

- 17** A spy satellite orbits the Earth at a height of 200 km and carries out surveillance with a telescopic camera having a lens diameter of 35 cm. If the observations are made using light of wavelength 550 nm, the separation of two small objects on the Earth's surface that are just resolved is

**A** 0.31 m

**B** 3.1 m

**C** 5.6 m

**D** 10.8 m