

6. Answer any **one** from the following questions:

10×1=10

- a) Discuss the characteristics of different forms of condensation.
- b) Analyse the differences between tropical and mid-latitude cyclones with necessary illustrations.

**U.G. 3rd Semester Examination - 2024**

**GEOGRAPHY**

**[HONOURS]**

**Course Code : GEO-H-CC-T-05**

**(Climatology)**

**[CBCS]**

Full Marks : 60

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

**UNIT-I**

**(Elements of the Atmosphere)**

**(Marks : 20)**

1. Answer any **three** from the following questions:

2×3=6

- a) What is *insolation*?
- b) What is *albedo*?
- c) Why are high latitudinal areas colder than the areas of low latitudes?
- d) Define *inversion of temperature*.
- e) What is *greenhouse effect*?



2. Answer any **one** from the following questions:

$$4 \times 1 = 4$$

- a) How does angle of incidence affect the distribution of insolation?
- b) What is the significance of ozone layer in atmosphere?

3. Answer any **one** from the following questions:

$$10 \times 1 = 10$$

- a) Discuss the nature and composition of atmosphere with necessary illustrations.
- b) Discuss the layered structure of the atmosphere with necessary illustrations.

## UNIT-II

### (Atmospheric Phenomena, Climate Change and Climatic Classification)

(Marks : 40)

4. Answer any **seven** from the following questions:

$$2 \times 7 = 14$$

- a) Define *doldrums*.
- b) Differentiate *wind* from air.
- c) Define *jet stream*.

d) What is *barometric pressure*?

e) What is *potential evapotranspiration*?

f) What is *waterspout*?

g) What is *coriolis force*?

h) What are called *planetary winds*?

i) What is the *eye* of tropical cyclone?

j) What is *potential evapotranspiration*?

k) Mention the consequences of storm surges.

5. Answer any **four** from the following questions:

$$4 \times 4 = 16$$

- a) Highlight the characteristics of tropical air mass.
- b) State the advantages of climatic classifications.
- c) Bring out the salient features of 1931 climatic classification after Thornthwaite.
- d) Differentiate adiabatic processes from non-frontolysis.
- e) Mention the characteristics of the Indian monsoon.
- f) Bring out the significance of Himalaya mountain range on Indian monsoon.