

DEPARTMENT OF GEOGRAPHY
M.D. UNIVERSITY, ROHTAK

M.PHIL PROGRAMME (w.e.f. 2015-16)

SCHEME OF EXAMINATION

The duration of the M.Phil programme shall be of three semesters. Semester I shall have theory and practical papers. Semester II shall have three optional groups of papers. In this semester, students shall have to opt for one paper out of the each group. Semester III shall be for dissertation work only.

SEMESTER: I

There shall be three papers, including two theory papers and one practical paper. Each paper shall be of 100 marks. In the theory papers, the end semester examination shall carry 80 marks and 20 marks for internal assessment. Internal assessment will be based on two assignments of 5 marks each and one presentation of 10 marks. Internal assessment will be evaluated by the course in-charge.

PAPER	NOMENCLATURE	MARKS	TIME
I	Research Methodology in Geography	End Semester Exam:80 Internal Assessment: 20	3 Hours
II	Methods and Techniques in Geography	End Semester Exam:80 Internal Assessment: 20	3 Hours
III	Practical: Advanced Computer based Techniques in Geography	End Semester Exam:100	4 Hours

SEMESTER-II

There shall be three optional groups of papers in this semester. Students shall have to opt for one paper out of the each group.

PAPER	NOMENCLATURE	MARKS	TIME
GROUP-A			
IV-A	Indian Cities: Past and Present	End Semester Exam:80 Internal Assessment: 20	3 Hours
IV-B	Gender Issues in Geography	End Semester Exam:80 Internal Assessment: 20	3 Hours
GROUP-B			
V-A	Infrastructural Development in Rural India	End Semester Exam:80 Internal Assessment: 20	3 Hours
V-B	Urban and Regional Development in India	End Semester Exam:80 Internal Assessment: 20	3 Hours
GROUP-C			
VI-A	Water Resources: Issues and Problems	End Semester Exam:80 Internal Assessment: 20	3 Hours
VI-B	Environmental Issues	End Semester Exam:80 Internal Assessment: 20	3 Hours

SEMESTER-III: DISSERTATION

The topic of dissertation and supervisor shall be approved by the Departmental Committee during the Second Semester. The dissertation shall be evaluated as per the existing M.Phil ordinance of the university.

Ph.D programme / M.Phil- Semester-I
Session: 2015-16 onwards
PAPER-I
RESEARCH METHODOLOGY IN GEOGRAPHY

Max. Marks: 100
End Semester Exam: 80
Internal Assessment: 20
Time: 3 Hours

Unit-I

Research: Nature, meaning and types; Geographic research and choice of approaches: Geographic perspective: nature of Geography, Geographic Questions and parameters of Geographic perspective.

Unit-II

Issues pertinent to thesis in Geography: Research proposal: issues and formulation; Literature search and review.

Unit-III

Significance of use of data in Geography; Data generation for quantitative analysis; Data production for qualitative analysis.

Unit-IV

Data representation; Data Interpretation: Research writing: Preparing for viva-voce.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Reference:

Clifford, Nicholas J. and Gill Valentine (eds.) (2003). *Key Methods in Geography*, London: Sage.

Holloway, Sarah L. et. al. (eds.) (2003). *Key Concepts in Geography*, London: Sage.

Kitchin, Rob and Nicholas J. Tale (2000). *Conducting Research into Human Geography*, Essex: Pearson Education.

Montello, Daniel R. and Paul C. Sutton (2006). *Scientific Research Methods in Geography*, New Delhi: Sage.

Stoddart, D.R. (ed.) (1981). *Geography, Ideology and Social Concern*, Oxford: Basil Blackwell.

Unwin, Tim. (1992). *The Place of Geography*, Essex; Prentice Hall.

Ph.D programme/ M.Phil- Semester-I
Session: 2015-16 onwards
PAPER-II
METHODS AND TECHNIQUES IN GEOGRAPHY

Max. Marks: 100
End Semester Exam: 80
Internal Assessment: 20
Time: 3 Hours

Unit-I

Quantitative and Qualitative Research-key characteristics; quantitative and qualitative methods: a general survey

Unit-II

Methods of Data Collection: Primary data (Census and Sampling Methods-sampling size and sample frames), Secondary Data—an appraisal of some basic secondary sources of socio-economic and demographic data with particular reference to India.

Unit-III

Data Classification; Standardization of Data: Rank, Z-Score; Composite index, Distinction between Parametric and Non-Parametric tests; Non-Parametric Tests: Formulation and testing of null hypothesis, one/two tailed tests, and Chi-Square, Spearman's Rank Correlation.

Unit-IV

Parametric Tests: Pearson's Product Moment correlation coefficient, regression analysis-simple and multiple.

Note: There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks.

Reference:

Hammond, R. and P.S. Mc Cullagh (1978), *Quantitative Techniques in Geography*, Oxford: Clarendon Press.

Kitchin, Rob and Nicholas J. Tale (2000), *Conducting Research into Human Geography*, Essex: Pearson Education.

Rogers, Peter A. (2009), *Statistical Methods for Geography*, London: Sage.

Ph.D programme/ M.Phil- Semester-I

Session: 2015-16 onwards

PAPER-III

ADVANCED COMPUTER BASED TECHNIQUES IN GEOGRAPHY

Max. Marks: 100

Time: 4 Hours

Unit-I

Basics about Excel: Table, formatting, sorting and filtering; use of basic formulae; random number generator; statistical charts (line graphs, bar diagrams, scatter diagram, control charts, histogram etc.)

Unit-II

SPSS Environment: entering data into data editor; Spearman rank correlation and Pearson product moment correlation, significance testing of r and t values; Liner regression analysis and residual mapping through GIS; Factor analysis, naming of factors, factor score and plotting of factor score with GIS software.

Unit-III

Georeferencing: Coordinate System; Geographical Coordinates, Projected Coordinates; Digitization. Data for GIS: Data model and data structure. Basic spatial analysis: Clip, erase, intersect, union etc. displaying output in the form of map in ArcGIS.

Unit-IV

In Situ Data Collection: Introducing Remote Sensing, Data Acquisition through Remote Sensing technique; displaying Landsat/LISS imagery, creating a composite image from Landsat and LISS imageries, suitable band combinations for various uses with the help of Landsat/LISS imageries

Note:

1. There will be eight questions in all, two from each unit. Candidates will be required to attempt four questions selecting one question from each unit. All questions will carry equal marks. Distribution of marks is under:

Lab Test	:	60 marks
Lab Record	:	30 marks
Viva-Voce	:	10 marks

2. The practical exam shall be conducted by a board of internal examiners comprising course-in-charge and HOD/nominee teacher of the department.

Reference:

1. A. Stewart Fotheringham (2000), *Quantitative Geography*, Sage, New Delhi.
2. J.R. Jensen and R.R. Jensen (2013), *Introductory Geographic Information System*, Pearson, Delhi.
3. Lo, C.P and Yeung, A.K.W (2005), *Concepts and Techniques of Geographic Information Systems*, API, New Delhi.
4. Schuurman, N. (2003), *GIS: A Short Introduction*, Oxford, Blackwell.