

**B.Sc. Semester-III Examination, 2022-23****ENVIRONMENTAL SCIENCE [Honours]**

Course ID : 31813 Course Code : SH/ENV/303/C-7

Course Title : Atmosphere and Global Climate Change

Time : 1 Hour 15 Minutes Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** of the following questions:

1×5=5

- What is albedo?
- What is tropopause?
- How tropical cyclone differs from hurricane?
- What do you mean by water vapor mixing ratio?
- What is atmospheric window?
- Mention the maximum temperature of thermosphere.
- In which states in India did western disturbance affects?
- Name the device which can measure wind direction.

2. Answer any **two** of the following questions:

5×2=10

- Differentiate atmosphere and climate. Mention the significance of atmosphere on earth briefly. 1+4
- Write a short note on greenhouse effect. 5
- What are the causes of smog? Differentiate smog and photochemical smog.  $2\frac{1}{2}+2\frac{1}{2}$
- Mention the effect of urbanization on microclimate. 5

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

10×1=10

- Illustrate about the ions and radicals of atmosphere. Describe the role of hydroxyl and hydroperoxyl radicals in atmosphere. 5+5
- Mention the impact of climate change on atmosphere with special reference of elevation of sea level. 10

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