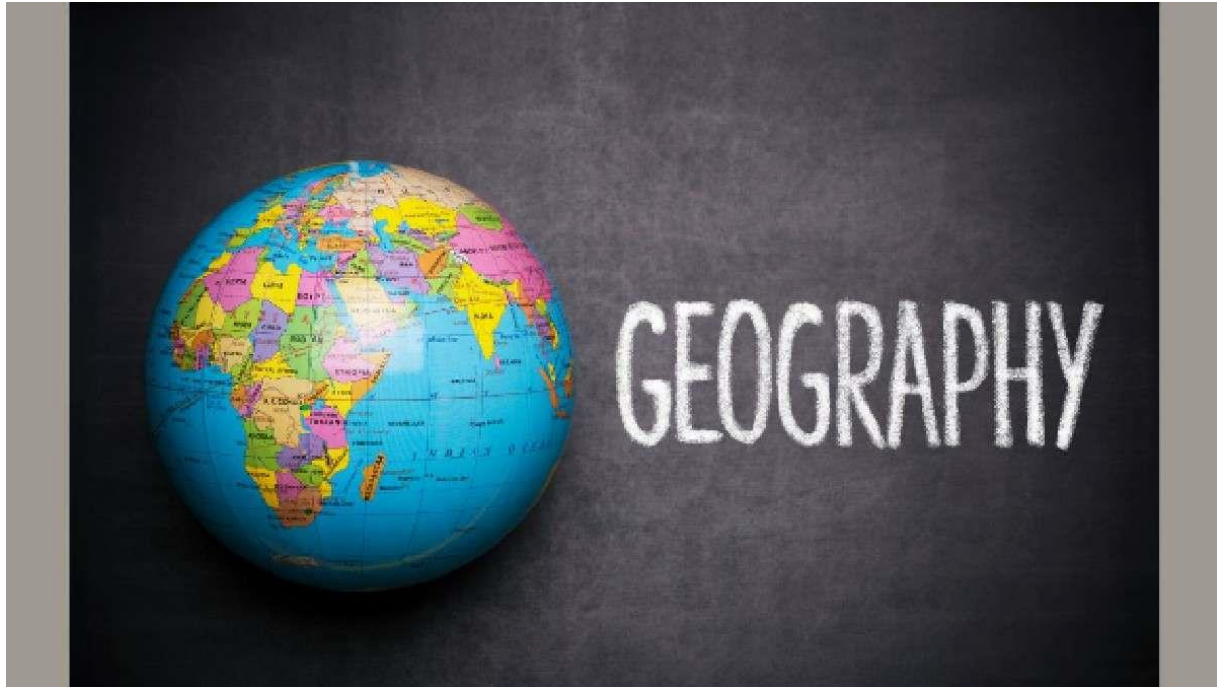# PROGRAMME PROJECT REPORT

Master's in Geography Programme

(2 Year)
(In Accordance with NEP-2020)

School of social Sciences
U. P. Rajarshi Tandon Open University, Prayagraj

211021

Content

Master's Degree Programme

The National Education Policy (NEP) 2020 envisions a new vision that enable an individual to study one or more specialized areas of interest at a deep level, and also develop capabilities across a range of disciplines including sciences, social sciences, arts, humanities, languages, as well as professional, technical, and vocational subjects. The NEP 2020 focuses on the formulation of expected learning outcomes for all higher education programmes. It states that "National Higher Education Qualifications Framework (NHEQF)" shall be align with the National Skills Qualifications Framework (NSQF) to ease the integration of vocational education into higher education. It also points out that higher education qualifications leading to a degree/diploma/certificate shall be described by the NHEQF in terms of Outcome Based Education (OBE).

The design of M.A. geography programme in line with NHEQF offers opportunities and avenues to learn core subjects but also to explore additional avenues of learning beyond the core subjects for holistic development of a learner.

The uniform grading system will also enable potential employers in assessing the performance of the learner. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on learner's performance in examinations, guidelines framed by the UGC are followed. Hence, adoption of NHEQF helps to overcome the gap between university degree and employability by introducing skills and competencies in the graduates.

M.A.-Geography Programme

The structure and duration of postgraduate programme of Master's in Geography in accordance with NEP 2020 includes multiple exit options within this period, with appropriate certifications:

- Level 8: a **Bachelor' Degree (Research)** for 4 year programme after completing 4th year of 4-year B.A. programme **OR PG Diploma in Geography** after completing 1st year (2 semesters) of study of M.A. programme.
- Level 9: a **Master in Arts (GEOGRAPHY)** programme after 2 years (4 semesters) of study;

Programme Mission & Objectives

In line with the mission of the University to provide flexible learning opportunities to all, particularly to those who could not join regular colleges or universities owing to social, economic and other constraints, the 2-year Post-Graduate Programme in Geography aims at providing holistic and value based knowledge and guidance to promote scientific temper in everyday life. The program offers a platform to the learners to fulfill the eligible criteria in various scientific jobs in government and private sector.

The Master of **Geography**Programme aims at the following objectives:

- The objective of the program is to prepare the incumbents to take the challenges of research and developments in the fields of social science. The curriculum opens new doors of systematic knowledge of the subject to the Learners having graduation in geography. The two year postgraduate (PG) program is designed to help learners to get employment in research laboratories, teaching positions and corporate sector.
- Provide strong core training so that graduates can adapt easily to changes and new demands from industry.

- Enable Learners to understand not only how to apply certain methods, but when and why they are appropriate.
- Integrate fields within remote sensing, GIS , tourism , mapping , and statistics to create adept and well rounded geographer.
- Expose Learners to real-world problems in the classroom and through experiential learning.

These program objectives acknowledge the interdisciplinarity of geography and the importance of building a strong foundation with our Learners.

Relevance of the Programme with Mission and Goals

The 2-year Post-Graduate Programme in M.A, GEOGRAPHY is designed with the objective of equipping learners to cope with the emerging trends and challenges in the scientific domain. In congruence with goals of the University the Programme also focuses to provide skilled manpower to the society to meet global demands. The Programme is designed in such a manner so that a successful learner can go for higher studies as well as join the industry or can run their own start-ups.

Nature of Prospective Target Group of Learners

The Program is targeted to all individuals looking to earn a postgraduation degree for employment, further higher education, promotion in career, professional development.

Appropriateness of Programme to be conducted in ODL mode to acquire specific skills & competence

Learning outcomes after Level 8		
Learning Outcomes	Elements of the descriptor	Level 8 Bachelor' Degree (Research) OR PG Diploma in Geography
LO 1	Knowledge and understanding	• advanced knowledge about a specialized field of enquiry, with depth in one or more fields of learning within a broad multidisciplinary/interdisciplinary context. • a coherent understanding of the established methods and techniques of research and enquiry applicable to the Geography.
LO 2	Skills required to perform and accomplish tasks	• a range of cognitive and technical skills required for performing and accomplishing complex tasks relating to the Geography, • cognitive and technical skills relating to the established research methods and techniques,
LO 3	Application of knowledge and skills	• apply the acquired advanced technical and/or theoretical knowledge and a range of cognitive and practical skills to analyses the quantitative and qualitative data gathered drawing on a wide range of sources for identifying problems and issues relating to the Geography , • apply advanced knowledge relating to research methods to carryout research and investigations to formulate evidence-based solutions to complex and unpredictable problems.

LO 4	Generic learning outcomes	• listen carefully, read texts and research papers analytically and present complex information in a clear and concise manner to different groups/audiences, • communicate technical information and explanations, and the findings/results of the research studies relating to specialized fields of learning, • present in a concise manner one's views on the relevance and applications of the findings of research and evaluation studies in the context of emerging developments and issues. • pursue self-paced and self- directed learning to upgrade knowledge and skills that will help accomplish complex tasks and pursue higher level of education and research.
		• problematize, synthesize and articulate issues and design research proposals, • define problems, formulate appropriate and relevant research questions,
LO 5	Constitutional, humanistic, ethical and moral values	• embrace and practice constitutional, humanistic, ethical, and moral values in one's life. • adopt objective, unbiased, and truthful actions in all aspects of work related to the chosen field(s) of learning and professional practice.
LO 6	Employment ready skills, and entrepreneurship skills and mindset	• managing complex technical or professional activities or projects, requiring the exercise of full personal responsibility for output of own work as well as for the outputs of the group as a member of the group/team. • exercising supervision in the context of work having unpredictable changes.

Learning outcomes after Level 9		
Learning Outcomes	**Elements of the descriptor**	**Level 9 (Master's in – <u>Geography</u>)**
LO 1	Knowledge and understanding	• advanced knowledge about a specialized field of enquiry with a critical understanding of the emerging developments and issues relating to one or more fields of learning, • advanced knowledge and understanding of the research principles, methods, and techniques applicable to the Geography, • procedural knowledge required for performing and accomplishing complex and specialized professional tasks relating to teaching, and research and development.
LO 2	Skills required to perform and accomplish tasks	• advanced cognitive and technical skills required for performing and accomplishing complex tasks related to the geography, • advanced cognitive and technical skills required for evaluating research findings and designing and conducting relevant research that contributes to the generation of new knowledge, • specialized cognitive and technical skills relating to a body of knowledge and practice to analyse and synthesize complex

		information and problems.
LO 3	Application of knowledge and skills	• apply the acquired advanced theoretical and/or technical knowledge about a specialized field of enquiry or professional practice and a range of cognitive and practical skills to identify and analyse problems and issues, including real-life problems, associated with the Geography .
LO 4	Generic learning outcomes	• listen carefully, read texts and research papers analytically and present complex information in a clear and concise manner to different groups/audiences, • communicate, in a well-structured manner, technical information and explanations, and the findings/ results of the research studies undertaken in the Geography , • meet one's own learning needs relating to the chosen fields of learning, work/vocation, and an area of professional practice, • pursue self-paced and self- directed learning to upgrade knowledge and skills, including research-related skills, required to pursue higher level of education and research.
LO 5	Constitutional, humanistic, ethical and moral values	• embrace and practice constitutional, humanistic, ethical and moral values in one's life, • adopt objective and unbiased actions in all aspects of work related to the chosen fields/subfields of study and professional practice, • participate in actions to address environmental protection and sustainable development issues,
LO 6	Employment ready skills, and entrepreneurship skills and mindset	• adapting to the future of work and responding to the demands of the fast pace of technological developments and innovations that drive shift in employers' demands for skills, particularly with respect to transition towards more technology-assisted work involving the creation of new forms of work and rapidly changing work and production processes. • exercising full personal responsibility for output of own work as well as for group/ team outputs and for managing work that are complex and unpredictable requiring new strategic approaches.

