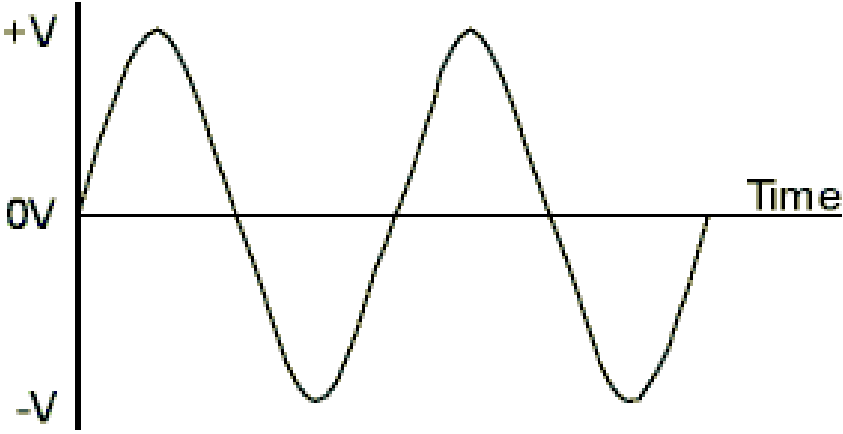


Tutorial Questions

1	(a)	<p>The diagram shows an alternating current wave-form.</p>  <p>On the diagram show:</p>	1.1	
	(i)	The amplitude	1.1	
	(ii)	The period	1.1	
	(iii)	The peak-to-peak voltage.	1.1	(3)
	(b)	The period of this wave is 35 ms. Calculate the frequency.	1.1	(2)
	(c)	Another alternating current has a frequency of 6 kHz. Calculate its period	1.1	(2)
	(d)	The peak to peak voltage of this waveform is read from the CRO screen and found to be 4.8 V. Calculate:		
	(i)	The peak voltage:	1.1	(2)

	(ii)	The RMS voltage:	1.1	(2)
			<i>11 marks</i>	
2.	(a)	Explain what is meant by an alternating wave-form	1.1	(2)
	(b)	Explain what is meant by a unidirectional waveform. Use a diagram to illustrate your answer.	1.1	(3)

	(c)	Here are three traces on the CRO:		1.1	
		<p style="text-align: center;"> trace 1 trace 2 trace 3 </p>			
		The voltage gain is set at 0.5 V per square and the time base is set at 0.5 ms per square.			
	(i)	Which one of these traces is unidirectional?		1.1	(1)
	(ii)	Calculate the peak voltage for trace 3		1.1	(2)
	(iii)	Calculate the RMS voltage for trace 1		1.1	(2)
	(iv)	Calculate the frequency for trace 2		1.1	(3)
				13 marks	

Quality 1 mark

Total = 25marks