Exercises

1. The number of waves per second passing a fixed point is called the _____ and is measured in _____.
2. The time taken for two adjacent crests to pass a fixed point is called the _____ and is measured in _____.
3. The maximum distance of particles from their resting position is called the _____.
4. The highest point on a sine wave is called a _____ or _____.
5. The lowest point on a sine wave is called a _____.
6. Define a transverse wave:

   _____

   _____

   _____
7. Define a longitudinal wave:

   _____

   _____

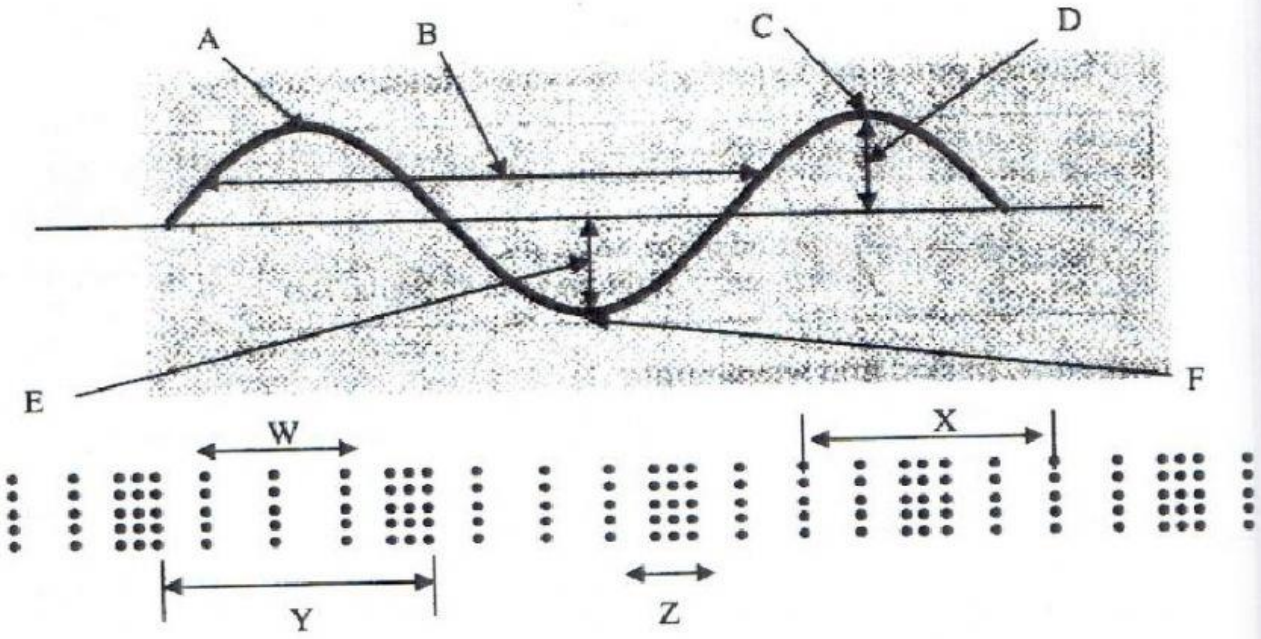
   _____
8. Give two examples of a transverse wave:

   _____ and _____
9. Give two examples of longitudinal waves:

   _____ and _____

10. Using the diagrams below write the letter that identifies the following:

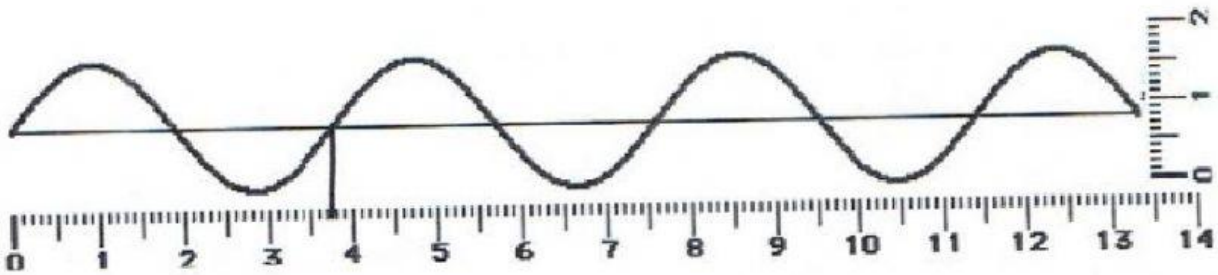
(i)	_____	=	crest
(ii)	_____	=	rarefaction
(iii)	_____	=	line of origin or rest position
(iv)	_____	=	amplitude
(v)	_____	=	compression
(vi)	_____	=	wavelength
(vii)	_____	=	trough



11. Calculate the velocity if wavelength = 8 m and f = 20 Hz.

12. Calculate wavelength if v = 50 m/s and f = 25 Hz.

13. Calculate frequency if v= 120 m/s and wavelength =3 m.



14. Use the diagram above, record

(a) _____ amplitude and

(b) _____ wavelength

15. Period of the wave is 5 s. If the wavelength is 6 m, calculate:

(a) the frequency

(b) the speed.