M.Sc. (Part-I) (Environmental Science) (CBCS Pattern) Semester-I

PSENVT02 - Paper-II - Fundamental of Atmospheric Science

P. Pages : 1 **GUG/W/24/11159**

Time : Three Hours * 4 2 5 6 * Max. Marks : 80

Notes : 1. All questions are compulsory and carry equal marks.
2. Illustrate the answers with suitable diagrams and examples.

1. Give the composition of atmosphere. Discuss the modern views regarding the structure of atmosphere. **16**

OR

a) Describe mass and energy transfer across various inference of atmosphere. **8**

b) Explain the atmospheric reactions for oxides of nitrogen. **8**

2. Establish the relationship between climate and various aspects of our environment. **16**

OR

a) Describe the classification of clouds. **8**

b) What is insolation? Highlight the factors affecting distribution of insolation. **8**

3. How the collection and analysis of wind data is carried out? Explain the method for construction of wind rose. **16**

OR

a) What is atmospheric stability? Give an account on stability classes. **8**

b) What are primary and secondary meteorological parameters? State the scope of meteorology in atmospheric science. **8**

4. Discuss the implications of climate change on planet Earth. **16**

OR

a) What are greenhouse gases? Describe the greenhouse effect phenomenon. **8**

b) How formation and depletion of atmospheric ozone is occurred? **8**

5. a) Write a note on radionuclides in atmosphere. **4**

b) Discuss forms of condensation briefly. **4**

c) How atmospheric mixing height is measured? **4**

d) Mention the effects of EI Nino and La Nino phenomenon on our environment. **4**

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