Instructional Design
2.5.1.2-year M.A.- Geography Programme Structure

The University follows the credit system in all its programmes. One credit is equal to 30 hours of learner's study time which is equivalent to 15 lectures in conventional system. To earn a Master's Degree, a learner has to earn 80 credits in minimum four semesters (two years) with 20 credits per semester. For earning 80 credits, a learner has to go through the following Programme Structure:

Programme Structure of M.A.- GEOGRAPHY under NHEQF

Level	Year	Sem	Core Course 1	Core Course 2	Core Course 3	Core course 4	Research Methodology/ Dissertation/ viva-voce	Total credit
8	1	1st	4	4	4	4	4	**20**
		2nd	4	4	4	4	4	**20**
9	2	3rd	4	4	4	4	4	**20**
		4th	4	4	4	4	4	**20**
Total credit								**80**

Explanation of terms used for categorization of courses:

A.   **Course 1 to 4:** A course, which should compulsorily be studied by a learner as a core requirement   is termed as a Core course.

B.   **Research Methodology/Dissertation/Viva-Voce:** A course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a learner studies such a course on his own with an advisory support by a counsellor/faculty member.

2.5.2   Course curriculum: The details of syllabus is given in Appendix-I

2.5.3 Language of Instruction: Hindi / English. However, learner can write assignment and give Term End Examination (TEE) either in Hindi or English.

2.5.4   Duration of the Programme
Minimum duration in years: 02   Maximum duration in years: 04

2.5.5   Faculty & Support Staff
Director (1), Associate Professor (1), Assistant Professor (contractual)(4), support staff (2)

Instructional Delivery Mechanisms

The Open University system is more learner-oriented, and the student is an active participant in the teaching-learning process. Most of the instructions are imparted through distance rather than face-to-face communication.
The University follows a multi-media approach for instruction. It comprises of:
- Self-instructional printed material (Self Learning Material)
- Audio and video lectures
- Face-to-face counselling
- Assignments
- Survey/Laboratory work
- Project work in some courses
- Teleconference/web conference
- Web Enabled Academic Support Portal
- e-GYANSANGAM   (Open   Educational   Repository): http://gyansangam.uprtou.ac.in

- e-GYANARJAN: Its a Learning Management System based on Moodle (http://gyanarjan.uprtou.ac.in) to aid the learner through web conferencing, sharing of learning resources, counselling classes etc.

2.6.1 Self-Learning Material

The Self Learning Material (SLMs) are prepared in line with the UGC guidelines on preparation of SLMs. The prepared study materials are self-instructional in nature. The course material is divided into units. Lessons, which are called Units, are structured to facilitate self-study. The units of a paper have similar nature of contents. The first page of each paper indicates the numbers and titles of the units . In the first units of each course, we start with course introduction. This is followed by a brief introduction to the paper. First units explains introduction, emphasis is given on contribution of ancient Indian knowledge into that specific course. Next, each unit begins with an introduction to talk about the contents of the unit. The list of objectives are outlined to expect the learning based outcome after working through the unit. This is followed by the main body of the unit, which is divided into various sections and subsections. Each unit is summarized with the main highlights of the contents.

Each unit have several "Check Your Progress" Questions and Terminal Questions /exercises. These questions help the learner to assess his/her understanding of the subject contents. At the end of units, additional references/books/suggested online weblink for MOOCs/Open Educational Resources for additional reading are suggested.

2.6.2 Audio and Video lectures

Apart from SLM, audio and video lectures have been prepared for some courses. The audio video material is supplementary to print material. The video lectures are available at YouTube channel of university(https://www.youtube.com/channel/UCj2XTEB6iCZwwIqmKw_jzYg).

2.6.3Counselling Classes

The face to face (F2F) counselling classes are conducted at head quarter and study centers. The purpose of such a contact class is to answer some of questions and clarify the doubts of learner which may not be possible through any other means of communication. Well experienced counsellors at study centers provide counselling and guidance to the learner in the courses that (s)he has chosen for study. The counselling sessions for each of the courses will be held at suitable intervals throughout the whole academic session. The time table for counselling classes are displayed at head quarter as well as by the coordinator of study center, however, attending counselling sessions is not compulsory. It is noted that to attend the counselling sessions, learner has to go through the course materials and note down the points to be discussed as it is not a regular class or lectures.

2.6.4Assignments

The purpose of assignments is to test the comprehension of the learning material that learner receives and also help to get through the courses by providing self-feedback to the learner. The course content given in the SLM will be sufficient for answering the assignments. Assignments constitute the continuous evaluation component of a course. The assignments are available at the SLM section of the home page of university website. In any case, learner has to submit assignment before appearing in the examination for any course. The assignments of a course carry 30% weightage while 70% weightage is given to the term end examination (TEE). The marks obtained by learner in the assignments will be counted in the

final result. Therefore, It is advised to take assignments seriously. However, there will be no written assignments for Lab courses.

2.6.5 Survey Work

Survey work are an integral component of the M.A. programme. While designing the curricula for survey courses, particular care has been taken to weed out experiments not significant to the present-day state of the discipline. Importance has been given to the utility of geographical study with respect to real life and experience, development of observational skill, social attitude , experimental skills, and other applications. It is planned to phase the survey work / courses during suitable periods (such as summer or autumn vacations) so that in-service persons can take them without difficulty. Survey courses have 4 credits. Learners will do survey of   related village and prepare   report under guidance of faculties in there study centre. viewing or listening to the video/audio programmes.

2.6.6Teleconference/Web conference

Teleconference/web conference, using done through ZOOM/ webex in form of online special counselling sessions is another medium to impart instruction to and facilitate learning for a distance learner. The Learners concerned would be informed about the teleconferencing schedule and the place where it is to be conducted by sending bulk SMS.

2.6.7Web Enabled Academic Support Portal

The University also provide Web Enabled Academic Support Portal to access the course materials, assignments, and other learning resources.

2.6.8e-GYANSANGAM

The e-GYAMSANGAM (UPRTOU-OER REPOSITORY) is an open access platform for educational resources that rely on the concept of 5Rs namely; Reuse, Revise, Remix, Retain and Redistribute. Uttar Pradesh Rajarshi Tandon Open University in support with Commonwealth Educational Media Centre for Asia initiated the implementation of philosophy behind the NEP-2020 to provide equitable use of technology to support learners (SDG4). This not only ensure inclusive and equitable quality education opportunities but also provide faculty to repurpose high quality open educational resources (OER) such that innovative, interactive and collaborative learning environment is built. UPRTOU believes the philosophy of Antyoday (reaching to last person of the society) and facilitate the learner by providing Self Learning Materials, Lecture Notes, Audio/video Lectures, Assignments, Course materials etc. through face-to-face mode as well as distance mode. This E-GYANSANGAM depository will fulfill the educational facilities through equitable use of technology to the learners.

Objectives

- To provide low-cost access model for learners. To foster the policy of reaching to unreached.
- To break down barriers of affordability and accessibility of educational resources.
- To give faculty the ability to customize course materials for learners.
- To provide equal access to affordable technical, vocational and higher education resources (SDG 4.3).

- To provide ubiquitous access to anyone. This will facilitate the quick availability of educational resources and reduces time.
- To supplement Self Learning Material (SLM).
- To reduce the mentor-mentee gap as depository provide access to number of local access as well as global access to educational resources.

2.6.9 e-GYANARJAN: It's a Learning Management System based on Moodle (http://gyanarjan.uprtou.ac.in) to aid the learner through web conferencing, sharing of learning resources, counselling classes etc.

2.6.10 Learner Support Service Systems

(a) Study Centre

A Study Centre has following major functions:

(i) **Counselling:** Counselling is an important aspect of Open University System. Face to face contact-cum-counselling classes for the courses will be provided at the Study Centre. The detailed programme of the contact-cum-counselling sessions will be sent to the learner by the Coordinator of the Study Centre. In these sessions learner will get an opportunity to discuss with the Counsellors his/her problems pertaining to the courses of study.

(ii) **Evaluation of Assignments:** The evaluation of Tutor Marked Assignments (TMA) will be done by the Counsellors at the Study Centre. The evaluated assignments will be returned to the learner by the Coordinator of Study Centre with tutor comments and marks obtained in TMAs. These comments will help the learner in his/her studies.

(iii) **Library:** Every Study Centre will have a library having relevant course materials, reference books suggested for supplementary reading prepared for the course(s).

(iv) **Information and Advice:** The learner will be given relevant information about the courses offered by the University. Facilities are also provided to give him/her guidance in choosing courses.

