1. List the three types of motion.
2. Define speed. What are its units?
3. A car is moving a speed of 55 km/h, how far will it travel in 20 minutes?
4. Define average speed.
5. Why is average speed used in calculations in place of actual speed?
6. Write the formula for average speed.
7. Define uniform motion.
8. Define non-uniform motion.
9. Differentiate between uniform motion & non-uniform motion.
10. List some methods by which our ancestors measured time.
11. How do clocks and watches measure time?
12. Write two examples for periodic motion.
13. Describe in detail the working of a simple pendulum. Also draw a diagram.
14. Explain the following:

    (a) Construction of a simple pendulum. (b) Bob of pendulum.

    (c) Oscillation of pendulum. (d) Time period of pendulum.
15. What is oscillatory motion? Give two examples.
16. What is rectilinear motion? Give two examples.
17. What is rotational motion? Give two examples.
18. What is circular motion? Give two examples.
19. How did Galileo discover the principle behind pendulum?
20. How will you determine the time period of a simple pendulum?
21. What precautions should be taken while performing the activity to determine the time period of a simple pendulum?
22. Why is the time noted when the bob is at the extreme positions and not when it is at mean positions while observing the motion of a pendulum?
23. Find the time period of a pendulum which completes 30 oscillations in 20 secs.
24. How do modern clocks and watches work?
25. What are quartz clocks?
26. Which clocks are more accurate, pendulum clocks or quartz clocks?
27. Write the basic units of : time, distance, speed.
28. Correct these units of speed:

(a) M/s. (b) seconds/m (c) km/h (d) cm/min

29. Who calculated the time period of a simple pendulum for the first time (discovered)

30. Which units of time will you use to express:

(a) your age (b) time taken for blinking

(c) the duration of a day

31. What is the smallest interval of time measured by common clocks.

32. (i) 1 day = _____ hrs = _____ min = _____ sec.

(ii) 1 hr = _____ sec.

(iii) 1 day = _____ millisec.

(iv) 1 sec = _____ nano second.

(v) 1 nanosecond = _____ microsec.

(vi) 1 microsecond = _____ second.

(vii) 1 millisecond = _____ second.

(viii) 1 millisecond = _____ nanosecond.

(ix) 1 century = _____ decade = _____ years.

33. Name some traditional/old devices used for measuring time.

34. What is the speed of -

(a) Rockets that launch satellites. (b) Speed of a tortoise.

35. Fill in the blank.

(i) Distance = _____ × time. (ii) Time = _____

(iii) Speed = $\frac{\text{distance}}{\text{\_\_\_\_\_}}$ (iv) Time = $\frac{\text{\_\_\_\_\_}}{\text{speed}}$

37. What is a speedometer? What does it measure? In what units does it measure this quantity?

38. What is odometer? What does it measure & in which units?

39. Convert 350 km/hr to m/s.

40. Draw a distance time graph for

(a) Car parked on a roadside.

(b) A car moving with uniform speed.

(c) Motion of honeybee.

41. A pendulum takes 36 s to complete 20 oscillations. Find its frequency & time period.