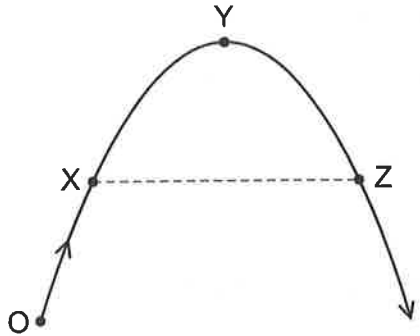
4 A stone is thrown from a point O in a vacuum and follows the trajectory as shown.



It passes through points X, Y and Z.

X and Z are on the same horizontal level.

Which sentence about the stone's motion is correct?

A At Y, the stone has no vertical component of velocity because its acceleration is zero.

B The acceleration at X is equal in magnitude and opposite to the acceleration at Z.

C The stone has the same acceleration at X, Y and Z.

D The vertical component of velocity at X is equal to the vertical component of velocity at Z.

5 An object on the Moon falls to the ground from rest through a distance of 4.50 m. The