Section-B

(Short Answers)

Note: Answer any EIGHT of the following questions. Each question carries 03 marks.

Q.2 Define the term transverse wave.

Q.3 Derive the formula of Wave speed, V =

Q.4 How is the sound produced?

Q.5 Define, Infrasonic and Ultra Sound.

Q.6 Calculate the speed of sound in air at 50°C? Given that speed of sound at 0°C is 331m sec.

Q.7 Define dispersion of light

Q.8 What are electromagnetic waves?

Q.9 Why is a normal eye not able to see the object put closer than 2.5cm.

Q.10 What is the electric force of repulsion between two electrons at a distance of Im?

Q.11 Determine the function of transformers in the process of moving electrical current from the power plant to your home.

Q.12 What do you understand by the half life of a radioactive element.

Q.13 Describe the structure of an atom

SECTION - C

Descriptive Answers

Note: Answer any FOUR of the following questions. Each question carries 06 marks.

Q.14 List the physical properties of different isotopes of an element that are different.

Q.15 What is Internet? And also differentiate between Data and Information,

Q.16 A wire carrying 4A current and has length of 15cm between the poles of a magnet is kept at an angle of 30° to the uniform field of 0.8 T. Find the force acting on the wire.

Q.17 Explain how an electroscope is built and how it operates.

Q.18 What do you understand by the term total internal reflection?

Q.19 Write notes on any TWO of the following:

(a) Electrostatic Potential (b) Parallel Combination Circuit

(c) SimplHarrnonlc motion