

Ba/Bs/EVS/C-6T

2025

(FYUGP)

(3rd Semester)



ENVIRONMENTAL SCIENCE

(MAJOR)

Paper Code : EVS/C-6T

(Atmosphere and Global Climate Change)

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. (a) Explain the evolution and development of earth's atmosphere from its primitive stage to the present composition. 15

Or

- (b) Explain the processes involved in the transfer of energy within the atmosphere. Describe the different layers of the earth's atmosphere. 10+5=15

(2)

2. (a) What are Asian Brown Clouds? Mention their major sources and the detrimental impacts they have on the climate and human health. 2+5+8=15

Or

- (b) Define air masses and explain their classification based on source regions. Explain the concept of air-sea interaction. 10+5=15

3. (a) Describe the major meteorological parameters. For each parameter, explain its method of measurement, commonly used instruments, standard units and effects on weather. 15

Or

- (b) What is temperature inversion? Explain the different types of temperature inversion. Write down the factors that affect atmospheric stability. 2+8+5=15

4. (a) Explain the importance of the ozone layer in protecting life on earth. Describe the major ozone-depleting substances and their sources. 7+8=15

(3)

Or

(b) Write a detailed note on photochemical processes in the atmosphere. Define atmospheric water and explain its various forms. 9+6=15

5. (a) What is Clean Development Mechanism (CDM)? Explain its objectives and significance in reducing greenhouse gas emissions. 15

Or

(b) Explain the impact of climate change on agricultural productivity, sea level rise and atmosphere. 5+5+5=15

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