CBSE Class 12 Electronic Technology 2010 - Set 114

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 five marks.

Questions

1. Define AC load line and show how it is used in explanation of phase reversal of the output voltage with respect to the input voltage.

OR

1. Draw low frequency hybrid model in CE configuration. Give typical values of the 'h' parameters.

2. Draw typical circuit of transformer coupled multistage amplifier and explain its working. Draw its frequency response.

OR

2. Draw the frequency response of R-C coupled multistage amplifier and explain the physical significance of the terms bandwidth, upper crossover frequency and lower crossover frequency.

3. Explain the working principle of a push-pull amplifier and give its advantages.

OR

3. Explain the difference between class 'A', class 'B' and class 'C' power amplifiers in terms of collector efficiency and distortion.

4. Give physical explanation of the effect of negative feedback on gain stability, distortion and bandwidth of an amplifier.

5. Explain the working principle of a single tuned amplifier. Draw its frequency response.

6. Explain Barkhausen criterion for oscillations. Explain the working principle of crystal oscillator.

7. Explain the working of transistor as a switch.

8. Explain the difference between SSI, MSI, LSI and VLSI.

- End of Question Paper -