25 Which region of the electromagnetic spectrum has waves of wavelength 1000 times smaller than the wavelength of visible light?

A infra-red

B microwaves

C ultraviolet

D X-rays

26 The diagram shows apparatus for the measurement of the frequency of a sound wave.

Sound of the unknown frequency is reflected back from a metal plate. A microphone placed at a distance *D* from the metal plate detects the sound intensity. A minimum intensity is detected with *D* = 12.0 cm. The plate is moved further away from the microphone until the next minimum is detected with *D* = 15.0 cm.

The speed of sound in air is 336 m s^{-1}.

What is the frequency of the sound?

A 56 Hz **B** 112 Hz **C** 5600 Hz **D** 11 200 Hz

27 An astronomer observes the light from a star that is moving away from the Earth.

For the observed light, what has been increased due to the star's motion?

A amplitude

B frequency

C speed

D wavelength