CBSE Class 12 Electronic Technology 2010 - 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. Explain the need for modulation in radio transmission.

2. Write equation for an AM wave. What are the various frequency components present in the AM signal ?

3. Explain the role of capacitor in linear diode detector.

4. Compare FM with AM.

5. Explain the term 'radiation resistance of antenna'.

6. Explain the term 'directivity of antenna'.

7. Draw sketch of ferrite rod antenna. Give applications of this antenna.

8. Give frequency ranges of VLF, LF, HF, UHF and Microwave.

9. Draw block diagram of AM broadcast transmitter.

10. If the IF is 455 kHz, what will be local oscillator frequency to receive a signal whose carrier frequency is 1000 kHz ?

11. Draw block diagram of a superheterodyne AM radio receiver.

12. Draw circuit diagram of RF amplifier stage in a radio receiver.

13. Which stage is responsible for motorboating fault in a radio receiver ?

14. Is there a loudspeaker that can be used as a microphone too ? Name it.

15. Draw sketch of moving coil microphone.

16. For a Public Address system, which type of loudspeaker is generally used ?

17. How is sound recorded on discs ?

18. Draw block diagram of hi-fi system.

19. Explain principle of reproducing sound from recorded magnetic tape.

20. Explain the need of P.A. system.

- End of Question Paper -