2024

(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)* Give a detailed account of the earth's atmospheric structure and composition. 10+5=15

Or

(b) Define greenhouse effect. Mention different causative factors leading to greenhouse effect. Write any five consequences of greenhouse effect. 2+8+5=15

2. *(a)* Write a note on the effect of urbanization on microclimate of an area and ways to mitigate it. Differentiate between El Niño and La Niña effects. 10+5=15

Or

(b) Mention the characteristics and classification of a tropical cyclone. Give a brief account of Indian monsoon and its development. 8+7=15

3. *(a)* Explain in detail five meteorological parameters. 15

Or

(b) What are atmospheric stability and mining heights? Explain the Gaussian prime model. 5+10=15

4. *(a)* What are the environmental impacts of acid-base reactions in the atmosphere? Define smog and write a detailed note on the types of smog and the processes leading to smog formation. 4+2+5+4=15

Or

(b) Give a detailed account on the ozone layer depletion, its causes, effects and mitigation measures. 15

5. *(a)* Explain the impact of climate change on economy and spread of human diseases. 7+8=15

Or

(b) Explain and discuss the key aspect of the Montreal Protocol, 1987 and Kyoto Protocol, 1997. 15

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