



KALPAVRUKSHA MODEL SCHOOL

Answers of Assignment-7

Class: VII

Sub: Physics

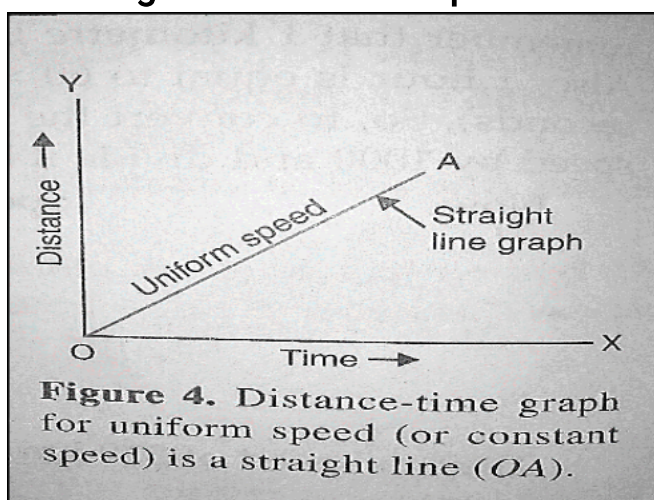
Date: 1.7.2021

Topic: TIME AND MOTION

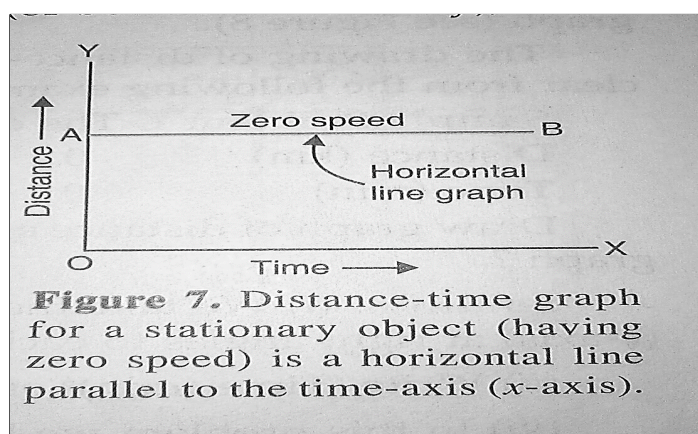
I. ANSWERS:

2. Show the distance-time graph for the motion in the following cases:

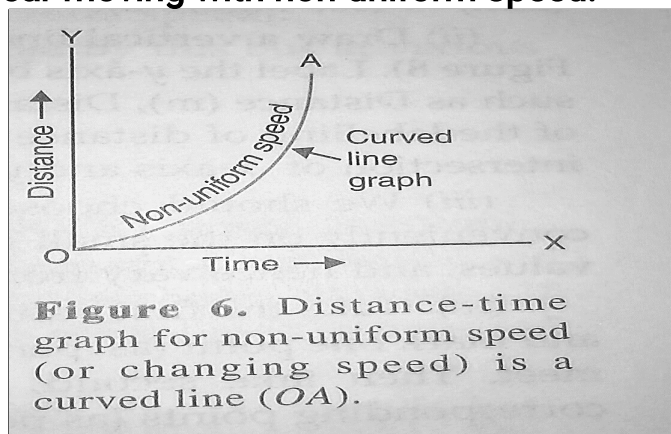
(i) A car moving with a constant speed.



(ii) A car parked on a side road.



(iii) A car moving with non-uniform speed.



3. What do you understand about the term 'Uniform Motion'?

ANS: This type of **motion** is defined as the **motion** of an object in which the object travels in a straight line and its velocity remains constant along that line as it covers equal distances in equal intervals of time.

4. What are the points that should be kept in mind while choosing a scale for drawing a graph?

ANS: The following points that we should keep in mind while choosing a graph is:

- 1) Label x-axis as time taken and Y-axis as the distance travelled by the vehicle
- 2) The intermediate values of each quantity to Mark the values on the graph.
- 3) We should utilize almost the full part of the paper on which the graph is to be drawn.
- 4) We should divide the maximum quantity into smaller equal parts.
- 5) A graph gives information about the nature of the movement of the object.
- 6) Movement or motion of the graph can be denoted by it's distance-time graphs.

5. Define Pie chart and Bar graph.

ANS: Pie charts show how much each category represents as a proportion of the whole, by using a circular format with different-sized "slices" for different percentages of the whole.

Bar graphs use a series of rectangular bars to show absolute values or proportions for each of the categories

6. What are applications of distance-time graphs?

ANS: Some applications of distance-time graph are:

- a. Used to calculate the speed of the body/object at a given interval of time when travelling in non-uniform motion.
- b. It helps us understand whether the motion is uniform or non uniform which is important in practical purposes.

- c. Distance- time graph helps to calculate the speed of an object.
- d. Graph helps in the easy interpretation of data and the distance -time graph helps us perceive the speed of an object.
- e. The distance-time graph helps us to find the distance travelled by the object at any instant interval of time.