



WEST BENGAL STATE UNIVERSITY
B.A./B.Sc. Honours 3rd Semester Examination, 2022-23

GEOACOR05T-GEOGRAPHY (CC5)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

FOR REGULAR SYLLABUS

GROUP-A

Answer any one question from the following (within 600 words) 10×1 = 10

1. Discuss the origin and characteristics of mid-latitude cyclones. Illustrate with the help of diagram. 6+4
2. Highlight the major Green House Gases present in the atmosphere. Assess the importance of ozone layer in the atmosphere. 7+3

GROUP-B

Answer any four questions from the following (within 150 words each) 5×4 = 20

3. "The stability and instability of the atmosphere depends on the relationship between normal lapse rate and adiabatic change of temperature"— Explain.
4. How does Aw climate differ from Af climate?
5. Distinguish between barotropic and baroclinic conditions of the atmosphere.
6. Distinguish between "freezing nuclei" and "condensation nuclei".
7. Differentiate Frontogenesis from Frontolysis.
8. Mention the factors of influencing insolation.
9. Mention the salient features of the modified (1948) climatic classification as proposed by Thornthwaite.

GROUP-C

Answer any five questions from the following (within 50 words each) 2×5 = 10

10. What do you understand by Potential Evapotranspiration?
11. Mention the significance of ionosphere.
12. How are El-nino and Monsoon related?
13. What is 'Aerosol'?
14. Define Solar Constant.

15. Distinguish between cPk's air mass and mT'wu air mass.
16. What is inversion of temperature?
17. What is Thermal Equator?
18. What is the role of an 'eye' in the development of a tropical cyclone?

FOR TRUNCATED SYLLABUS

GROUP-A

Answer any *one* question from the following (within 600 words) 10×1 = 10

1. Elucidate the factors controlling insolation of the earth. Give a suitable diagram of the Heat Budget of the earth. 7+3
2. Discuss the origin and characteristics structure of Tropical cyclones. What is occlusion? 8+2

GROUP-B

Answer any *four* questions from the following (within 150 words each) 5×4 = 20

3. Describe the nature and composition of Troposphere.
4. What are the major types of inversion of Temperature?
5. Discuss the significance of Ozone layer.
6. State the origin of mid-latitude cyclone.
7. Distinguish between barotropic and baroclinic conditions.
8. Specify the conditions required for condensation.
9. Mention the salient features of A climate in Koppen's classification.

GROUP-C

Answer any *five* questions from the following (within 50 words each) 2×5 = 10

10. What is monex?
11. What is hygroscopic nuclei?
12. What is hadley cell?
13. What is break in monsoon?
14. Define 'Aerosol'.
15. Define 'Hail'.
16. Define Jetstream.
17. What do you mean by Green House effect?
18. What is Potential Evaporation?

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