

10 Two stars of masses M and $2M$ move in circular motion about their common centre of mass.

Which of the following statements is true?

- A** Such a motion is not possible.
- B** Both stars move with the same speed.
- C** Both stars move with the same radius.
- D** Both stars move with the same angular velocity.

11 A spacecraft is launched from the surface of the Earth towards the Moon. In order to reach