(OBJECTIVE TYPE QUESTIONS)

Directions : *Mark (✓) against the correct answer :*

1. A car moves at the speed of 80 km / hr. What is the speed of the car in metres per second ? **(Hotel Management, 2002)**

   (*a*) 8 m / sec (*b*) $20\frac{1}{9}$ m / sec (*c*) $22\frac{2}{9}$ m / sec (*d*) None of these

2. An athlete runs 200 metres race in 24 seconds. His speed is : **(S.S.C. 2002)**

   (*a*) 20 km / hr (*b*) 24 km / hr (*c*) 28.5 km / hr (*d*) 30 km / hr

3. Which of the following trains is the fastest ?
(a) 25 m / sec (b) 1500 m / min (c) 90 km / hr (d) None of these

4. A person crosses a 600 m long street in 5 minutes. What is his speed in km per hour ?
(a) 3.6 (b) 7.2 (c) 8.4 (d) 10
(R.R.B. 2003)

5. A man walking at the rate of 5 km / hr crosses a bridge in 15 minutes. The length of the bridge (in metres) is :
(S.S.C. 2000)
(a) 600 (b) 750 (c) 1000 (d) 1250

6. How long will a boy take to run round a square field of side 35 metres, if he runs at the rate of 9 km / hr ?
(S.S.C. 1999)
(a) 50 sec (b) 52 sec (c) 54 sec (d) 56 sec

7. A car is running at a speed of 108 kmph. What distance will it cover in 15 seconds ?
(a) 45 metres (b) 55 metres (c) 450 metres
(d) Cannot be determined (e) None of these
(R.B.I. 2003)

8. One of the two buses completes a journey of 300 km in $7\frac{1}{2}$ hours and the other a journey of 450 km in 9 hours. The ratio of their average speeds is : **(R.R.B. 2001)**
(a) 2 : 3 (b) 3 : 4 (c) 4 : 5 (d) 8 : 9

9. A truck covers a distance of 550 metres in 1 minute whereas a bus covers a distance of 33 kms in 45 minutes. The ratio of their speeds is :
(S.S.C. 2004)
(a) 3 : 4 (b) 4 : 3 (c) 3 : 5 (d) 50 : 3

10. The ratio between the speeds of two trains is 7 : 8. If the second train runs 400 kms in 4 hours, then the speed of the first train is :
(I.M.T. 2002)
(a) 70 km / hr (b) 75 km / hr (c) 84 km / hr (d) 87.5 km / hr

11. A train travels at an average of 50 miles per hour for $2\frac{1}{2}$ hours and then travels at a speed of 70 miles per hour for $1\frac{1}{2}$ hours. How far did the train travel in the entire 4 hours ?
(IGNOU, 2003)
(a) 120 miles (b) 150 miles (c) 200 miles (d) 230 miles

12. A man in a train notices that he can count 21 telephone posts in one minute. If they are known to be 50 metres apart, then at what speed is the train travelling ?
(a) 55 km / hr (b) 57 km / hr (c) 60 km / hr (d) 63 km / hr

13. Sound is said to travel in air at about 1100 feet per second. A man hears the axe striking the tree, $\frac{11}{5}$ seconds after he sees it strike the tree. How far is the man from the wood chopper ?
(M.B.A. 2002)
(a) 2197 ft (b) 2420 ft (c) 2500 ft (d) 2629 ft

14. An express train travelled at an average speed of 100 km / hr, stopping for 3 minutes after every 75 km. How long did it take to reach its destination 600 km from the starting point ?
(M.A.T. 2003)
(a) 6 hrs 21 min (b) 6 hrs 24 min (c) 6 hrs 27 min (d) 6 hrs 30 min

15. A certain distance is covered by a cyclist at a certain speed. If a jogger covers half the distance in double the time, the ratio of the speed of the jogger to that of the cyclist is :
(a) 1 : 2 (b) 2 : 1 (c) 1 : 4 (d) 4 : 1

16. A motor car starts with the speed of 70 km / hr with its speed increasing every two hours by 10 kmph. In how many hours will it cover 345 kms ? **(Bank P.O. 2003)**
(a) $2\frac{1}{4}$ hrs (b) 4 hrs 5 min (c) $4\frac{1}{2}$ hrs
(d) Cannot be determined (e) None of these

17. The speed of a car increases by 2 kms after every one hour. If the distance travelled in the first one hour was 35 kms, what was the total distance travelled in 12 hours?
(a) 456 kms (b) 482 kms (c) 552 kms
(d) 556 kms (e) None of these **(Bank P.O. 2003)**

18. A train covers a distance of 10 km in 12 minutes. If its speed is decreased by 5 km/hr, the time taken by it to cover the same distance will be : **(S.S.C. 1999)**
(a) 10 min (b) 11 min 20 sec (c) 13 min (d) 13 min 20 sec

19. Anna left for city A from city B at 5.20 a.m. She travelled at the speed of 80 km/hr for 2 hours 15 minutes. After that the speed was reduced to 60 km/hr. If the distance between two cities is 350 kms, at what time did Anna reach city A ?
(a) 9.20 a.m. (b) 9.25 a.m. (c) 9.35 a.m.
(d) 10.05 a.m. (e) None of these **(Bank P.O. 1999)**

20. An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. To cover the same distance in $1\frac{2}{3}$ hours, it must travel at a speed of : **(S.S.C. 2000)**
(a) 300 kmph (b) 360 kmph (c) 600 kmph (d) 720 kmph

21. A salesman travels a distance of 50 km in 2 hours and 30 minutes. How much faster, in kilometres per hour, on an average, must he travel to make such a trip in $\frac{5}{6}$ hour less time ? **(Hotel Management, 2002)**
(a) 10 (b) 20 (c) 30 (d) None of these

