

**PLEASE NOTE: IF YOU HAVE THE OPINION THAT INSUFFICIENT INFORMATION IS SUPPLIED FOR YOU TO ANSWER A PARTICULAR QUESTION, MAKE A REALISTIC ASSUMPTION, MOTIVATE IT AND THEN ANSWER THE QUESTION.**

**QUESTION 1****OSCILLOSCOPES**

- 1 1 Consider Figure 1 below and calculate the required parameters listed below

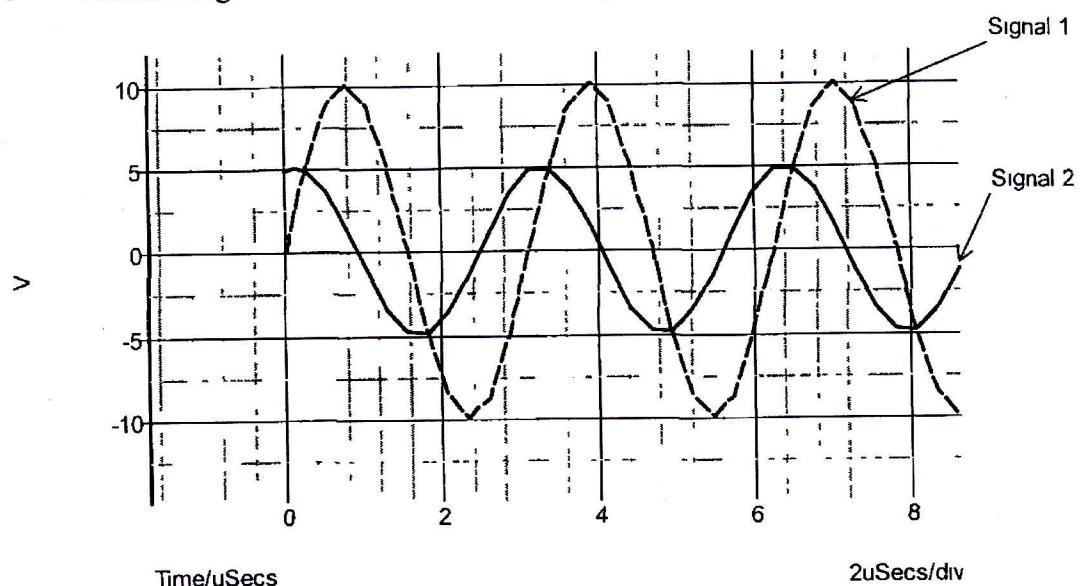


Figure 1 Oscilloscope display of two sine waves

- 1 1 1 Peak-to-peak voltage of Signal 2 (1)
- 1 1 2 RMS voltage of Signal 2 (1)
- 1 1 3 Peak-to-peak voltage of Signal 1 (1)
- 1 1 4 Average voltage of Signal 1 (1)
- 1 1 5 Frequency of Signal 1 (1)
- 1 1 6 The power (W) dissipated in a  $50 \Omega$  load if Signal 1 is measured across the load (1)

[TURN OVER]