



WEST BENGAL STATE UNIVERSITY
B.A./B.Sc. Honours 3rd Semester Examination, 2019

GEOACOR05T-GEOGRAPHY (CC5)

CLIMATOLOGY

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.*

CATEGORY-A

Answer any one question from the following (within 600 words) $10 \times 1 = 10$

1. Discuss the structure and composition of the atmosphere. What is meant by inversion of temperature? $7+3=10$
2. What is condensation? Mention different forms of condensation. Describe the ice-crystal theory of raindrop formation. $2+3+5=10$

CATEGORY-B

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

3. What do you understand by the heat budget of the earth?
4. Describe the Index-Cycle of a Jet stream.
5. Distinguish between barotropic and baroclinic conditions of the atmosphere.
6. How does the location of monsoon trough influence wind direction in India?
7. Differentiate cTwm airmass and mPk airmass.
8. Discuss the tri-cellular model in atmosphere in brief.
9. Discuss the role of frontogenesis in the formation of mid-latitude cyclones.

CATEGORY-C

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

10. What do you mean by Insolation?
11. What is the Hadley cell?
12. What is meant by the 'Ozone hole'?
13. What is the 'eye' of a cyclone?
14. Distinguish between Bw and Bs climates.
15. Differentiate between dry and wet adiabatic lapse rates.
16. What is geostrophic wind?
17. Describe the relationship between thermal gradient and wind movement.
18. What is meant by an occluded front?

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