(v) **Interaction with fellow-Learners:** In the Study Centre learner will have an opportunity to interact with fellow Learners. This may lead to the formation of self-help groups.

(b) Learner Support Services (LSS)

The University has formed an LSS cell at the head quarter. The LSS cell coordinate with the Study Centre to get rid of any problem faced by the learner.

Procedure for admissions, curriculum transaction and evaluation

2.7.1 Admission Procedure

(a) The detailed information regarding admission will be given on the UPRTOU website www.uprtou.ac.in) and on the admission portal. Learners seeking admission shall apply online.

(b) Direct admission to 2-year M.A. (**Geography**) program is offered to the interested candidates.

(c) **Eligibility:** Bachelor degree in any discipline

2.7.2 Programme Fee: Rs. 8500 / year. The fee is deposited through online admission portal only.

2.7.3 Evaluation

The evaluation consists of two components: (1) continuous evaluation through assignments, and (2) term-end examination. Learner must pass both in continuous evaluation as well as in the term-end examination of a course to earn the credits assigned

to that course. For each course there shall be one written Terminal Examination. The evaluation of every course shall be in two parts that is 30% internal weightage through assignments and 70% external weightage through terminal exams.

(a) **Theory course**   **Max. Mark**s   Terminal
Examination   70
Assignment   30
        Total   **100**

        (b)   **Viva -voce course:**   **Max. Marks** viva voce Examination 100 at (only regional centre)

        (c)   **Research Methodology/Dissertation- 100**

The following 10-Point Grading System for evaluating learners' achievement is used for CBCS programmes:

10-Point Grading System in the light of UGC-CBCS Guidelines

Letter Grade	Grade Point	% Range
O (Outstanding)	10	91-100
A+ (Excellent)	9	81-90
A (Very Good)	8	71-80
B+ (Good)	7	61-70
B (Above Average)	6	51-60
C (Average)	5	41-50
P (Pass)	4	36-40
NC (Not Completed)	0	0-35
Ab (Absent)	0	
Q	Qualified	Applicable only for Non-Credit courses
NQ	Not Qualified	

Learner is required to score at least a 'P' grade (36% marks) in both the continuous evaluation (assignments) as well as the term-end examination. In the overall computation also, learner must get at least a 'P' grade in each course to be eligible for the M. A. degree.

Computation of CGPA and SGPA

    (a)   Following formula shall be used for calculation of CGPA and SGPA

For jth semester SGPA (Sj) = Σ (Ci *Gi)/ Σ Ci	where, C_i = number of credits of the ith course in jth semester G_i= grade point scored by the learner in the ith course in jth semester.
CGPA = Σ (Cj *Sj)/ Σ Cj	where, S_j = SGPA of the jth semester C_j = total number of credits in the jth semester

The CGPA and CGPA shall be rounded off up to the two decimal points. (For e.g., if a learner obtained 7.2345, then it will be written as 7.23 or if s(he) obtained 7.23675 then it be will written as 7.24)

CGPA will be converted into percentage according to the following formula: Equivalent Percentage = CGPA * 9.5

(b)   Award of Division

The learner will be awarded division according to the following table:

Division	Classification
1st Division	6.31 or more and less than 10 CGPA
2nd Division	4.73 or more and less than 6.31 CGPA
3rd Division	3.78 or more and less than 4.73 CGPA

2.7.4   Multiple Entry and Multiple Exit options

The 2-year M.A. programme is an Outcome-Based Education (OBE) for qualifications of different types. The qualification types and examples of title/nomenclature for qualifications within each type are indicated in Table 1.

Table 1				
Level	Qualification title	Programme duration	Entry Option	Exit option
8	B.Sc. / B.A. (Research) OR PG Diploma in Geography	Programme duration: First year (first two semesters) of the M.A. programme	Bachelor degree in concerned subject B.Sc. / B.A. with Geography as one of the subject) or Graduate in any discipline.	**Exit** Awarded with Bachelor' Degree (Research) for 4 year programme OR Exit awarded with PG Diploma in Geography
9	Master in (Geography)	Programme duration: First two years (four semesters) of the of the M.A. programme	B.Sc./B.A. (Research) OR PG Diploma in Geography	**Exit** awarded with Master's in (Geography)

. Viva-voce

The viva voce terminal exam are held in the regional Centre. viva-voce is based on the syllabus.

Cost estimate of the programme and the provisions

2-year MA. programme consists of 16 theory courses, 2 viva- voce,1 village report, 1 research projects / dissertation. One course/ paper is of 4 credits which consists of approx. 15/16 units. The total approximated expenditure on the development of 16 courses is:

S. No.	Item	Cost per Unit (writing & editing)	Total cost (Rs.)
1	Total no. of units in 16 courses = 12*16=192 + 4*15=60 TOTAL = 252 units	4500	252*4500= 1134000
2	BOS Meetings etc.	100000	100000
		Total	**1234000**

Quality assurance mechanism and expected programme outcomes

(a) **Quality assurance mechanism:** The program structure is developed under the guidance of the Board of studies comprising external expert members of the concerned subjects followed by the School board. The program structure and syllabus is approved by the Academic Council of the University. The course structure and syllabus is reviewed time to time according to the feedback received from the stakeholders and societal needs.

The Centre for Internal Quality Assurance will monitor, improve and enhance effectiveness of the program through the following:

Annual academic audit

Feedback analysis for quality improvement

Regular faculty development programs

Standardization of learning resources

Periodic revision of program depending upon the changing trends by communicating to the concerned school

(b) **Expected programme outcomes (POs)**

Knowledge and understanding	PO1	Demonstrate a fundamental/coherent understanding of the academic in all disciplines of Geography, its different learning areas and applications, and its linkages with related disciplinary areas/subjects
Skills related to specialization	PO 2	Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of Geography experiments
Application of knowledge and skills	PO 3	Identify and apply appropriate principles and methodologies to solve different types of problems with well-defined solutions.
	PO 4	Equip Learners to face the employment challenges and instil confidence to turn into entrepreneur and also step into research career.
Generic learning outcomes	PO 5	Generation of new scientific insights or to the innovation of new applications of chemical research
	PO 6	The Learners will improve their competencies on par with their counterparts in premier institutions across the nation.

U.P. Rajarshi Tandon Open University, Prayagraj
Detailed Programme Structure and Syllabus
Proposed Course Structure   Appendix-I
M.A. Programme Subject Name : Geography

Year	Sem.	Course Code	Title of Course	Credits	Max. Marks (70+30)
1st Year	1st Sem.	MAGO-101	GEOMORPHOLOGY	4	100
		MAGO-102	GEOGRAPHY OF INDIA	4	100
		MAGO-103	FUNDAMENTAL OF ECONOMIC GEOGRAPHY	4	100
		MAGO-104	AGRICULTURAL GEOGRAPHY	4	100
		MAGO-105	RESEARCH METHODOLOGY	4	100
Credit of 1st Semester				**20**	
	2nd Sem.	MAGO-106	GEOGRAPHY OF RESOURCES	4	100
		MAGO-107	CLIMATOLOGY	4	100
		MAGO-108	OCEANOGRAPHY	4	100
		MAGO-109	SETTLEMENT GEOGRAPHY	4	100
		MAGO-110	DISSERTATION	4	100
Credit of 2st Semester				**20**	
2nd Year	3rd Sem.	MAGO-111	GEOGRAPHY OF POPULATION	4	100
		MAGO-112	FOUNDATIONS OF GEOGRAPHICAL THOUGHT	4	100
		MAGO-113	ENVIRONMENT MANAGEMENT AND ECO-DEVELOPMENT	4	100
		MAGO-114	DISASTER MANAGEMENT	4	100
		MAGO-115	DISSERTATION	4	100
Credit of 3rd Semester				**20**	
	4th	MAGO-116	CARTOGRAPHY AND STATISTICAL METHODS	4	100
		MAGO-117	TRANSPORT GEOGRAPHY	4	100
		MAGO-118	POLITICAL GEOGRAPHY	4	100
		MAGO-119	MODEALS, THEORY AND LAW IN HUMAN GEOGRAPHY	4	100
		MAGO-120	VIVA- VOCE	4	100
Credit of 4th Semester				**20**	
Total Credits = 40+40 = 80 (Year 1+2)				**80**	
Total Marks = 1000+1000 = 2000 (Year 1+2)					**2000**

Syllabus for [M.A. in Geography (MAGO): Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme : MAGO	Year: 1	Semester: 1
Subject: Geography		
Course Code: *MAGO-101N*	Course Title: **Geomorphology**	

Course Objectives:

1. Learners will understand the concept of place and how it is connected to people's sense of belonging to the physical environment, landscape and culture.

2. Learners will understand the fundamental concepts of spatial interaction and diffusion, which explain how human activities are influenced by the concept of distance.

3. Learners will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards.

4. Learners will be able to read and interpret information on different types of physical features maps.

5. Learners will learn how human, physical and environmental components of the world interact.

Course Outcomes:

CO1-Describing human-environment, and nature-society interactions as well as global human and environmental issues.

CO2-Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales.

CO3-Evaluating the impacts of human activities on natural environments.
CO4-Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues.

CO5-Showing an awareness and responsibility for the environment.

Credits: 4	**Type of Course:** Core
Category of Course	Value-added / employability
Max. Marks: 100	Min. Passing Marks: 36
Syllabi framed block wise/unit wise	

Unit- 01 Definition and Scope of Geomorphology
Unit - 02Structure of the Earth's Interior, Theories of Origin of Continents and Oceans

Unit – 03 Forces Affecting the Earth's Crust.

