1.
At the maximum height, what of the followings is correct?
Its velocity is zero
Its y-component velocity is zero
Its x-component velocity is zero
Its acceleration is zero

2.
To have the maximum range, a projectile must be launched at an angle of
25
35
45
60

3.
Ignoring air resistance, the acceleration of any projectile along the x-direction is (SI units)
9.8
0
varied from one to another
less than zero

4.
Ignoring air resistance, the acceleration of any projectile along the y-direction is (SI units)
9.8
0
varied from one to another
less than zero

5.
A projectile is fired at an angle of 30 above the horizontal with an initial speed of v. If the maximum range it reaches is 140 m, what its initial speed?
20 m/s
40 m/s
60 m/s
80 m/s

6.

A projectile is fired with an angle Q above the horizontal. It takes 15 s to reach its range of 135 m. What is its speed at the highest point?
9 m/s
10 m/s
11 m/s
12 m/s

7.
A projectile is fired horizontally from a height of 100 m above the ground. If it takes 2 sec to hit the ground, what is its initial speed?
20.2 m/s
30.2 m/s
40.2 m/s
50.2 m/s

8.
A projectile is fired horizontally from a building of height of 100 m above the ground. If it hits the ground at a point 20 m away from the edge of the building, what is its initial speed?
4.4 m/s
6.4 m/s
8.4 m/s
10 m/s

9.
A projectile is fired with initial speed of v at an angle Q above the horizontal. ITwo seconds later, the velocity of the projectile is determined to be v(t)=18.2 i - 11.15 j (m/s). What is its initial speed ?
20 m/s
30 m/s
40 m/s
50 m/s

10.
A projectile is fired with initial speed of v at an angle Q above the horizontal. ITwo seconds later, the velocity of the projectile is determined to be v(t)=18.2 i - 11.15 j (m/s). What is angle Q ?
15
25
35
45