

Time : 3 Hours

Max. Marks: 75

(No additional sheet will be supplied)

PART – A (5 x 3 = 15 marks)

Answer any FIVE Questions

Each question carries 3 marks

Each answer should not exceed 1 page

1. What are the different layers of atmosphere
2. What is Green House effect ? Explain
3. Explain the measurement of air, temperature and humidity
4. What is the use of T-Phigram
5. What is the effect of Ozone layer on human health
6. What are the sources of aerosols
7. What are the different types of radars
8. Explain the structure of a Thunderstorm

PART – B (4 x 15 = 60 marks)

Answer ALL Questions

Each question carries 15 marks

Each answer should not exceed 6 pages

9. Define Solar Constant? Explain the Solar Radiation Spectrum at the surface and above the atmosphere of the earth

(OR)

10. a) State the Stefan – Boltzmann Law and its importance in atmospheric physics

b) Explain Wien's Displacement Law

11. Explain the terms:

1) Radiosonde

2) Upper air wind measurement

3) List the various ground based instruments used for measurement of temperature.

(OR)

12. Describe the ground based instrument used to measure the direction and speed of the wind.

[P.T.O]

13. a) Explain CO_2 , CH_4 and CO gaseous pollutants effects on climate and human health
b) What is the basic principle for measurement of gaseous pollutants?

(OR)

14. a) Explain the working of multi wave length solar radiometer
b) What are the effect of aerosols on climate and human health?

15. Explain the pulsed radar with necessary diagram

(OR)

16. Explain in detailed working of clear air radar

