

2022

GEOGRAPHY

(Honours)

Paper Code : III - C

(New Syllabus)

Full Marks : 50

Time : Two Hours

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

Group - A

[Climatology]

Section - I

Answer any *one* question.

10×1=10

1. Highlight the characteristics of Jet stream. Explain how does it influence the wind system in the lower atmosphere in the summer season with reference to India. 2+8
2. Explain the origin of the Tropical Cyclone over the Indian Ocean. How do you correlate the rise of sea surface temperature with increasing occurrences of Tropical cyclones worldwide ? 6+4

Section - II

Answer any *four* questions.

5×4=20

3. How does condensation take place ? Describe the various forms of condensation. 2+3
4. What is the 'burst of monsoon'? 5
5. Write down the importance of ozone layer. 5
6. Explain the vertical distribution of temperature in relation to the layering of the atmosphere. 5
7. Mention the characteristics of Hadley Cell. 5
8. Explain the El-Nino phenomenon over the Pacific Ocean with proper illustrations. 5
9. Explain the mechanism of precipitation as per the 'collision coalescence' theory. 5
10. What is Global Warming ? In your opinion what are the possible ways to control the Global Warming. 1+4

P.T.O.

(2)

Group - B

[Soil and Biogeography]

Section - III

Answer any *one* question.

10×1=10

11. Describe the characteristics of Laterite soil profile and explain its development in tropical humid regions. 4+6
12. Describe the structures of an ecosystem with reference to the Forest Ecosystem. How does energy flow and the nutrient cycle maintain these structures ? 6+4

Section - IV

Answer any *two* questions.

5×2=10

13. How do eluviation and illuviation occur in a soil profile ? 5
 14. What is a wetland ? How are wetlands important for the biodiversity and ecosystem ? 2+3
 15. What do you mean by the pH of soil ? How is the soil pH expressed ? Describe its importance ? 1+2+2
 16. Describe the textural classes of soil. How is the soil texture related with soil fertility ? 3+2
-