

- 24** A horizontal beam of light is incident normally on a polarising filter. The incident light is vertically polarised and has an intensity of 24 W m^{-2} . The direction of the transmission axis of the filter is at an angle of 30° to the vertical.

What is the intensity of the light in the transmitted beam?

- A** 18 W m^{-2} **B** 21 W m^{-2} **C** 28 W m^{-2} **D** 32 W m^{-2}

- 25** A sinusoidal wave has a frequency of 100 Hz and a wavelength of 1.0 m . A detector is placed at a distance of 1.0 m from the source of the wave. The detector is moved parallel to the wave's direction of travel. The detector is moved a distance of 1.0 m in the direction of travel. The detector is moved a distance of 1.0 m in the direction of travel. The detector is moved a distance of 1.0 m in the direction of travel.