

B.Sc. 3rd Semester (Honours) Examination, 2021

ENVIRONMENTAL SCIENCE

Course ID: 31813

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

Course Title: Atmosphere & Global Climate Change

Time: 1 hr 15 min.

Full Marks: 25

The figures in the right hand side margin indicate full marks.

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

1. Answer any five questions from the following: (1 X 5 =5)

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

2. Answer any two questions from the following: (5 X 2=10)

- a) Differentiate atmosphere and climate. Mention the significance of atmosphere on earth briefly. (1+4)
- b) Write a short note on greenhouse effect.
- c) What are the causes of smog? Differentiate smog and photochemical smog. (2.5+2.5)
- d) Mention the effect of urbanization on microclimate.

3. Answer any one question from the following: (10 X 1=10)

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