

**2022**

**1st Semester Examination**

**GEOGRAPHY**

**Paper : GEO 103**

**Full Marks : 40**

**Time : Two Hours**

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Paper : 103.1**

**(Climatology)**

**Group - A**

Answer any *two* of the following questions :  $2 \times 2 = 4$

1. What is hydrostatic equilibrium?
2. How is the thermocline line related to upwelling?
3. What is global warming potential?
4. Why does burst of monsoon occur at early monsoon?

**Group - B**

Answer any *two* of the following questions :  $4 \times 2 = 8$

5. Briefly describe the Elevated Heat Pump (EHP) theory of Indian summer monsoon.

**P.T.O.**

6. Explain the meteorological significance of geopotential.
7. How far Milankovitch cycle is responsible for the global climate change?
8. Discuss the role of Indian Ocean Dipole (IOD) on the weather conditions of the surrounding areas of Indian ocean.

### Group - C

Answer any *one* of the following questions :  $8 \times 1 = 8$

9. Explain the mechanism of thunderstorm formation and its weather conditions.
10. Give an account of a simple climate model considering the impact of gas and aerosols.

### Paper : 103.2

#### (Regional Geomorphology of India)

### Group - A

Answer any *two* of the following questions :  $2 \times 2 = 4$

1. What is an Intertrappean deposit?
2. Highlight the features of 'Active Part' of the Ganga delta.
3. Identify the major geomorphic features of Terai region.
4. Write a short note on the "Daling Series" of the Darjeeling Himalaya.

**Group - B**

Answer any *two* of the following questions :  $4 \times 2 = 8$

5. Discuss briefly the nature of the Late Quaternary evolution of the lower Ganga delta.
6. Explain the formation of the chenier beach ridges in Subarnarekha delta.
7. Identify the major geomorphic features of Western Ghats with reference to Deccan Trap.
8. Discuss the development and distribution of fluvial terraces in the foothills of Darjeeling Himalaya.

**Group - C**

Answer any *one* of the following questions :  $8 \times 1 = 8$

9. Discuss how the soil landform assemblages of the Chhotanagpur plateau and its adjacent areas of West Bengal are correlated with the local geomorphological diversities.
  10. Differentiate the tectonically modified geomorphological features of the North Andaman from South Andaman group of islands with diagram and examples.
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