Unit – 04 Earthquake and Volcano, Volcanicity and Landscapes.
Unit – 05 Rocks and their Classification.
Unit – 06 Theory of Plate Tectonics
Unit – 07 Theories of Mountain Building.
Unit – 08 Weathering and Erosion.
Unit – 09 Penk and Davis Erosion Cycle
Unit – 10 Drainage System and Drainage Pattern.
Unit – 11 Fluvial Geomorphology and Karst Geomorphology.
Unit – 12 Costal Geomorphology
Unit - 13 Arid Geomorphology and Glacial Geomorphology.
Unit – 14 Regional Geomorphology- Kumaun Himalaya, Ganga Plain, Chota Nagpur Plateau
Unit – 15 Slope Analysis –Classification of Slope, Models of Slope Development.
Unit – 16   Applied Geomorphology, Anthropogenic Geomorphology

Suggested Text Book Readings:
1. 1. Singh, Jagdish & Singh K.N. :Physical Geography, Gyanodya Publication, Gorakhpur.
2. Thornbury, W.D. : Principles of Geomorphology, New Age International (p) Ltd., New Delhi.
3. Singh, Savindra : Geomorphology, Prayag Pustak Bhawan, Allahabad.
4. Bloom. A.L. : Geomorphology, Prentice Hall, New Jersery, USA.
5. King, C.A.M : Techniques in Geomorphology, Edward Arnold, London.
6.   Kale, V.S. and Gupta, A. : Introduction to Geomorphology, Orient Longman, Hyderabad.
7. Dayal, P. : Geomorphology, Patna

This course can be opted as an elective by the Learners of following subjects: N.A.

Suggested equivalent online courses (MOOCs) for credit transfer: N.A.

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 1
Subject: Geography		
Course Code: **MAGO-102N**	Course Title:GEOGRAPHY OF INDIA	

Course Objectives:

1. Learners will get an introduction to the main regions of the India in terms of both their uniqueness and similarities.

2. Learners will be exposed to historical, economic, cultural, social and physical characteristics of India.

3. Learners will learn the relationships between the global, the regional and the local, particularly how places are inserted in regional and global processes.

4. In addition to the ability of understanding and reading maps, Learners will develop cartography skills and will be able to create maps on their own.

5. Learners will be introduced to demographic, social and cultural attributes such as migration, social relations and cultural identity.

Course Outcomes:

CO1: Identifying and explaining the Indian Geographical Environment, from global to local scales.

CO2: Applying geographical knowledge to everyday living.
CO3: Applying knowledge of global issues to a unique scientific problem.
CO4: Showing an awareness and responsibility for the environment and India.
CO5: Evaluating the impacts of human activities on natural environments special reference to India.

Credits: 4	**Type of Course:** Core
Category of Course	Employability
Max. Marks: 100	Min. Passing Marks: 36

(Syllab framed block wise/unit wise)

Unit – 1 Geological Structure, Physical Region, Drainage System
Unit – 2 Concept and Origin of Monsoon
Unit – 3 Climatic Regions, El Nino, La-Nina
Unit – 4 Soils: Types and Distribution, Types of Vegetation
Unit – 5 Irrigation, Multi-Purpose Projects, Watershed Management
Unit – 6 Agriculture and Agriculture Region, Agro-Climatic Region.
Unit – 7 Green Revolution in India, Environmental Impact of Green Revolution
Unit – 8 Environmental Agriculture, Food Security in India, Agriculture Policy of India
Unit – 9 Mineral Resources, Iron ore, Mica, Coal
Unit – 10 Energy Resources – Petroleum, Natural Gas

Unit – 11 Atomic Energy, Conservation of Energy, Green Energy
Unit – 12 Industry– Iron-Steel, Textile Industries, Sugar Industry, Industrial Regions
Unit – 13 Population Growth and Distribution, Population Structure- Age, Sexual
Unit – 14 Population Policy, Urbanization, Problem and Solutions of Urbanization
Unit – 15 Population and Environment,
Unit – 16 Settlements – Urban and Rural, Pattern, Modes of Transportation

Suggested Text Book Readings:
1. Singh, J. : India : A Comprehensive Geography, GyanodayaPrakashan, Gorakhpur
2. Tiwari, R.C.: Geography of India, Pravalika Publication, Allhabad.
3. Singh, R.L. : India : A Regional Geography, NGSI, Varanasi
4. Gautam, Alka: Geography of India, Sharda Pustak Bhawan, Allahabad
5. Khullar, D.R. : India : A Comprehensive Geography, Kalyani Pub., New Delhi

This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 1
Subject: Geography		
Course Code: **MAGOE-103N**	Course Title:**FUNDAMENTAL OF ECONOMIC GEOGRAPHY**	

Course Objectives:

1. This course offers an introduction to the ways in which economic activities are organized over the earth's surface.

2. The economic processes operating at different geographical scales are depending on the complex economic-political-social interactions that are framed at the global level.

3. The course explores the processes of globalization and seeks to provide understanding of today's increasingly interdependent world.

4. Learners will be familiarized with economic processes such as globalization, trade and transportation and their impacts on economic, cultural and social activities.

5. Learners will learn about the variety of political systems and nation states which administratively subdivide the regions of the world.

6. How human activities are regulated and under the jurisdiction of a variety of geographical units and how these relations shape the economic and social space are of particular relevance.

7. Learners will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards.

Course Outcomes:

CO1: Learners would be able to understand how in an increasingly globalized world, economic activities occur unevenly over geographical space; how local places and global economy are intertwined, and how the regime of neoliberal policies are generating uneven geography of capitalist development.

CO2: Learners will be introduced to demographic, social and cultural attributes such as migration, social relations and cultural identity. The main objective is to underline that human activities are subject to adaptation and change.

CO3: student will able to write to fundamental input for planners and policy makers for regional development.

Credits: 4	**Type of Course:** Core

Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36

(Syllabi framed block wise/unit wise)

Unit – 1 Concept of Economic Geography, Scope, Fundamental Concepts, Development and Changing Definition of Economic Geography

Unit – 2 Approaches to study, Study methods, Relation of Economic Geography to Economics, Globalization.

 Unit – 3 Characteristics of Mineral Resources, Conditions and Factor Affecting Excavation.   **Unit – 4** Iron Ore in World Level, Bauxite, Reserves of Tin, Production, Distribution and Trade.

Unite –5 Energy and Power Resources in The World- Various forms of Energy, Current Status and Conditions of Energy, Petroleum, World Reserves, Regional Distribution and Trade

Unit – 6 Natural Gas – Adequacy and Reserves, Coal Reserves, Production , Distribution

Unit – 7 Hydroelectric Power – Natural Conditions, Distribution Pattern of Production at the World Level.

Unit – 8 Renewable Energy Source- Solar Energy, Geothermal Energy, Global Energy Crisis , Energy Forecasting and Conservation.

Unit – 9 Theory of Agricultural Location – Von Thunen's Theory, Modern Theory

Unit – 10 Agricultural Regions, Definition, Bases Element of Delimiting, Causes of Origin and Development.

Unit – 11 Agricultural Regions of the World, Demarcation and Characteristics of Agricultural Regions.

Unit – 12 Agricultural Regions of U.S.A., Agricultural Regions of China and the Latest Scientific Agricultural Regions.

Unit – 13 Goods Manufacturing Industry, Small-scale Industry, Large-scale Industry, Localization of Industries.

Unit – 14 Theories of Industrial Location - Theory of Weber, Sophistication in Weber Theory, Market Competition Theory, Integrated Theory.

Unit – 15 Relative Importance of Different Elements of Localization – Market, Power, Labour, Localization of Capital and Industry.

Unit- 16 Industrial Regions of the World - Industrial Regions of the European Community, Industrial Regions of U.S.A., Industrial Regions of Japan.

Suggested Text Book Readings:
1. Singh, K.N. & Singh, J. :ArthicBhoogolkeMoolTatva, yanodayaPrakashan, Gorakhpur.
2. Alexander, J.W. : Economic Geography, Prentice Hall of India, New Delhi.
3. Maurya, S.D. :ArthicBhoogol, Pravalika Publications, Allahabad.
4. Gautam, A. :ArtkikBhoogolkeMoolTatva, Sharda Pustak Bhawan, Praygraj.
5. Long, G.C. and Morgan,G.C.: Human and Economic Geography , Oxford University Press, Hong Kong.

This course can be opted as an elective by the Learners of following subjects: N.A.

Suggested equivalent online courses (MOOCs) for credit transfer: N.A.

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 1
Subject: Geography		
Course Code: **MNGO-104 N**	Course Title: **Agriculture Geography**	

Course Objectives:
1. Students correlate activity of agriculture and its determinants.
2. Classify various types of agriculture in the world and differentiate.
3. Discuss the problems and prospects of agriculture.
4. Acquire new methods, techniques and trends used in agriculture.
5. Understand the concept of sustainable agricultural development.

Course Outcomes:

CO 1: Understand about the introduction to agriculture, nature, scope, significance and development of agriculture geography, study approaches applied in agriculture.

CO 2: understand the influence of physical. Economic and technological factors on agriculture patterns.

CO 3: Understand the agriculture regionalization and modes in agriculture geography and their classification of agricultural models and some theories.

