PG Even Semester Exam, May 2025

Geography

2nd Semester

COURSE NO. GEOCC- 553

[Climatology & Oceanography]

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer five questions, taking one from each Unit

UNIT-I

1. a. Explain the structure of the atmosphere. 7

   b. Enlist and explain the factors affecting the insolation. 7

2. a. Elaborately discuss the Jet Streams. Enlist the significance. 6

   b. What are the causes of the origin of local winds? Discuss their significance on prevailing weather and climate in various regions with suitable examples. 8

UNIT-II

3. Examine critically the drawbacks of Koppen's classification of climates. Explain how Thornhwaite attempted overcome Koppen's limitations. 7+7=14

4. a. Explain about the El-Nino. 5

   b. Discuss the characteristics of tropical cyclones critically and analyse the extent to which they differ from temperate cyclones. 9

UNIT-III

5. a. Discuss about Meterological Hazards in India. 8

   b. How does a Tornado form? 6

6. a. What are the different causes and effects of Drought? Explain it. 7

   b. Explain the Global climate change evidences. 7

UNIT-IV

7. a. What are the major ocean reliets? Discuss its characteristics. 4+4=8

   b. Enlist and explain the factors affecting ocean salinity? 6

8. What are ocean currents? Explain the factors that influence the movement and direction of ocean currents. Compare and contrast the currents of the Pacific and Atlantic Oceans. Explain with a diagram. 2+4+8=14

UNIT-V

9. a. Explain the impacts of sea level rise. 7

   b. Explain the prevention and mitigation measures for tsunamis. 7

10. What are tidel waves? How do the gravitational forces of the sun and the moon influence the formation of tidal waves? Mention the factors controlling the nature and magnitude of tides. 2+4+8=14

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2025/SEM/EVEN/14/36/GEO/GEOCC-553/251