

P - II (1+1+1) H / 20 (N)

2020

## GEOGRAPHY (Honours)

Paper : III-C  
[New Syllabus]

Full Marks : 50

Time : Two Hours

*The figures in the margin indicate full marks.*

### CLIMATOLOGY

#### Section - I

Answer any *one* question.

10×1=10

1. Define tropical cyclone. Briefly discuss the horizontal structure of a tropical cyclone. 2+8=10
2. Give an account of global pressure belts. Explain how global pressure belt controls the planetary wind system. 5+5=10

#### Section - II

Answer any *four* questions.

5×4=20

3. Write a short note on inversion of temperature. 5
4. Explain the causes that lead to the increase of green house gases. 5
5. Write about the causes of ozone depletion. 5
6. What is lapse rate ? Distinguish between normal lapse rate and adiabatic lapse rate. 5
7. Write a short note on Jet Stream. 5

8. Explain the mechanism and formation of precipitation as per Ice Crystal Theory. 5
9. Explain the consequence of El-Nino on Indian Climatic scenario. 5
10. Give your critical view on Koppen's scheme of classification of World climate. 5

### SOIL AND BIOGEOGRAPHY

#### Section - III

Answer any *one* question. 10×1=10

11. Assess the role of climate in soil forming processes. Explain the influence of soil texture on soil fertility. 5+5=10
12. Define Ecosystem. Describe tropic level. Explain the function of ecosystem with the help of the law of thermodynamics. 2+3+5=10

#### Section - IV

Answer any *two* questions. 5×2=10

13. Distinguish between the process of eluviation and illuviation. Explain the effect of illuviation process on 'B' horizon of a soil profile. 3+2=5
14. Write a short note on soil pH. 5
15. Define Ecotone. What are the causes of Biodiversity loss. 2+3=5
16. What are the causes of wetland degradation ? 5
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