MID-II

Sub code :- 103

Marks : 40M

Part - A

Answer the following questions: 4x1 = 4M

1. (a) Give two examples of artificial satellites.
   (b) what is the 'g' value.
   (c) write S.I unit of energy.
   (d) write S.I unit of temperature. 4x3 = 12M
2. Define heat and temperature.
3. Define kinetic energy and write its formula.
4. Convert 4°C into kelvin scale.
5. Write different types of energy.

Part - B

6. (a) State and explain Newton's law of gravitation

   (or)

   (b) State and explain kepler's 1st & 2nd law of planetary motion.
7. (a) State and explain the principle of solar thermal conversion

   (or)

   (b) Write a brief note on PSLV.
8. (a) Derive Ideal gas Equation (PV=nRT)

   (or)

   (b) Define Noise pollution. Explain the sources of Noise pollution.

Sub & code: 103 - Engineering physics

Duration:

Marks

PART-A

10 x 3 = 30M

Answer the following questions:

1. Define fundamental physical quantity and derived physical quantity.
2. Define accuracy and least count.
3. Define the terms: (i) Unit vector (ii) Null vector
4. Define concurrent and coplanar forces.
5. What is the g value on earth, mention with its S.I unit.
6. Define work done and energy. mention their S.I units.
7. Write any 6 types of energy.
8. Define Heat and temperature.
9. State the relation between degree celsius, kelvin and farhenheit temperatures.
10. Write any three differences between musical sound and Noise.

Part-B

5 x 10 = 50M

11. (a) Write the expression for magnitude and direction of a resultant vector of the parallelogram law of two vectors.

(or)

12. (b) State parallelogram law of forces. Illustrate the parallelogram law in the case of a flying bird.
13. (a) State and explain the Newton's law of Gravitation.

(or)

14 (b) Write a brief note on Polar satellites (PSLV).
15. (a) Define kinetic energy. Derive its expression

(or)

16. (b) Explain the principle of solar thermal conversion.
17. Derive Ideal gas equation $PV = nRT$.
18. Explain the sources of Noise pollution.

SET-2