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36

(Syllabi should be framed block wise/unit wise)

Unit – 1 Introduction of Agricultural Geography
Unit – 2 Origin and Development of Agricultural Geography
Unit – 3 Natural Factors Affecting Agriculture
Unit – 4 Human Factors Affecting Agriculture
Unit – 5 Agricultural Land Use : Concept and Methodology
Unit – 6 Theories of Localization of Agriculture
Unit – 7 Agricultural Regionalisation and Agricultural Regions
Unit – 8 New Dimensions of Agricultural Development
Unit – 9 Land Use Planning and Balanced Agricultural Development
Unit – 10 SustainableAgricultural Development
Unit – 11 Agro-climatic Regional Planning
Unit – 12 Agricultural Land Use Survey Methods
Unit – 13 Agricultural Regions of Major Countries of the World – U.S.A., China, Japan
Unit – 14 Agricultural Regions of India
Unit – 15 Agricultural Development and Five Year Plan of India
Unit – 16 Population and Agriculture, Food Security
Unit – 17 Agriculture and Climatic Change

Suggested Text Book Readings:

1Tiwari, R.C. & Singh, B.N.: Krishi Bhoogol, Pravalika Publication, Prayagraj.

1. Singh, Jasbir :Agricultural Geography, Tata Mc Graw, New Delhi.
2. Gautam, A. : Krishi Bhoogol, Sharda Pustak Bhawan, Praygraj.
3. Singh, B.B. : Krishi Bhoogol, Gorakhpur

Note:- This course can be opted as an elective by the Learners of following subjects: NA
Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: **1**	Semester: **1**
Subject: **Geography**		
Course Code: **MAGO-105N**	Course Title: **Research Methodology**	

Course Objectives:

The objective is to inculcate in the students the spirit to scientific inquiry and critical thinking through methodological rigour and disciplined objectivity. It is designed specifically to prepare students for further exploration while working for Ph.D. degree formally or engaging with the society as informed citizenry.

Course Outcomes:

This course will enable students to engage in research work with better understanding of tools and techniques and better exposure to wider world of intellectual churning. It will equip them with cutting edge in tracking NET Examination where methodology occupies major share of compulsory part of syllabus.

Credits: **4**	Type of Course: Core/Elective
Category of Course (Please mention category of course; It may have more than one option)	Awareness/ life skills / soft skills/ value- added / employability/ entrepreneurship/ skill development/MOOCs or OER
Max. Marks: 100	Min. Passing Marks: 36

(Syllabi should be framed block wise/unit wise; No of blocks and units may change)

खण्ड—1   शोध का अर्थ, आवश्यकता, समस्या की प्रकृति तथा डिजाइन

इकाई—1   शोध का अर्थ, प्रकार एवं आवश्यकता

इकाई—2   शोध समस्या की प्रकृति एवं चयन

इकाई—3   शोध परिकल्पना

इकाई—4   शोध प्रतिचयन

खण्ड—2   शोध विधियाँ

इकाई—5   ऐतिहासिक शोध

इकाई—6   वर्णनात्मक शोध

इकाई—7   प्रयोगात्मक शोध

इकाई—8   गुणात्मक शोध

खण्ड—3   ऑकड़े संग्रह की तकनीक

इकाई—9   परीक्षण प्रश्नावली एवं साक्षात्कार

इकाई—10	मापनी विधियाँ
इकाई—11	केस अध्ययन विधि
इकाई—12	समाजमितीय विधि
खण्ड—4	सांख्यिकीय प्राविधियाँ
इकाई—13	केन्द्रीय प्रक्षेपण की मापें एवं सह—सम्बन्धात्मक गुणक
इकाई—14	सांख्यिकीय अनुमान का आधार
इकाई—15	टी—परीक्षण तथा प्रसरण विश्लेषण
इकाई—16	नॉन पैरामैट्रिक सांख्यिकी—(Y2 Md Test, KS Test, KHi Test, मान विटनी, यू—टेस्ट)

Suggested Text Book Readings:
  Goode, William and Hatt, Methods in Social Research, 1952
  S Sarantakos, Social Research,1993, P. Sprdley, Participant Observation, 1980
  J Loffland and L H Loffland, Analyzing Social Setting, 1995

This course can be opted as an elective by the students of following subjects:

Suggested equivalent online courses (MOOCs) for credit transfer:

Electronic media and other digital components in the curriculum:
Choose any one or more than: (Electronic Media: Audio/Video Lectures, Online Counseling/Virtual Classes/E-Contents/e-SLM/OER/supplementary links for reference/ Video Conferencing/Radio broadcast/Web Conferencing/ Other electronic anddigital contents)

Name of electronic media	Year of incorporation

Note: School may revise list of electronic media and other digital components in thecurriculum time to time and shall be updated in website also

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 2
Subject: Geography		
Course Code: *MAGO-106N*	Course Title:Geography of Resources	

Course Objectives:

- It is an introductory course of resource geography which is aimed at providing knowledge about the concepts of resources, classification, models of natural resource processes, their use and misuse, conservation and management of resources for sustainable development.

- Which is aimed at providing knowledge about the concepts of resources?

- It's also give knowledge about natural resource processes.
- Conservation and management of resources for sustainable development.
- Learners will be able to read and interpret information on different types of physical features maps.

Course Outcomes:

CO1: Learners will become sensitized to concept of resources.

CO2 Learners will become sensitized the classification of resources.

CO3: Learn about use and misuse of resources.

CO4: Will learn conservation methods and techniques.

CO5: Showing an awareness and responsibility for the environment: Able to understanding of Unifying Principles

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36
(Syllabi framed block wise/unit wise)	

Unit – 1 Meaning, Definition and Concept of Resource
Unit – 2 Steps in Resource Development, Dynamic Relationship between Resources and Culture
Unit – 3 Nature and Evolution of Resource Geography, Approaches to Geography of Resources
Unit – 4 Classification of Resources : Natural Resources, Human Resources
Unit – 5 Principle of Resource Adequacy, Hypothesis of Resource Scarcity, The Limits of Growth
Unit – 6 Resources Ecosystems , Resources Conservation- Concept, Conservation Law
Unit – 7 Soil Resources – Classification, Distribution, General Principles of Conservation, Soil Conservation in India
Unit – 8 Biological Resources : Classification of Natural Vegetation, Distribution, Pulp and Paper Industry
Unit – 9 Mineral Resources- Iron Ore, Coal, Bauxite, Petroleum
Unit – 10 Deforestation, Biodiversity, Forest Conservation in India
Unit – 11 Water Resources – Water Availability and Uses Worldwide, Human Use of Water
Unit – 12 Fish Production and Distribution from Sea Water, Water Conservation
Unit – 13 Population Growth and Distribution in the World, Theories related to Population Growth.
Unit – 14 Population Resource Relationship, Over Population, Optimum Population
Unit – 15 Energy Crisis in the World and Alternative Energy Sources
Unit – 16 Resource Regions of the World – Delimitation, Anglo America, Temperate European, African-Asian Arid Region, Latin America, Monsoon Asia

Suggested Text Book Readings:
1. Singh, J. :SansadhanBhoogol, GyanodayaPrakashan, Gorakhpur.
2. Zimmermann, E.W. : Introduction to World Resources, Harper & Row, New York.
3. Simmans, I.G. : The Ecology of Natural Resources, Edward Arnold, London.
4. Smith, G.H. (ed.): Conservation of Natural Resources, John Wiley, New York.

This course can be opted as an elective by the Learners of following subjects: N.A.

Suggested equivalent online courses (MOOCs) for credit transfer: N.A.

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO) Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 2
Subject: Geography		
Course Code: *MAGO-107N*	Course Title: **Climatology**	

Course Objectives:
- The broad objective of the course is to introduce to the Learners the fundamentals of atmospheric phenomena, global climate systems and climate change.
- The atmosphere and climate are a critical part of the earth system, and climatic variability and change are central to the issue of current and future global environmental change.
- To grasp the techniques for modelling the climate, covering both theoretical and technical aspects.
- To understand the dynamics of the atmosphere, the ocean and the overall climatologically system.
- To be able to analyze and interpret climatic data.

Course Outcomes:
CO1: Understand the physical basis of the natural greenhouse effect, including the meaning of the term radioactive forcing.

CO2: Know something of the way various human activities are increasing emissions of the natural greenhouse gases, and are also contributing to sulphate aerosols in the troposphere.

CO3: Demonstrate an awareness of the difficulties involved in the detection of any unusual global warming signal" above the background noise of natural variability in the Earth's climate and of attributing (in whole or in part) any such signal to human activity.

CO4: Understand that although a growing scientific consensus has become established through the IPCC, the complexities and uncertainties of the science provide opportunity for climate sceptics to challenge the Panel's findings.

CO5: On successful completion of this course, Learners should be able to understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change.

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36
(Syllabi framed block wise/unit wise)	

Unit – 1 Meaning, Definition, Scope and Development of Climatology
Unit – 2 Composition and Structure of Atmosphere
Unit – 3 Insolation, Distribution of Insolation and factors affecting it
 Unit – 4 Temperature - Distribution of Temperature and factors affecting it, Inversion of Temperature
 Unit – 5 Atmospheric Pressure: Meaning, Atmospheric Pressure Belt, Atmospheric Pressure Gradient, fting of Air Pressure Belts,

 Unit – 6 Winds Belts,Latitudinal Displacement of Wind Belts, Tricellular Meridional Circulation
 Unit – 7 Monsoon:Definition, Burst of Monsoon, Major Monsoon Regions of the World
 Unit – 8 Origin of Indian Monsoon, Local Wind, Land and Sea Breezes, Mountain and Valley
        Breezes,Chinook, Foehn, Harmattan, Sirocco, Blizzard, Dust Devils, Loo, Santa Ana
 Unit – 9 Humidity: Meaning, Types and Importance, Condensation, Fog Types, Theory's of Precipitation,
      Forms of Precipitation, Types and Distribution ofRainfall,
Unit – 10 Air Masses, Meaning and Concept, Characteristic, Classification, Major Airmasses of the World
Unit – 11 Fronts and Their Types, Cyclones- Meaning and Definition, Temperate Cyclones – Origin and
 Types
 Unit – 12 Tropical Cyclones – Origin and Types, Structure, Anticyclone- Meaning, Types and
Characteristic
     Unit – 13 Regionalization of Climate on the World – Climate Regions Demarcated by Koppen and
Thornthwaite Classification Schemes.

