

QP Code: 24/PT/15/IIA

POST-GRADUATE DEGREE PROGRAMME

Term End Examination — December, 2024

GEOGRAPHY

Paper-IIA : CLIMATOLOGY

Time : 2 hours]

[Full Marks : 50

Weightage of Marks : 80%

Special credit will be accuracy and relevance in the answer. Marks will be deducted for incorrect spelling, untidy work and illegible handwriting. The weightage for each question has been indicated in the margin.

Section - A

Answer any *three* questions :

10 × 3 = 30

1. Establish the relationship between climatology and meteorology. What is climatic resource ? 8 + 2
2. Discuss the theories of climate change. What is applied climatology ? 8 + 2
3. Explain the favourable conditions for the formation of tropical cyclones. Write about the structure of tropical cyclones with diagrams. 7 + 3
4. Elucidate the techniques of short range weather forecasting. State the features of Nor'westers. 8 + 2
5. Examine the origin and development of thunderstorm. State the weather pattern associated with thunderstorm. 6 + 4
6. Classify and discuss fronts. Specify the weather associated with warm front and cold front. What is Fujita scale of tornado ? 6 + 2 + 2

Photocopy is strictly prohibited

PG/1030

[Turn over

Section - B

7. Answer any *five* questions : 4 × 5 = 20
- a) State the salient features of changing climate in Quaternary period.
 - b) Briefly discuss the salient features of macro and micro climate with examples.
 - c) Highlight the features of climatic hazards.
 - d) Bring out the concept of atmospheric stability and instability.
 - e) Write a short note on earth's orbital eccentricity and its feedback.
 - f) Make a comparison between El Nino and La Nina.
 - g) Briefly mention the salient features of greenhouse gases.
 - h) Explain the Atmospheric transparency hypothesis that is related with climate change.
 - i) Briefly describe 'ozone depletion'.
 - j) Write a short note on 'Little Ice Age'.
-