

## CBSE Question Paper – 2010 RADIO ENGINEERING AND AUDIO SYSTEMS

(Theory) paper I Class – XII

Time allowed: 3 hour

**Maximum Marks: 40** 

**Instructions**: Attempt all 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.

## **Other Educational Websites:**



- 8. Give frequency ranges of VLF, LF, HF, UHF and Microwave.
- 9. Draw block diagram of AM broadcast transmitter.
- 10. If the If is 455kHz, what will be local oscillator frequency to receive a signal Whose carrier frequency is 1000 kHz?
- 11. Draw block diagram of a super heterodyne AM radio receiver.
- 12. Draw circuit diagram of RF amplifier stage in a radio receive.
- 13. Which stage is responsible for motor boating 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.

## **Other Educational Websites:**