Unit – 14 Types of Climate and Their Distribution, Tropical Rain Forest Climate, Tropical Monsoon
Climate, Mediterranean Climate West European Type
Unit – 15 Climate Change – Meaning and Concept, Climate Change; Factors and Effects

Unit – 16   Applied Climatology – Definition, Climate and Agricultural, Climate and Human Health, Climate
and Biosphere

Suggested Text Book Readings:

1. Lal, D.S. : Climatology, Sharda Pustak Bhawan, Allahabad
2. Critchfield, H.J. - General Climatology, Prentice Hall of India, New Delhi.
3. Singh, Savindra, Climatology, Pravalika Publication, Allahabad
4. Kendrew, W.G. : Climatology, Oxford Uni. Press.
5. Trewartha, G.T. : An Introduction to Climate, Mc Graw Hill Series in Geography

This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

**Note: School may revise list of electronic media and other digital components in the curriculum time to
  time and shall be updated in website also.**

Syllabus for [M.A. in Geography (MAGO) Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 2
Subject: Geography		
Course Code: *MAGO-108N*	Course Title: Oceanography	

Course Objectives:
1. To introduce the Learners to the basic principles and concepts in Oceanography.
2. To acquaint the Learners with the applications of Oceanography indifferent areas and environment.
3. To make the Learners aware of the Planet Earth and thereby to enrich the student's Knowledge.

Course Outcomes:
CO1: At the end of the semester Learners will different physical aspects of water as a natural resource.
CO2: They will learn some strategies of water resource management.
CO3: Learn Also about the conservation of water.
CO4: Learners can compute critical flow and critical depth in floodplain hydraulics.
CO5: Learners can delineate watersheds and stream polylines from digital elevation data.

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36

(Syllabi framed block wise/unit wise)

Unit – 1 Oceanography : Definition , Scope, Development of Oceanography
Unit - 2 Branches of Oceanography , Oceanography and its related subjects
Unit – 3 Bottom Reliefs of the Oceans
Unit – 4 Pacific Ocean, Shape and Extension, Relief of the Bottom, Island of the Pacific Ocean
Unit – 5 Indian Ocean- Shape and Extension, Bottom Relief of Indian Ocean, Costal sea
Unit – 6 Atlantic Ocean - Shape and Extension, Bottom Relief, Islands of the Atlantic Ocean
Unit – 7 Composition of Ocean Water, Distribution of Salinity
Unit – 8 Controlling Causes of Salinity, Vertical Distribution of Salinity of Ocean water
Unit – 9 Regional Distribution of Salinity- Pacific Ocean, Indian Ocean
Unit – 10 Origin of Ocean Currents, Reasons responsible for the origin of Currents
Unit – 11 Major Currents of Different Oceans
Unit – 12 Causes and Characteristics of Tides
Unit – 13 Types of Tides, Effects of Tides
Unit – 14 Theory's of Origin of Tides, Energy Generation from Tides
Unit – 15 Coral Reefs - Conditions Necessary for Formation , Types of Corals, Theory's of Origin of Coral Reefs, Coral Bleaching
Unit – 16 Marine Resources, Ocean Energy Resources, Sources of Marine Pollution

Suggested Text Book Readings:

1. Singh, Savindra: Oceanography, PrayagPustak Bhawan, Allahabad.
2. Lal, D.S. : Oceanography, Sharda Pustak Bhawan, Allahabad.
3. Gerald, S. : General Oceanography : An Introduction, New York
4. King, C.A ; Oceanography, C.E. Arnold, London

Syllabus for [M.A. in Geography (MAGO) Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 2
Subject: Geography		
Course Code: **MAGO-109N**	Course Title: Settlement Geography	

Course Objectives:
• Understand the scope and content of settlement geography
• Trace the development of settlement geography in relation to allied disciplines
• Understand the concept of settlement geography.
• Acquire knowledge about Rural settlements- Definition, nature and characteristics
• Analyze the morphology of rural settlements
• Learn the rural house types, census categories of rural settlements and idea of social segregation

Course Outcomes:

CO 1: Learn the census definition and categories of urban settlements

CO 2: Analyze the urban morphology models of Burgess, Hoyt, Harris and Ullman

CO 3: Differentiate between city-region and conurbation

CO 4: Analyze the functional classification of cities

CO 5: Develop the skill of mapping language distribution of India

CO 6: Learn to plot proportional squares to illustrate housing distribution

CO 7: Acquire the skill of identifying rural settlement types from topographical sheet

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36

Unit –**1** Definition, Development, Scope of Settlement Geography
Unit – **2** Classification of Settlements
Unit – **3** Distribution of Rural Settlements, Pattern
Unit – 4 Types of Rural Settlements
Unit – 5 Rural Service Center
Unit – 6 Rural Planning
Unit – 7 Rural Urban Settlement and Urban Geography
Unit – 8 Origin and Development of Towns
Unit – 9 Urban Morphology
Unit – 10 Functional Classification of Towns

Unit – 11 Urban Systems Analysis
Unit – 12 City Regions Interactive Influences
Unit – 13 Urban Problems
Unit – 14 Town Planning and Master Plan
Unit- 15 Rural Panning

Suggested Text Book Readings:
1. Tiwari ,R.C, Settlement Geography, Pravalika Publication Prayagraj
2. Lal, H. – City and Urban Fringe : A Case of Bareilly.
3. Bansal, S.C. – NagreeyBhoogol, Varanasi.
4. Singh, O.P. - NagreeyBhoogol, Lucknow.
5. Singh, U. - NagreeyBhoogol, Allahabad

This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 1	Semester: 2
Subject: Geography		
Course Code: *MAGO-110N*	Course Title: **Dissertation**	
Course Objectives: ➢ Dissertation is an important segment of concerned subject. ➢ Learners will have to select any topic of their interest field for dissertation work related to Geography ➢ They will submit their Dissertations on the topic related to Geography		
Course Outcomes: ➢ Learners will know the skill of Dissertation writing ➢ They will understand the practical knowledge of their concerned subject		
After completing dissertation learners will submit their dissertation in the School of Social Sciences and also concerned on Regional centres for evaluation and award of marks. Evaluation and award of mark will be internal/external		
Credits: 4	**Type of Course:** Core	
Category of Course	value-added / employability	
Max. Marks: 100	Min. Passing Marks: 36	

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 3
Subject: MAGO		
Course Code: **MAGO-111N**	Course Title: Geography of Population	

Course Objectives:
1. This course introduces the spatial distribution of population with causative factor.
2. It also deals with various theories and concepts related with population
3. Study of population is an essential component in planning of various human related issues.
4. It also helpful in knowing various kinds of demographic problems,
5. Population Geography also deals in population policies in developed & developing countries.

Course Outcomes:
CO1: Understand the distribution of population.
CO2: Population distribution and its problems.
CO3: Population dynamics
CO4: Understand population policies & its importance.
CO5: Learners aware about the population policies.

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability

Max. Marks: 100	Min. Passing Marks: 36

(Syllabi framed block wise/unit wise)

Unit – 1 Population Studies in Geography, Definition and Scope of Population Geography

Unit – 2 Approaches to Population Geography, Development of Population Geography

Unit – 3 Population Geography and Other Social Sciences, Population Geography in India

Unit – 4 Factors Affecting the Distribution and Density of Population

Unit – 5 World Distribution of Population - Areas with High population, Areas with Medium population, Area with Low and Sparse Population, Unpopulated Area

Unit – 6 Population Density - Types, World Distribution of Population Density

Unit – 7 Population Growth in the World, Population Growth in India.

Unit – 8 Meaning of Fertility, Determinants of Fertility

Unit – 9 Meaning of Mortality, Causes of Variation in Mortality

Unit – 10 Methods of Calculation of Sex Ratio, Types of Sex Ratio

Unit – 11 `Meaning of Literacy, Factor Affecting Causes of Literacy

Unit – 12 Literacy Pattern in the World, Literacy in India, Difference between Male and Female Literacy

Unit – 13 Meaning of Urbanization, Effects of Urbanization, Urbanization in India.
Unit – 14 Population Theory of Malthus, Neo- Malthusianism, Optimum Population Theory
Unit – 15 Problems Arising out of Population, Population Problems in India
Unit – 16 Meaning, Need and Objectives of Population Policy, Population Policy of India, New Population Policy

Suggested Text Book Readings:
1. Chandna, R.C. : A Geography of Population (Hindi & English) Kalyani, New Delhi.
2. Trewartha, G.T. : A Geography of Population.
3. Zelinsky, W. (ed.) :Geography and a Growing World.
4. Yadav, Hira Lal :JansankhyaBhoogol, New Delhi

This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 3
Subject: Geography		
Course Code: **MAGO-112N**	Course Title:Foundations of Geographical Thought	

Course Objectives:
- Main objectives of this course are to acquaint the Learners with the philosophy.
- Also teach the Methodology and historical development of geography as a professional field.
- The idea is to address the spirit and purpose of the changing geographies and to what we as geographers contribute towards knowledge production.
- The course aims at developing critical thinking and analytical approaches.
- Learners will acquire an understanding of and appreciation for the relationship between geography and culture.

