Annexure-IV

(19)

DEPARTMENT OF GEOGRAPHY
MAHARSHI DAYANAND UNIVERSITY ROHTAK

Geog./23/842-851
Dated: 21.09.2023

NOTICE

A meeting of PG Board of Studies shall be held on 30.09.2023 at 11.00 a.m. in the office of the HOD to discuss the following agenda:

1. To consider and approve the panel of examiners for evaluation of Ph.D. thesis of Ms. Preeti Kumari, Ph.D scholar under the supervision of Prof. Parmod Kumar.

2. To consider and approve the panel of examiners for evaluation of Ph.D. thesis of Ms. Mahima Sangwan, Ph.D scholar under the supervision of Prof. Mehtab Singh.

3. To discuss and approve the syllabi of Minor Course/Multidisciplinary course as per ordinance sent by center of Curriculum Design and Development M.D.University Rohtak.

4. Any other matter with the permission of the chair.

All the members of PG Board of Studies in Geography are requested to attend the meeting as per schedule mentioned above.

Copy of the above is forwarded to the following for information and necessary action.

Sr. No.	Name of the Members of PGBOS in Geography	
1.	Dr. Binu Sangwan, Department of Geog., M.D. University, Rohtak	Member, Ex officio
2.	Dr. Sachinder Singh, Department of Geog., M.D. University, Rohtak	Member, Ex officio
3.	Dr. Renu Arya, Department of Geog., M.D. University, Rohtak	Member, Ex officio
4.	Dr. Pardeep Kumar, Department of Geog., M.D. University, Rohtak	Member
5.	Dr. Dalbir Singh, Associate Professor, Pt. Neki Ram Sharma Govt. College, Rohtak.	Member
6.	Dr. Satvir Singh, Associate Professor, Pt. Neki Ram Sharma Govt. College, Rohtak.	Member
7.	Prof. D.D. Sharma, Department of Geography, H.P. University, Shimla.	Outside Expert - Email
8.	Dean ,Faculty of Social Sciences M.D. University, Rohtak	E-mail
9.	D.R.(R&S) M.D. University, Rohtak	E-mail
10.	Incharge, Academic branch, M.D. University, Rohtak	E-mail

22.09.2023

Chairman
PGBOS in Geography

Head
Department of Geography
M.D. University Rohtak

(20)

Name of the Department/Centre/Institute: Geography
Name of the Minor Course: Fundamentals of Physical Geography
Offered in Semester: Ist

Course Code		**Course Credits**	4 (L: 3 T: 1)
Max. Marks	100{External (term-end exam) – 70} (Internal – 30)	**Time of end term examination**	3 Hours

Note: Examiner will set nine questions in total. Answer to question no. 1 shall be compulsory comprising questions from all four units and remaining eight questions shall be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

Course Objectives:
To describe:
1. basics about solar system, earth and its related characteristics.
2. basic concept of latitude-longitude.
3. interior of earth and types of landforms.
4. weather, climate and global environmental issues.
5. oceans and their basic characteristics.

Course Outcomes:
Students would be able tounderstand:
1. the basic concept of physical geography.
2. the orders of landforms.
3. the global atmospheric circulation and global environmental issues.
4. oceans as a resource in times to come.
5. the relevance of physical geography.

Unit - I

Solar system, solar and lunar eclipse; Earth-shape, movements, formation of day/night and seasons; Latitude-longitude.

Unit – II

Interior of earth; Volcanism and earthquakes, Weathering and erosion; Brief introduction to first and second order landforms.

Unit – III

Weather and climate: Factors effecting distribution of climate; Composition and structure of atmosphere; Introduction to Monsoon; Global warming.

Unit – IV

Relief of oceans; Oceanic salinity; Oceanic currents of Atlantic, Pacific and Indian Ocean.

Suggested Readings:

1. Getis Arthur and Bjelland Mark and Getis Victoria, 2014, *Introduction to Geography*, McGraw Hill Education, Noida, UP.
2. Lal, D.S. 1993, *Climatology*, Chaitanya Publishing House, Allahabad
3. Leong, Goh Cheng, 2015, *Certificate Physical and Human Geography*, Oxford University Press, New Delhi.
4. Singh, Savinder, 2006, *Physical Geography*, Pravalika Publications, Allahabad.
5. Strahler Alan and Strahler Arthur, 2005, *Introducing Physical Geography*, John Wiley & Sons, Washington.

