



Question Paper

B.Sc. Honours Examinations 2021

(Under CBCS Pattern)

Semester - III

Subject : GEOGRAPHY

Paper : C 5-T

(Climatology)

Full Marks : 60

Time : 3 Hours

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

(Theory)

Group - A

A. Answer any *four* of the following questions :

1. Discuss the factors affecting Insolation and give reasons for its unequal distribution.

- 2. What is condensation? Outline the atmospheric processes that cause cooling and subsequent condensation of water vapour. 2+10
- what is the index cycle of jet stream? Describe summer monsoon wind in relation to jet stream.

12×4=48

- 4. Explain the ice-crystal theory of precipitation.
- Distinguish between normal lapse rate and adiabatic lapse rate. What are the factors influencing horizontal distribution of temperature? What do you mean by break of Indian monsoon?
- Differentiate El Nino and La Nina. Describe the life cycle of mid-latitude cyclone and draw sketches to illustrate your answer.
- Mention the salient features of major Greenhouse gases. "Global warming is a human induced climatic change"—Explain. Mention the predicted consequences of global warming.
- 8. Define air masses. How do they originate? Classify them and state the characteristics of all types of air masses. 2+4+6

Group - B

B. Answer any *six* of the following questions :

- 1. What do you mean by 'Hydroscopic Nuclei'?
- 2. What is Occlusion
- 3. Define 'Eckman Spiral'?
- 4. What is humidity province?
- 5. What is Solar Constant?
- 6. What do you mean by 'Cs' type of climate, as per Koppen's classification?
- 7. What is frontogenesis?
- 8. What do you mean by walker circulation?
- 9. What is Barotropic wind system?
- 10. Write two impacts of ozone hole on ecosystem.

2×6=12