WEST BENGAL STATE UNIVERSITY

B.A./B.Sc. Honours 3rd Semester Supplementary Examination, 2021

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)   10×1 = 10

1. Discuss the structure and composition of different layers of atmosphere. What are   7+3 = 10
   the impacts of green house gases on the layers of the atmosphere?

2. Discuss the characteristic features of tropical cyclones. Distinguish between   6+4 = 10
   warm and cold fronts.

CATEGORY-B

Answer any *four* questions from the following   5×4 = 20

3. How does inversion of temperature occur?

4. Discuss briefly the seasonal pattern of jet streams.

5. Distinguish between barotropic and baroclinic instability.

6. Explain the formation of raindrops on the basis of Bergeron–Findeisen theory.

7. Mention the major climatic types after Köppen.

8. Discuss the existence of tri-cellular model in atmosphere.

9. What are the factors that control the incidence of insolation?

CATEGORY-C

Answer any *five* questions from the following   2×5 = 10

10. What is meant by Ozone hole?

11. What is meant by Occluded front?

12. What is P-E index?

13. What is meant by advection?

14. What do you mean by withdrawal of monsoon?

15. Define doldrum.

16. Differentiate between dry and wet adiabatic lapse rate.

17. What do you mean by 'heat budget' of the earth?

18. What is Westerlies?

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

——×——