Sachinder 30/9/23 Dkumar 30.09.23 30.9.23 Mehtab Singh 30.9.2023
Satma 30/9/23

Name of the Department/Centre/Institute: Geography
Name of the Minor Course: Fundamentals of Human Geography
Offered in Semester: 2nd

Course Code		**Course Credits**	4 (L: 3 T: 1)
Max. Marks	100{External (term-end exam) – 70} (Internal – 30)	**Time of end term examination**	3 Hours

Note: Examiner will set nine questions in total. Answer to question no. 1 shall be compulsory comprising questions from all four units and remaining eight questions shall be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

Course Objectives:
To describe:

1. the changing nature of human geography.
2. growth and distribution of population in world.
3. the linkages between birth rate, death rate and population growth.
4. the space-society linkages in terms of culture, religion and languages.
5. the types of rural and urban settlements and population-resource relationship.

Course Outcomes:
Students would be able to:

1. keep up to date with theoretical aspects and conceptual base of human geography.
2. understand the population dynamics at world level.
3. know about the space-society linkages in term of race, religion, language and settlements.
4. understand the types of rural settlements and concept of urbanization.
5. understand the linkages between population and resources.

Unit - I

Nature and scope of human geography; Basic concepts of human geography; Welfare human geography; Human geography and socio- environmental problems.

Unit – II

Population: Population growth and distribution; Age and sex composition; Literacy; Demography transition theory.

Unit – III

Space and Society: The evolution of culture; Religion of the world: Christianity, Islam, Hinduism, Buddhism; Definition of language: spatial distribution of languages with special reference to India.

Unit – IV

Settlements: Types of rural settlements; Classification of urban settlements; Trends and patterns of urbanization; Population resource relationship: Malthus and Ricardo.

Suggested Readings:

1. Blij, H.J. de and Alexander B. Murphy 1999, *Human Geography*, John Wiley, New York.
2. Chandna, R.C. 2010, *Population Geography*, Kalyani Publisher, Ludhiana.
3. Daniel, P.A. and Hopkinson, M.F.1989, *The Geography of Settlement*, Oliver & Boyd, London.
4. Hussain Majid 2018, *Human Geography*, Rawat Publications, Jaipur.
5. Leong G.C. and Morgan Gillian C. 1973, *Human and Economic Geography*, Oxford University Press, Oxford.

Satinder 30/9/23 Kumar 30.09.23 30.9.23 30.9.2023

Name of the Department/Centre/Institute: Geography
Name of the Minor Course: Fundamentals of Environmental Geography
Offered in Semester: 3rd

Course Code		**Course Credits**	4 (L: 3 T: 1)
Max. Marks	100{External (term-end exam) – 70} (Internal – 30)	**Time of end term examination**	3 Hours

Note: Examiner will set nine questions in total. Answer to question no. 1 shall be compulsory comprising questions from all four units and remaining eight questions shall be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

Course Objectives:
To describe:

1. the basic concept of environmental geography.
2. the structure and types of environment.
3. the basic concepts of ecosystem, ecological production, ecological pyramid.
4. the types of environmental pollution and environmental degradation.
5. the concept, methods and approaches related to environmental management.

Course Outcomes:
Students would be able to:

1. know about key concepts of environmental geography.
2. understand the basic concepts and types of environment.
3. enhance their knowledge about major threats of environment.
4. understand the role of government in disaster management.
5. apply this knowledge in various fields of life.

Unit - I

Environmental Geography: Nature, concepts and scope of Environmental Geography; Structure and types of Environment.

Unit – II

Ecosystem: Meaning, concepts, types and components of Eco-System; Ecological production: Trophic structure; Ecological pyramid; Energy flow and biogeochemical cycle

Unit – III

Environmental Pollution: Meaning, types, sources, causes and impacts; Air, Water and Land pollution; Environmental degradation – nature, process, types and causes.

Unit – IV

Environmental Management: Concept, methods and approaches; Conservation of natural resources; Disaster management: Concept, methods and approaches; National policy on disaster management in India.

