CBSE Class 12 Electronic Technology 2004 - Set 115

Question Paper

Conducted by the Central Board of Secondary Education (CBSE)

Time Allowed: 3 Hours **Maximum Marks: 40**

General Instructions

(i) Attempt all questions. Each question carries two marks.

Questions

1.

What do you understand by the term ‘modulation’ ?

2.

Explain the term ‘percentage modulation’.

3.

Explain the principle of working of linear diode detector.

4.

Write the equation for F.M. wave and explain the term ‘modulation index’ in F.M.

5.

Explain the term ‘radiation resistance’ of an antenna.

6.

In what manner are antenna dimensions related to the frequency to be radiated ? Give reasons.

7.

Sketch the ferrite rod antenna and explain its working.

8.

Explain the effect of Earth’s curvature upon space waves.

9.

In a labelled block diagram of an A.M. broadcast transmitter, draw waveforms at the input and output of each block.

10.

Give advantages of superheterodyne receivers over straight receivers.

11.

Draw circuit diagram of A.F. stage of a radio receiver.

12.

What is 'tracking error' and how is it minimised ?

13.

There is no sound output from a radio receiver. Give step-by-step procedure for finding the fault.

14.

Sketch the velocity ribbon type microphone. Give its applications.

15.

What type of loudspeaker is used in public address system ? Give reasons.

16.

Give directional patterns of (a) moving coil microphone and (b) velocity ribbon microphone.

17.

Explain how sound is reproduced from recorded magnetic tape.

18.

Explain the principle of recording sound on discs

19.

Explain the need for biasing in tape recorders.

20.

Draw block diagram of P.A. system and explain.

- End of Question Paper -