[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 8734 **C** **Roll No.....**

Unique Paper Code : 251103

Name of the Paper : ELHP-105 : Electronics Practical – I

Name of the Course : B.Sc. (H), Electronics

Semester : First

Duration : One Hour

Maximum Marks : 25

(Write your Roll No. on the top immediately on receipt of this question paper.)

SECTION A

Attempt any five questions from Section A. Each question is of 1 mark.

Attempt any ten questions from Section B. Each question is of 2 marks.

Q1. What is reciprocal of compressibility of a body called. What is its value for incompressible liquid?

www.onlineseva.net

Q2. Which factors control the time period in Searl's method for calculating elastic constants.

Q3. Why is the position of hollow and solid cylinders exchanged in Maxwell's needle experiment?

Q4. What is the difference between optical lens and magnetic lens with reference to focal length?

Q5. What are the operating voltages for LED'S?

Q6. How a semiconductor, which is non-conducting at room temperature can be made conducting.

Q7. Write down diode current equation.

SECTION B

Q8. What is elasticity? What do you understand by elastic limit? State Hook's law.

Q9. What are the factors on which power of magnetic lens depends?

Q10. Define the terms (i) Work function (ii) Threshold frequency and (iii) Stopping potential.

Q11. Explain I-V characteristics of a p-n junction diode in forward bias and reverse bias.

Q12. In Hall measurement, why does the resistance of the sample increases with increasing magnetic field.

P.T.O.

Q13. What is optical lever? What happens to the mirror of optical lever when the wire whose elastic constants are to be determined gets loaded.

Q14. What are emission spectra? What information it gives about the substance.

Q15. What is the use of determining the value of e/m?

Q16. Why is a constant current source necessary for four probe method to calculate resistivity?

Q17. What is photoelectric effect? How the number of electrons emitted can be increased.

Q18. What are requirements for a semiconductor material to be used as a visible LED?

Q19. Define Young's modulus and Bulk modulus

Q20. Explain the terms electrostatic deflection and magnetic deflection.

www.onlineseva.net