Course Outcomes:

CO1: This should enable the student to critically look at the contents of other courses at Postgraduate level as logically integrated with the broad currents of thought the subject has witnessed in the distant and recent past

CO2: Learners will demonstrate an advanced understanding of the historical development of geographical thought.

CO3: They can understand the major current philosophical and theoretical debates in geography.

CO4: Learners will demonstrate an understanding of current research within the breadth of geography, as well as more in depth knowledge of research in their specialty areas.

CO5: Learners will develop a solid understanding of the concepts of "space," "place" and "region" and their importance in explaining world affairs.

Credits:4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36

(Syllabi framed block wise/unit wise)

Unit – 1 Tendencies of Geographical Thought and Ancient Period
Unit – 2 Romantic Period
Unit – 3 The Dualistic Age
Unit – 4 Determinism and Possibilism, Recent Trends.
Unit – 5 Changing Paradigm of Geography
Unit – 6 Geography as Geophysics
Unit – 7 Geography as a Nature and Human Interrelationships
Unit – 8 Spatial Organization, Concept of Socialist Geography ,Eco-development

Unit – 9 The Concept of Earth Surface, Concept of Landscape
Unit – 10 Regional And Cultural Landscape
Unit – 11 Models in Geography, Quantitative Revolution
Unit – 12 Welfare Geography, Idealism in Geography
Unit – 13 Positivism in Geography, Humanism, Behaviouralism
Unit – 14 Feminist and Gender Geography, Functionalism
Unit – 15 Post Modernism, Progress of Geography in India
Unit – 16 Concept of System, Types of System, System Analysis in Geography

Suggested Text Book Readings:

1.   Singh, Jagdish :Bhaugolik Chintan KeMooladhar, GyanodayaPrakashan, Gorakhpur.
2.   Dikshit, S.K. :Bhaugolik Chintan Ka UdbhavAvam Vikas, Vishwavidyalaya Prakashan, Varansi
3.   Dickinson, R.E. : The Makers of Modern Geography, Routledge and Kegon Paul, London.
4.   Harvey, D. : Explanation in Geography, Edward Arnold, London.
5.   Husain, Majid : Evolution of Geographical Thought, Rawat Publications, Jaipur.
6.   Hartshorne, R. (1959) : Perspectives on the Nature of Geography, John Murray, London

This course can be opted as an elective by the Learners of following subjects: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 3
Subject: Geography		
Course Code: ***MAGO-113N***	Course Title: **Environment Management and Eco-development**	
Course Objectives: 1. Learners will understand the concept of place and how it is connected to people's sense of belonging to the physical environment, landscape and culture. 2. Learners will understand the fundamental concepts of spatial interaction and diffusion, which explain how human activities are influenced by the concept of distance. Learners will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards. 3. Learners will be able to read and interpret information on different types of physical features maps. 4. Learners will learn how human, physical and environmental components of the world interact.		
Course Outcomes: CO1: Describing human-environment, and nature-society interactions as well as global human and environmental issues. CO2: Identifying and explaining the planets human and physical characteristics and processes, from global to local scales. CO3: Evaluating the impacts of human activities on natural environments. CO4: Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues. CO5: Showing an awareness and responsibility for the environment		
Credits: 4	**Type of Course:** Core	
Category of Course	Value-added / employability	
Max. Marks: 100	Min. Passing Marks: 36	
(Syllabi framed block wise/unit wise)		
Unit – 1 Environment, Biosphere and Ecosystem **Unit – 2** Bio-geochemical Cycles , Carbon Cycle, Nitrogen Cycle, Water Cycle, Oxygen Cycle **Unit – 3** Stability of Ecosystem **Unit – 4** Instability of Ecosystem, Causes of Environmental Crisis **Unit – 5** Economic Development and Environmental Crisis **Unit – 6** Population and Environmental Degradation , Poverty and Environmental Degradation **Unit – 7** Expansion in Agriculture Sector, Green Revolution and Environmental Degradation **Unit – 8** Vegetation Community, Vegetation Succession **Unit – 9** Major Ecosystems of the World, Process of Deforestation, Its Causes and Consequences **it – 10** Soil Elements, Regional Classification of Soils **Unit – 11** Productivity of Soil and its Loss, Soil Erosion and Desertification **Unit – 12** Water Pollution: Concept, Problems and Remedies of Water Pollution, Ganga Purification Project		

it – **13** Ground Water Degradation, Causes and Consequences of Pollution, Water Crisis in India

it – **14** Concept of Air Pollution, Causes of Air Pollution, Noise Pollution
Unit – 15 Energy Crisis in India, Solar Energy, Wind Energy and Bio-gas
Unit – 16 Environment Management and Eco-development: Concepts, Principles, Approaches to Environment Management

Suggested Text Book Readings:
1.   Singh, J.: Environment Management and Eco-development, GyanodayaPrakashan, Gorakhpur
2.   Singh, Savindra : Environmental Geography, PrayagPustak Bhawan, Allahabad.
3.   Odum, E.P. (1971): Fundamentals of Ecology, W.B. Sounders Co. Philadelphia.
4.   Joy, T. (1977): Bio-geography: A Study of Plants in the Ecosphere, Oliver & Boyd, Edinburgh

Suggested online links:
  1. Studies, ErachBharucha, https://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf
  2. Environmental Pollution: Lesson 10.pmd (shivajicollege.ac.in)

This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 3
Subject: Geography		
Course Code: *MAGO-114N*	Course Title: **Disaster Management**	
Course Objectives: • Understand the nature of hazards and disasters. • Assess risk, perception and vulnerability with respect to hazards. • Prepare hazard zonation maps. • Assessing the nature, impact and management of major natural and man-made hazards affecting the Indian subcontinent.		
Course Outcomes: CO 1: Analysis of trends of temperatures CO 2Analyze the rainfall variability of about three decades of climatic regions of India. CO 3: Understand Climate change vulnerability assessment and adaptive strategies with particular reference to South Asia CO 4: Analyze Role of urban local bodies, panchayats and educational institutions on climate change mitigation: Awareness and action programmes. CO 5: Develop concepts and skills regarding mitigation measures concerning climatic hazards		
Credits: 4	**Type of Course:** Core	
Category of Course	value-added / employability	
Max. Marks: 100	Min. Passing Marks: 36	
(Syllabi framed block wise/unit wise)		
Unit – 1 Concept of Disaster and Hazards, Types, Element and Aspects of Management **Unit – 2** Methods and Approaches of Disaster Management **Unit – 3** Volcanic Disaster and Management **Unit – 4** Earthquake Disaster and Management **Unit – 5** Tsunami Disaster and Management **Unit – 6** LandslideDisaster and Management **Unit – 7** Cyclone Disaster and Management **Unit – 8** Flood Disaster and Management **Unit – 9** Drought and Famine Disaster **Unit – 10** Weather RelatedDisaster and Management **Unit – 11** Biological and Health Disaster **Unit – 12** Man-made Management **Unit – 13** Global Warming **Unit – 14** Climate Change **Unit – 15** Disaster and Management in India		

Unit – 16 Environment Laws in India**,** Institutional Organization and Policy Framework
Suggested Text Book Readings: 1. Singh, S. : Disaster Management, Pravalika Publication, Allahabad. 2. Singh, J. : Environment and Eco-development, GynodayaPrakashan, Gorakhpur 3. Pathak, G. : Natural Disasters and Their Management, Rajesh Publications, New Delhi
This course can be opted as an elective by the Learners of following subjects: NA Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 3
Subject: Geography		
Course Code:*MAGO-115N*	Course Title: **Dissertation**	
Course Objectives: ➢ Dissertation is an important segment of concerned subject. ➢ Learners will have to select any topic of their interest field for dissertation work related to Geography ➢ They will submit their Dissertations on the topic related to Geography		
Course Outcomes: ➢ Learners will know the skill of Dissertation writing ➢ They will understand the practical knowledge of their concerned subject		
➢ After completing dissertation learners will submit their dissertation in the School of Social Sciences and also concerned on Regional centres for evaluation and award of marks. ➢ Evaluation and award of mark will be internal/external		
Credits: 4	**Type of Course:** Core	
	value-added / employability	
Max. Marks: 100	Min. Passing Marks: 36	

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 4
Subject: Geography		
Course Code: ***MAGO-116N***	Course Title: **Cartography and statistical methods**	

Course Objectives:

- The objective of this course is to provide an understanding for the graduate business student on statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, multiple regression

- How to calculate and apply measures of location and measures of dispersion -- grouped and ungrouped data cases.

- How to apply discrete and continuous probability distributions to various business problems.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.

- Compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis, for forecasting.

Course Outcomes:

CO1: Keeping in view the nature of data and purpose of study, Learners would be able to make a rational choice amongst listed various statistical methods.
CO2: Demonstrate understanding of basic concepts of probability and statistics embedded in their courses.
CO3: Show proficiency in basic statistical skills embedded in their courses.
CO4: Learners shall know how to organize, manage, and present data.
CO5: Learners shall know how to organize, manage, and present data.
CO6: Demonstrate ability to write reports of the results of statistical analyses giving summaries and conclusions using nontechnical language.

