

GEOGRAPHY

(A) Major Core Course

Sl.No.	Sem.	Type of Course	Name of Course	Credits	Marks
1.	I	MJC-1 (T)	Geomorphology (T)	4	100
		MJC-1 (P)	Geomorphology (P)	2	100
2.	II	MJC-2 (T)	Climatology and Oceanography (T)	4	100
		MJC-2(P)	Climatology and Oceanography (P)	2	100
3.	III	MJC-3 (T)	Economic Geography (T)	5	100
		MJC-4 (T)	Cartograms, Map Projection and Surveying (T)	3	100
		MJC-4(P)	Cartograms, Map Projection and Surveying (P)	1	100
4.	IV	MJC-5(T)	Human Geography (T)	5	100
		MJC-6(T)	Geography of India and Bihar (T)	5	100
		MJC-7(T)	Statistical Methods in Geography (T)	3	100
		MJC-7(P)	Statistical Methods in Geography (P)	2	100
5.	V	MJC-8(T)	Environmental Geography (T)	5	100
		MJC-9(T)	Cartographic Techniques (T)	3	100
		MJC-9 ()	Cartographic Techniques (P)	2	100
6.	VI	MJC-10(T)	Evolution of Geographical Thought (T)	5	100
		MJC-11(T)	Research Methodology and Field Work	4	100
		MJC-12(T)	Remote sensing and GIS (T)	3	100
		MJC-12(P)	Remote Sensing and GIS (P)	2	100
7.	VII	MJC-13(T)	Regional Planning and Development (T)	5	100
		MJC-14(T)	Social Geography (T)	5	100
		MJC-15(T)	Disaster Management (T)	4	100
		MJC-15(P)	Disaster Management (P)	2	100
8.	VIII	MJC-16(T)	Research Methodology (T)	4	100
TOTAL				80	

GEOGRAPHY

SEMESTER – II

PAPER : MJC-2 (T) **Full Marks- 100**
TITLE OF THE PAPER : CLIMATOLOGY & OCEANOGRAPHY **ESE: 70**
CREDIT : 4 **CIA: 30**

COURSE OBJECTIVES :

- 1.To understand different layers and composition of atmosphere.
- 2.To critically examine various aspects of climate and its classification.
- 3.To understand oceanic relief features and composition of ocean water.

COURSE OUTCOMES :

After completion of the course students will be able to -

1. Understand the structure and composition atmosphere.
2. Understand the various climatic phenomena.
3. Understand causes of climate change.
4. Understand Ocean, its features and properties.

Unit	Topics	No. of Lectures
I	Composition and Structure of Atmosphere, Insolation.	08
II	Air Masses and Fronts- Concepts, Classification and Properties; Tropical and Temperate Cyclones.	10
III	Classification of Climate: Koppen's and Thornthwaite's, Climatic Change: Causes and evidences.	10
IV	Relief of the Ocean floor: Continental Shelf, Slope and Deep Sea Plain, Bottom Relief of Indian and Atlantic Ocean, Factors of Salinity of Oceans.	12
Total		40

Suggested Readings:-

1. Barry R. G. and Carleton A. M., (200) *Synoptic and Dynamic Climatology*, Routledge, UK.
2. Barry R. G. and Corley R. J., (1998) *Atmosphere, Weather and Climate*, Routledge, New York.
3. Critchfield H. J., (1987) *General Climatology*, Prentice-Hall of India, New Delhi.
4. Lutgens F. K., Tarbuck E. J. and Tasa D., (2009) *The Atmosphere: An Introduction to Meteorology*, Prentice-Hall, Englewood Cliffs, New Jersey.
5. Oliver J. E. and Hidore J. J., (2002) *Climatology: An Atmospheric Science*, Pearson Education, New Delhi.
6. Trewartha G. T. and Horne L. H., (1980) *An Introduction to Climate*, McGraw-Hill, US.
7. Gupta L. S., (2000) *Jalvayu Vigyan*, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi.
8. Lal, D S., (2006) *Jalvayu Vigyan*, Prayag Pustak Bhavan, Allahabad.
9. Vatal, M., (1986) *Bhautik Bhugol*, Central Book Depot, Allahabad.
10. Singh, S (2009): *Jalvayu Vigyan*, Prayag Pustak Bhawan. Allahabad.

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GEOGRAPHY

SEMESTER –II

PAPER : MJC-2 (P) Full Marks- 100
TITLE OF THE PAPER : CLIMATOLOGY & OCEANOGRAPHY ESE: 70
CREDIT : 2 CIA: 30

COURSE OBJECTIVES :

1. To understand different weather phenomena through graph and diagrams.
2. To get acquainted with different weather measuring instruments. .
3. To understand and analyse spatial weather conditions.

COURSE OUTCOMES :

After completion of the course students will be able to -

1. Understand the various weather phenomena.
2. Interpret weather conditions of a place or region.
3. Understand the functions of various weather instruments.

Unit	Topics	No. of Lectures
I	Graphical Representation of Wind Rose, Cyclone and Anticyclone	06
II	Interpretation of Weather Map; Climograph and Hythergraph	06
III	Metrological Instruments - Functions of Wind Vane and Anemometer, Barometer, Dry and Wet Bulb Thermometer	08
Total		20

Suggested Readings:-

1. Singh R.L., Singh Rana P.B. (2020), Elements of Practical Geography, Kalyani Publishers.
2. Sharma J.P.,(1991-92) Prayogik Bhugol (Practical Geography) Rastogi & Company Meerut.
3. Sinha, MMP & Bala, Seema (2017) Uchh Cartography, Rajesh Publication, New Delhi.
4. Sarkar, A (2015) Practical Geography: A Systematic Approach, Orient Black Swan Private Ltd. New Delhi.

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