

**21** A satellite is in geostationary orbit around the Earth.

Which statement is correct?

- A** The angular velocity of the satellite is the same as that of a point on the Earth's Equator.
- B** The speed of the satellite is the same as that of a point on the Earth's Equator.
- C** There is a resultant force on the satellite in the direction in which it is travelling.
- D** The satellite has no weight.

**22** A cell of electromotive force (e.m.f.)  $E$  and internal resistance  $r$  is connected to a variable resistor