Suggested Readings:

1. Goudie, Andrew. 1984.*The Nature of the Environment,* Oxford Katerpring Co. Ltd.
2. Saxena, H.M. 1994. *Prayavaranevn Paristhitiki Bhugool*, Rajasthan Hindi Granth Academy, Jaipur.
3. Singh, Savinder. 1991. *Environmental Geography,* Prayag Pustak Bhawan, Allahabad.
4. Singh, R.B. (ed.). 1989. *Environmental Geography,* Heritage Publishers, New Delhi.
5. Strahler, A.H. and Strahler A.N. 1977. *Geography and Mans' Environment,* John Wiley, New York.

Jashinder 30/9/23
Kumar 30.09.23
30.9.23
Satwi 30/9/23
30.9.23

(23)

Name of the Department/Centre/Institute: Geography
Name of the Minor Course: Geography of India and Haryana
Offered in Semester: 7th

Course Code		**Course Credits**	4 (L: 3 T: 1)
Max. Marks	100{External (term-end exam) – 70} (Internal – 30)	**Time of end term examination**	3 Hours

Note: Examiner will set nine questions in total. Answer to question no. 1 shall be compulsory comprising questions from all four units and remaining eight questions shall be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

Course Objectives:
To describe:

1. the evolution of administrative map of India and Haryana.
2. the physiographic divisions of India and Haryana.
3. the distribution of population in India and Haryana.
4. characteristics of agriculture in India and Haryana.
5. contemporary socio-ecological issues in India and Haryana.

Course Outcomes:
Students would be able to:

1. understand the geographic aspects of India and Haryana.
2. understand the evolution of administrative map of India and Haryana.
3. understand demographic aspects of India and Haryana.
4. get familiarized with the socio-economic aspects of India and Haryana.
5. have knowledge about the contemporary issues of India and Haryana.

Unit - I

Evolution of administrative map of India; Physiographic divisions of India; Drainage systems; Soil types.

Unit – II

Distribution and density of population; Sex-ratio; Literacy rate; Characteristics of Indian agriculture; Major industrial regions of India.

Unit – III

Evolution of state of Haryana; Physiographic divisions of Haryana; Soil types; Soil degradation and conservation in Haryana.

Unit – IV

Growth of population in Haryana; Distribution and density of population in Haryana; Agricultural development and green revolution in Haryana; Modes of irrigation in Haryana; Industrial development in Haryana.

Suggested Readings:

1. Chandna, R.C. (2022) *Geography of Population*, Part 1&2, Kalyani Publishers, Ludhiana.
2. Gautam A, (2009), *Advance Geography of India*, Sharda Pustak Bhwan, Allhabad.
3. Rajkumar and Mehtab Singh, 2012. Industrial Development in Haryana: Its Nature and Magnitude, *Research Journal (Art), M.D. University, Rohtak*, Vol-II, No.2. pp 133-140
4. Singh Jasbir (1976), *An Agriculture Geography of Haryana*, Vishal Publication, Kurukshetra.
5. Singh Surender and Jitender Saroha (2019, Geography of India, G.K. Publications (P)) Ltd., New Delhi.

Sachinder 30/9/23 Satum 30/9/23 D. Kumar 30.09.23 30.9.23 Mehtab Singh 30.9.2023

(24)

Name of the Department/Centre/Institute: Geography
Name of the Minor Course: Fundamentals of Geo-informatics
Offered in Semester: 8th

Course Code		**Course Credits**	4 (L: 3 T: 1)
Max. Marks	100{External (term-end exam) – 70} (Internal – 30)	**Time of end term examination**	3 Hours

Note: Examiner will set nine questions in total. Answer to question no. 1 shall be compulsory comprising questions from all four units and remaining eight questions shall be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

Course Objectives:
This course is designed to:
1. impart the basic knowledge of geospatial technologies.
2. give an exposure on the concepts of aerial photography and remote sensing.
3. impart knowledge about fundamental concepts of GIS and GNSS.
4. develop geographical thinking through technology.
5. built-up the skills on the utilization of geospatial technologies for addressing the real-world problems.

Course Outcomes:
Students would be able to:
1. know about various aspects of geoinformatics.
2. understand the basic concept of aerial photography, remote sensing, GIS and GNSS.
3. know the applications of remote sensing and GIS.
4. enhance their knowledge about modern technologies.
5. apply this knowledge in various fields of life.

