

- 12** A spacecraft orbiting a planet in uniform circular motion has an antenna detached gently from it.

Neglecting air resistance, which statement best describes the motion of this detached antenna?

- A** It will move off in a straight line away from the planet.
- B** It will take a parabolic path into the planet.
- C** It will continue to orbit in uniform circular motion.
- D** It will drop straight down into the planet.