

23 Which statement about progressive transverse and longitudinal waves is correct?

- A** Particles in a transverse wave have fixed equilibrium positions but those in longitudinal waves do not.
- B** Transverse waves can be polarised but longitudinal waves cannot.
- C** Transverse waves transfer energy but longitudinal waves do not.
- D** Two-source interference can be demonstrated with transverse waves but not with longitudinal waves.

24 A point charge has a uniform surface charge density of $1.5 \times 10^{-10} \text{ C/m}^2$.