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36
(Syllabi framed block wise/unit wise)	

Unit – 1 Definition, History and Need of Map

Unit – 2 Map Projection – Definition and Classification

Unit – 3 Conical Projection – Simple Conical Projection with One Standard Parallel, Conical Projection with Two Standard Parallel, Bonne's Projection- Features, Construction and Uses

Unit – 4 Cylindrical Projection: Merits ,Demerits and Construction

Unit – 5 Mercator's Projection, Gall's Projection

Unit – 6 Polar Projection - Orthographic Polar Projection, Stereographic Polar Zenithal Projection, Selection of Map Projections

Unit – 7 Need of Geological Map, Beds and Bedding Plane, Dip, Strike Line

Unit – 8 Geological Maps of Inclined, Geological Maps of Unconformable

Unit – 9 Profile and description of geological map with folded, inclined bed

Unit – 10 Statistics in Geography, Usefulness of Statistics in Geography, Types of Data.

Unit – 11 Arithmetic Mean, Median, Mode

Unit – 12 Correlation- Types, calculation of correlation by Spearman's and

Unit – 13 Lorenz Curve, Scatter Diagrams, Hypsometric curves

Unit – 14 Remote Sensing Techniques- Meaning, History, Efforts and Applications of Remote Sensing Techniques in India

Unit – 15 Geographical Information System- Definition, Objectives and Functions

Unit – 16 Profiles – Types and Characteristics Karl Pearson's methods

Suggested Text Book Readings:

1. Singh, J. :BhaumikiyaManchitro Ki Ruprekha, Vasundhara Prakashan, Gorakhpur.
2. Singh, R.L. :Element of Practical Geography, Kalyani Publication, New Delhi
3. Robinson,A.H.: Elements of Cartography, New York.
4. Tiwari, R.C. :Abhinav PrayogatmakBhoogol, Pravalika Publication, Prayagraj

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This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 4
Subject: Geography		
Course Code: *MAGO-117N*	Course Title: **Transport Geography**	
Course Objectives: • The objective of the course is to appraise the Learners about the geographic relevance of transportation. • About the various models of global relevance and modal characteristics of modes. • Structural analysis of transport network (accessibility and connectivity). • Development of Road Transport in India and Special Reference to Haryana. • Manually uses of geographical models.		
Course Outcomes: CO1: Learners shall learn about the significance of transport in multifaceted development. CO2: Significance of various models. CO3: Role of theories related to transport network. CO4: About the Accessibility, connectivity and policy interventions. CO5: They will be applying the various approaches of transport in daily life.		
Credits: 4	**Type of Course:** Core	
Category of Course	value-added / employability	
Max. Marks: 100	Min. Passing Marks: 36	
(Syllabi framed block wise/unit wise)		
U**nit – 1** Definition and Scope of Transport Geography **Unit – 2** Spatial Interaction – Complementarity, Lack of Intervening Opportunity, Transferability **Unit – 3** Gradual Development of Means of Transport, Modes and Means of Transport, AncientPeriod, Medieval Period and Modern Period **Unit – 4** Means and Modes of Transport, Relative Importance of Means of Transport **Unit – 5** Analysis of Transport Network - Traditional and Modern Methods **Unit – 6** Graph Theory, Planar and Non- planar Graphs, Graph Index **Unit – 7** Accessibility- Definition ,Types and Analysis **Unit – 8** Connectivity, Degree of Circuity, Detour Index **Unit – 9** Rail Transport – Inequalities and problems in Distribution and Development		

Unit – 10 Road Transport- Inequalities and problems in Distribution and Development
Unit – 11 Water Transport - Existing Patterns, Problems and Prospects
Unit – 12 Present Patterns ,Problems and Potentials of Air Transport
Unit – 13 Role of Transport in Regional Development in India
Unit – 14 Transport Planning Concept, Methodology
Unit – 15 Transport Policy of India.

Reference Books –

1. Singh, J. (1969) Transport Geography of South Bihar, N.G.S.I., B.H.U.
2. Singh, K.N. (1990) Transport Network in Rural Development in Eastern U.P., I.R.E.D., Gorakhpur.
3. Singh, K.N. (2005) ParivahanBhoogol, GyanodayaPrakashan, Gorakhpur
4. Robinson, H. &Banford, C. (1978) Geography of Transport, Mc Donald & Evans, London.

Suggested equivalent online courses (MOOCs) for credit transfer: NA

This course can be opted as an elective by the Learners of following subjects: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 4
Subject: MAGO		
Course Code: *MAGO-118N*	Course Title: **Political Geography**	

Course Objectives:
- A capacity to construct and to evaluate arguments in light of geographical evidence.
- An understanding of continuity and change in human activity across the globe.
- Awareness of the influence of varied and complex factors on human activity across space.
- An ability to examine a variety of sources critically and to analyze them in terms of their contexts.
- The capacity to evaluate human activity in light of geographical evidence.
- Awareness of diversity and complexity of human activity as it relates to space and place.

Course Outcomes:

CO1: An understanding of continuity and change in human activity across the globe.

CO2: Awareness of the influence of varied and complex factors on human activity across space.

CO3: A capacity to construct and to evaluate arguments in light of geographical evidence.

CO4: An ability to examine a variety of sources critically and to analyze them in terms of their contexts.

Credits: 4	**Type of Course:** Core
Category of Course	value-added / employability
Max. Marks: 100	Min. Passing Marks: 36

(Syllabi should be framed block wise/unit wise; No of blocks and units may change)

Unit – 1 Political Geography- Definition, Scope
Unit – 2 State - Nation Concept
Unit – 3 Political Geography of Frontiers and Borderers
Unit – 4 Structure of the State,
Unit – 5 Base Areas and Capitals
Unit – 6 Geopolitical Theory
Unit – 7 Concept and Geographical Basis of Federalism
Unit – 8 Geopolitical Problems of India
Unit – 9 Inter- State Border Disputes
Unit – 10 Meaning, Objectives and Relevance of Electoral Geography
Unit – 11 Geographical Study of Voting Behaviour
Unit – 12 Determination of Constituencies
Unit – 13 World : Political and Environmental Problems
Unit – 14 Major Problem Areas of the World
Unit – 15 Geopolitical Significance of Indian Ocean

Suggested Text Book Readings:
1. Chauhan, P.R.: RajnitikBhoogol, Vasundhara Prakashan, Gorakhpur.
2. Dikshit, R.D. : Political Geography : A Contemporary Perspective, Tata Mc Graw Hill, New Delhi
3. Adhikari, S.: Political Geography of India, Sharada Pustak Bhawan, Allahabad
4. Tiwari, R.C.: Political Geography, PravalikaPublication,Allhabad
5. Dikshit, S.K.: RajnitikBhoogolAvamBhurajniti, Vishwavidyalaya Prakashan, Varanasi.

This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree		
Programme: MAGO	Year: 2	Semester: 4
Subject: Geography		
Course Code:*MAGO-119N*	Course Title: **Models, theory and law in Human Geography**	

Course Objectives:

- Gain knowledge about major themes of human Geography.

- Acquire knowledge on the history and evolution of humans.

- Understand the approaches and processes of Human Geography as well as the diverse patterns of habitat and adaptations.

- Develop an idea about space and society

Course Outcomes:

CO1: to understand environmental impact on society.

CO2: to understand population, and settlement pattern on the earth surface.

CO3: to provide systematic knowledge about environment and human relationship.

CO4: to make learners aware about the changing landscape of the earth surface.

CO5: also aims to provide knowledge about tribes and different society

Credits: 4	**Type of Course:** Core
Category of Course	Value-added / employability
Max. Marks: 100	Min. Passing Marks: 36

(Syllabi framed block wise/unit wise)

Unit – 1 Models in Human Geography
Unit – 2 System Analysis in Human Geography
Unit – 3 Central Place Theory of Christaller's, Central Place Theory of Losch
Unit – 4 Zipf 's Rank-Size Rule , Concept of Primate City
Unit – 5 International Borders and Rules of Frontier Areas
Unit – 6 Spikeman's Rimland Theory, Mackinder's Heartland Theory
Unit – 7 Rostow's Theory of Economic Growth, Smith's Theory of Spatial Limitation

Unit – 8 Industrial Location Theory of Isard and Hoover

Unit – 9 Industrial Location Theory of Losh and Weber

Unit – 10 Van Thunen's and Other Agricultural Location Theories

Unit – 11 Center-periphery Theory of Friedmann, Growth Pole Theory of Perroux and Boudeville

Unit – 12 Theories of Urban Morphology

Unit – 13 Population Theories of Malthus and Marx

Unit – 14 Demographic Transition Theory

Unit – 15 Federalism in Geography

Suggested Text Book Readings:
1.   Husain, M ,Bhaugolic Models, Tata McGraw Hill, New Delhi
2.   Maurya, S.D. , Manav Bhugol me Modal SidhantavamNiyam, Pravalika, Publication, Allhabad

This course can be opted as an elective by the Learners of following subjects: NA

Suggested equivalent online courses (MOOCs) for credit transfer: NA

Note: School may revise list of electronic media and other digital components in the curriculum time to time and shall be updated in website also.

Syllabus for [M.A. in Geography (MAGO)]: Subject: [Geography]

Course prerequisites: Bachelor degree in any subject OR Any 4 year Graduate Degree.		
Programme: MAGO	Year: 2	Semester: 4
Subject: Geography		
Course Code: **MAGO-120N**	Course Title: **Viva Voce**	

Course Objectives:
    1.To be evaluated through viva -voce by concerned subject expert
    2.To assess the learners ability to communicate with other person .
    3.To identify and analyse the learners presence of mind		

Course Outcomes: 1.Learner will familiar with various aspects of the course and personal skills. 2.They will be familiar with their strength and weakness .		
Credits:4	**Type of Course:** Core	
Category of Course	value-added / employability/ skill development/	
Max. Marks: 100	Min. Passing Marks: 36	