

U.G. 3rd Semester Examination - 2023**GEOGRAPHY****[HONOURS]****Course Code : GEO-H-CC-T-05****(Climatology)****[New Syllabus under 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) Distinguish between *climatology* and *meteorology*.
- b) What is tropopause?
- c) Mention the characteristics of *ionosphere*.
- d) What is *albedo*?
- e) What is *greenhouse effect*?

[Turn over]

2. Answer any one from the following questions:

4×1=4

- a) Identify the characteristics of horizontal distribution of temperature in atmosphere.
- b) What is the significance of ozone layer in atmosphere?

3. Answer any one from the following questions:

10×1=10

- a) Discuss the nature and composition of atmosphere with necessary illustrations.
- b) Explain the nature of vertical distribution of temperature with special reference to types of inversion of temperature.

UNIT-II

(Atmospheric Phenomena, Climate Change and Climatic Classification)

(Marks : 40)

4. Answer any seven from the following questions:

2×7=14

- a) What is meant by *precipitation*?
- b) When is air stable?

c) What is *frontogenesis*?

d) What is meant by *trade wind*?

e) Differentiate *wind* from air.

f) What is *coriolis force*?

g) What is *barometric pressure*?

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

i) Define *monsoon*.

j) Mention the consequences of storm surges.

k) What is called *mid-latitude cyclone*?

5. Answer any four from the following questions:

4×4=16

- a) Mention different forms of *precipitation*.
- b) Distinguish between *warm front* and *cold front*.
- c) What are the causes behind *atmospheric instability*?
- d) Write a short note on *jet stream*.
- e) Bring out the significance of Himalaya mountain range on Indian monsoon.
- f) State the advantages of climatic classifications.

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

10×1=10

- a) Discuss the characteristics of different forms of condensation.
 - b) Classify air mass with necessary illustrations.
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