CE/EC/EEE/ME 122 (R-22)

Total No. of Questions : 10] [Total No.of Pages : 02

I/IV B. Tech. DEGREE EXAMINATIONS, AUGUST - 2024

Second Semester

CE / EC / EEE / ME

ENGINEERING PHYSICS

Time : **Three Hours** Maximum : **70** Marks

Answer ONE Question from each Unit.

All Questions carry equal marks. 5x14=70 M

UNIT - I

1. Write the principle of superposition and discuss the interference of light.

(OR)

2. Discuss the wavelength determination of light using grating.

UNIT - II

3. Write the principle, construction and working of ruby laser.

(OR)

4. Write the applications of optical fibers in communication.

UNIT - III

5. Write in detail different types of polarizations with examples.

(OR)

6. Write the origin of permanent magnetic moment in magnetic materials and explain the hysteresis curve of ferro magnets.

UNIT - IV

7. What are intrinsic and extrinsic semiconductors discuss with examples and indicate the position of Fermi level in the energy band diagram.

P.T.O.

(OR)

8. Write the applications of semiconductors.

UNIT - V

9. Discuss how the Davisson and Germer experiment proved the wave nature of light.

(OR)

10. Write the BCS theory of super conductors.