Unit - I

Aerial Photography: History and development; Classifications of aerial photographs; Availability and procurement of aerial photographs in India; Elements of image interpretation.

Unit – II

Remote Sensing: Electromagnetic radiation; Stages of remote sensing; Energy interactions in atmosphere; Energy interactions with earth surface features; Types of remote sensing: active and passive.

Unit – III

Geographical Information System: Basic concept and history; Component and functions of GIS; Data models: raster & vector; Errors in GIS: types and sources; Applications of GIS.

Unit – IV

Global Navigation Satellite System: Basic concept and history; Segments; Reference system: coordinate and time system; Types and sources of errors; Surveying and mapping with GPS.

Suggested Readings:

1. Ahmed, El, Rabbany. 2002. *Introduction to GPS: The Global Positioning System,* Artech House, Boston, London
2. Chandra, A.M. and S.K. Ghosh. 2006. *Remote Sensing and Geographical Information System,*Narosa Publishing Houose, New Delhi.
3. Chaunial, D.D. 2016. *Principles of Remote Sensing and Geographical Information System (In*

Jachinder 30/9/23 D Kumar 30.09.23 30.9.23 Mohit Singh 30.9.2023
Satrun 30/9/23

Hindi), Sharda Pustak Bhawan, Allahabad.

4. Gopi, S, R. Sathikumar, N. Madhu. 2018. *Advanced Surveying: Total Station, GPS, GIS and Remote Sensing,* Pearson India Education Services Pvt. Ltd.
5. Reddy, Anji, M.2001. *Textbook of Remote Sensing and Geographical Information Systems,* BSP B.S. Publications, Hyderabad.

Jachinder 30/9/23

Kumar 30.09.23

30.9.23

Sahu 30/9/23

Department of Geography
M.D. U...

30.9.2023

Name of the Department/Centre/Institute: Geography
Name of the Multidisciplinary Course: Geography and Maps
Offered in Semester: 1st

Course Code		**Course Credits**	3 (L: 2 T: 1)
Max. Marks	75{External (term-end exam) – 50} (Internal – 25)	**Time of end term examination**	3 Hours

Note: Examiner will set nine questions in total. Answer to question no. 1 shall be compulsory comprising questions from all four units and remaining eight questions shall be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

Course Objectives:
To describe:

1. geography as a field of knowledge.
2. the place of geography in natural and social sciences and relevance of geography in public life.
3. scale and methods of expressing scale.
4. maps, its types and importance.
5. topographical sheets.

Course Outcomes:
Students would be able to:

1. acquaint with the philosophy, methodology and development of geography as a professional field.
2. understand the basic characteristics of Natural and Social Science.
3. understand the importance of scale in day-to-day life.
4. understand the importance and uses of maps.
5. have knowledge about topographical sheets.

Unit - I

Geography as a field of knowledge; Geography among Natural and Social Sciences; Purpose of Geography; Applied Geography.

Unit – II

Scale: Definition and importance of scale; Selection of scale; Methods of expressing the scale: Simple statement method, Representation Fraction method, Graphical method; Conversion of scale.

Unit – III

Maps: Elements of maps; Type of maps: on the basis of scale, functions and style of construction; uses & importance of maps.

Unit – IV

Topographical maps and their types; Basic information on topographical sheets; Conventional signs.

Suggested Readings:

1. Dikshit R.D. 2022, *The Art and Science of Geography: Integrated Readings*, PHI Learning Pvt. Ltd., Delhi.
2. Robinson A. H. 2009, *Elements of Cartography*, John Wileyand Sons, New York.
3. Sharma, J. P. 2010. *Prayogtmak Bhugol ki Rooprekha,* Rastogi Publications, Meerut.
4. Kannan Monika and Shilpi Yadav, 2022, Practical Geography, Rawat Publications
5. Singh, R. L. and Rana P. B. Singh. 1991. *Prayogtmak Bhugol ke Mool Tatva.*: Kalyani Publishers, New Delhi.

Lachhinder 30/9/23 Satnam 30/9/23 Kumar 30.09.2023 30.9.23 Head Department of Geography 30.9.2023