertiary sectors in
 Indian economy (Trade, Transport and Services); The
 Geography of social Infrastructural facilities; a review of
 approaches and trends in Reasearch:
- (b) i) Urbanisation in India-nature, trends and spatial
 patterns;
 ii) Rural to urban migration-its nature and problems.
 iii) Regional Dimensions of population growth
 iv) Successes and failures of the family planning
 programme-the regional dimension.

*Note : The question paper shall contain nine questions in all in-
 cluding three questions from each part. Candidates shall
 attempt four questions in all, selecting at least one ques-
 tion from each part.*

Reading List :

1. Dharam Kumar and Tapan Ray Chaudhari (ed.), *The Cambridge Economic-History of India*, Vol. I and II. Cambridge University Press, London, 1983.
2. A. R. Desai, *Social background t o Indian Nationalism*, Popular Books, Bombay, 1959.
3. Bipin Chandra, *Nationalism and Colonialism and Colonialism in Modern India*, Orient Longman Limited, New Delhi, 1979.
4. Moonis Raza and A. Habeeb, "Characteristic of Colonial Urbanisation: A Case Study of the Satellite Primacy of Calcutta (1850-1921) " in Manzoor Alam and V.V. Pokshishevky (eds), *Urbanisation in Developing Countries*, Osmania University, HYD, 1970.
5. Pau A. Boran, *The Political Economy of Growth*, People's Publishing House, New Delhi, 1862.
6. D.H. Prasad, "Roots of Uneven Regional Growth in India", *Economic and Political Weekly*, Vol. XXXIII, No. 33, Aug. 13, 1988.
7. Balraj Mehta, *India's Political Economy*, Avishkar Prakshan, N.D.
8. D.Dhal, "Roots of Uneven Development in India", *Economic and Political weekly*, Vol. XXIV No. 9 p. 480, 1989.
9. Manesh Chand and V.M. Puri, *Regional Planning in India*, Allied Publisher, New Delhi, 1985.
10. Enayat Ahmed and D.K. Singh, *Regional Planning with Particular Reference to India*, Oriental Publishers, New Delhi.
11. G.K. Shrokker, *Industrialisation in India*, People's Publishing House New Delhi, 1980.
12. C.H. Hanumantha Rao, *Technological Change and Distribution of Grains in Indian Agriculture*, Institute of Economic Growth New Delhi, 1975.
13. P.C. Joshi, *Land Reforms in India, Trends and Perspectives*, Institute of Economic Growth, New Delhi, 1976.
14. N.S. Siddharthan, *Conglomerates and Multinationals in India, A Study of Investment and Profit*, Institute of Economic Growth, New Delhi.

15. Ph. Prasad, "Production Relations : Achilles Heel of India Planning", Economic and Political Weekly, Vol. 8 No. 19 pp 869-72, 1973.
16. A. Bhaduri, "A Study in Agricultural Backwardness under Semi-Feudalism"
17. S.K. Munshi, *Geography of Transportation in Eastern India Under the British Raj*, K.P. Bagchi and Co., Calcutta, 1980.
18. R.C. Sharma, *Regional Planning for Social Development*, Oriterion Publishing Co., New Delhi, 1989.
19. Sudhir Wanmali, *Geography of a Rural Service System in India*, B.R. Publishing Corporation, New Delhi, 1987.
20. V.L.S.P. Rao, *Urbanisation in India-Spatial Dimensions*, concept Publishing Co., New Delhi, 1983.
21. Shekhar Mukherjee, *The Demographic Field Theory : Population, Political and Demographic Behaviour in India.*
22. Moonis Raza and Yash Aggarwal, *Transport Geography of India*, Delhi, 1987.
23. A.P. Srinivasmurthy, *Irrigation Planning in India*, Himalaya Publishing House, Bombay, 1990.

Paper-II Background to Research on the Geography of Indian Society and Culture

Max. Marks : 100

Time : 3 Hrs.

1. Approaches and subject matter

Meaning and Approaches to Social Geography, Relationship between man and society; social structure and social change as a subject matter of social geography; socio-cultural Regionalisation with special reference to social Area analysis.

2. Social Structure of India

Geographical Dimensions of components of social structure-Religion, language, scheduled castes and tribes; Regional pattern of family and marriage, status of women; concept and indicators; status of women in India-General and Regional perspectives;

15. A. Mahmood, Statistical Methods in Geographical Studies, Rajesh Publications, New Delhi, 1977.
16. S. Gregory, Statistical Methods and the Geographers, Longman.

Paper -III (Part-B) Advanced Research Techniques

Max. Marks : 50

Time : 3 Hours

1. Scalegram technique : Population thresholds (Read and Muonch Method): N-N-Analysis; Mean Spacing (Mather's Rule): Ruilley's Gravity Model, Sub-script Notations.
2. Analysis of Variance (Concepts and Assumptions): Techniques of Analysis of Variance (one way and two way classifications).
3. Co-efficient of Multiple Correlation : Multiple-Regression Equation; Significance Test for Regression Co-efficient.
4. Principal Component Analysis (Segments, Components and Factors theoretical only).
5. Co-relation Matrix, Extraction of Components, Component scores.
6. **Analysis of Time Series**
Characteristic Movements of Time Series, Classification of Time Series Movements, Moving Averages, Estimation of Trend, Estimation of Seasonal Variation.
7. Introduction to Matrices (concepts basic operation and use of Matrices in Geographical Research).

Note :- The examiner shall set 8 questions in all including atleast one questions on each section. Candidates shall attempt any four questions.

Reading Books :

R. J. Johnston, *Multivariate Statistical Analysis in Geog.*, Longman, London.

M.R. Spiegel, *Theory and Problems of Statistics*, Mc Graw Hill, 1981.

A. Kundu and et al. *Input-output Framework and Economic Analysis*, K.B. Publications, New Delhi, 1976.

C.R. Kothari, *Research Methodology*, Willey Eastern, 1987.