CBSE

GRAVITATION WS 3

Class 09 - Science

Section A

1. If a planet existed whose mass was twice that of Earth and whose radius 3 times greater, how much will a 1 kg mass weigh on the planet? **[1]**

   a) 1.1 N
   b) 25 N
   c) 2.17 N
   d) 5 N

2. **Assertion (A):** Mass is a scalar quantity. **[1]**
   Reason (R): It has a magnitude as well as direction.

   a) Both A and R are true and R is the correct explanation of A.
   b) Both A and R are true but R is not the correct explanation of A.
   c) A is true but R is false.
   d) A is false but R is true.

3. **Assertion (A):** During a journey from the earth to the moon and back, maximum fuel is spent to overcome the earth's gravity at take off. **[1]**
   Reason (R): Earth's mass is much greater than that of the moon.

   a) Both A and R are true and R is the correct explanation of A.
   b) Both A and R are true but R is not the correct explanation of A.
   c) A is true but R is false.
   d) A is false but R is true.

Section B

4. Suggest a method for calculating the mass of the moon. **[2]**