**Gulistan Academy**

Physics (9th) Max.Marks = 30

Chapter No.2 (Kinematics) Pass Marks = 20

Time = 45 minutes

**Question No.1: Multiple choice questions. (1**x**6 = 6)**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. The distance-time graph of an object moving with uniform acceleration will be | | | |
| 1. A horizontal straight line | 1. An inclined straight line | 1. An exponential | 1. A random shaped |
| 1. A train moves with a constant speed of 36 km/min for 3 minutes. How much distance will it cover? | | | |
| 1. 1.8 km | 1. 18 km | 1. 108 km | 1. 10.8 km |
| 1. A car starts from rest. It acquires a speed of 23 ms-1 after 19 s. The distance moved by the car during this time is | | | |
| 1. 0.2185 km | 1. 2.185 km | 1. 21.85 km | 1. 21.85 m |
| 1. The speed-time graph of a body is shown in the figure below. The acceleration for section DE is   C:\Users\Maaz\AppData\Local\Microsoft\Windows\INetCache\Content.Word\a16d33a76649add2397ca85a4e66294ed31593a8.png | | | |
| 1. 0 ms-2 | 1. 1 ms-2 | 1. 2 ms-2 | 1. 3 ms-2 |
| 1. The motion of a football player is | | | |
| 1. Random Motion | 1. Translatory Motion | 1. Rotatory Motion | 1. Vibratory Motion |
| 1. A plastic ball and a hard ball are dropped from the top of a high tower. Which ball will hit the ground first? | | | |
| 1. Plastic Ball | 1. Hard Ball | 1. Both at same time | 1. None of these |

**Question No.2: Give short answers. (2**x**8 = 16)**

1. A body can never be completely at rest or in motion. Explain.
2. Differentiate between scalars and vectors.
3. How can vector quantities be represented graphically?
4. What do you mean by the term position? Explain.
5. How can you find the distance covered by an object by its speed-time graph?
6. A stone is dropped from the top of a tower. It takes about 5 seconds to reach the Earth. What will be its final speed?
7. Define Speed, Uniform Speed, Acceleration and Uniform Acceleration.
8. Define different types of Translatory Motion.

**Question No.3: (4+4 = 8)**

1. Drive the second equation of motion by graphical method.
2. When breaks are applied, the speed of train reduces from 96 kmh-1to 48 kmh-1 in 700 m. How much further will the train move before coming to rest?

***Best of luck***