22. A person has to cover a distance of 6 km in 45 minutes. If he covers one-half of the distance in two-thirds of the total time; to cover the remaining distance in the remaining time, his speed (in km/hr) must be : **(S.S.C. 1999)**
(a) 6 (b) 8 (c) 12 (d) 15

23. A man performs $\frac{3}{5}$ of the total journey by rail, $\frac{17}{20}$ by bus and the remaining 6.5 km on foot. His total journey is :
(a) 65 km (b) 100 km (c) 120 km (d) 130 km

24. A can complete a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.
(a) 220 km (b) 224 km (c) 230 km (d) 234 km
(Assistant Grade, 1997)

25. A person travels equal distances with speeds of 3 km/hr, 4 km/hr and 5 km/hr and takes a total time of 47 minutes. The total distance (in km) is : **(R.R.B. 2001)**
(a) 2 (b) 3 (c) 4 (d) 5

26. A farmer travelled a distance of 61 km in 9 hours. He travelled partly on foot @ 4 km/hr and partly on bicycle @ 9 km/hr. The distance travelled on foot is :
(a) 14 km (b) 15 km (c) 16 km (d) 17 km
(U.P.S.C. 2002)

27. A is faster than B. A and B each walk 24 km. The sum of their speeds is 7 km/hr and the sum of times taken by them is 14 hours. Then, A's speed is equal to :
(a) 3 km/hr (b) 4 km/hr (c) 5 km/hr (d) 7 km/hr
(I.A.F. 2002)

28. A person travels from P to Q at a speed of 40 kmph and returns by increasing his speed by 50%. What is his average speed for both the trips ? **(M.B.A. 2003)**
(a) 36 kmph (b) 45 kmph (c) 48 kmph (d) 50 kmph

29. A car driver travels from the plains to the hill station, which are 200 km apart at an average speed of 40 km / hr. In the return trip, he covers the same distance at an average speed of 20 km / hr. The average speed of the car over the entire distance of 400 km is :

(a) 25 km / hr (b) 26.67 km / hr (c) 28,56 km / hr (d) 30 km / hr

30. Mac travels from A to B a distance of 250 miles in $5\frac{1}{2}$ hours. He returns to A in 4 hours 30 minutes. His average speed is :

(a) 44 mph (b) 46 mph (c) 48 mph (d) 50 mph

31. A boy goes to his school from his house at a speed of 3 km / hr and returns at a speed of 2 km / hr. If he takes 5 hours in going and coming, the distance between his house and school is : **(S.S.C. 2004)**

(a) 5 km (b) 5.5 km (c) 6 km (d) 6.5 km

32. The average speed of a train in the onward journey is 25% more than that in the return journey. The train halts for one hour on reaching the destination. The total time taken for the complete to and fro journey is 17 hours, covering a distance of 800 km. The speed of the train in the onward journey is :

(a) 45 km / hr (b) 47.5 km / hr (c) 52 km / hr (d) 56.25 km / hr

33. I started on my bicycle at 7 a.m. to reach a certain place. After going a certain distance, my bicycle went out of order. Consequently, I rested for 35 minutes and came back to my house walking all the way. I reached my house at 1 p.m. If my cycling speed is 10 kmph and my walking speed is 1 kmph, then on my bicycle I covered a distance of :

(a) $4\frac{61}{66}$ km (b) $13\frac{4}{9}$ km (c) $14\frac{3}{8}$ km (d) $15\frac{10}{21}$ km

34. A, B and C are on a trip by a car. A drives during the first hour at an average speed of 50 km / hr. B drives during the next 2 hours at an average speed of 48 km / hr. C drives for the next 3 hours at an average speed of 52 km / hr. They reached their destination after exactly 6 hours. Their mean speed was :

(a) 50 km / hr (b) $50\frac{1}{3}$ km / hr (c) $51\frac{1}{3}$ km / hr (d) 52 km / hr

35. A man on tour travels first 160 km at 64 km / hr and the next 160 km at 80 km / hr. The average speed for the first 320 km of the tour is : **(R.R.B. 2003)**

(a) 35.55 km / hr (b) 36 km / hr (c) 71.11 km / hr (d) 71 km hr

36. A boy rides his bicycle 10 km at an average speed of 12 km / hr and again travels 12 km at an average speed of 10 km / hr. His average speed for the entire trip is approximately : **(S.S.C. 1999)**

(a) 10.4 km / hr (b) 10.8 km / hr (c) 11 km / hr (d) 12.2 km / hr

37. A man travels 600 km by train at 80 km / hr, 800 km by ship at 40 km / hr, 500 km by aeroplane at 400 km / hr and 100 km by car at 50 km / hr. What is the average speed for the entire distance ? **(S.S.C. 2000)**

(a) 60 km nr (b) $60\frac{5}{123}$ km / hr (c) 62 km / hr (d) $65\frac{5}{123}$ km / hr

38. A car travels the first one-third of a certain distance with a speed of 10 km / hr, the next one-third distance with a speed of 20 km / hr, and the last one-third distance with a speed of 60 km / hr. The average speed of the car for the whole journey is :

(a) 18 km / hr (b) 24 km / hr (c) 30 km / hr (d) 36 km / hr

(Civil Services, 2003)

39. A motorist covers a distance of 39 km in 45 minutes by moving at a speed of x kmph for the first 15 minutes, then moving at double the speed for the next 20 minutes and then again moving at his original speed for the rest of the journey. Then, x is equal to :

(a) 31.2 (b) 36 (c) 40 (d) 52

40. Mary jogs 9 km at a speed of 6 km per hour. At what speed would she need to jog during the next 1.5 hours to have an average of 9 km per hour for the entire jogging session ?

(a) 9 kmph (b) 10 kmph (c) 12 kmph (d) 14 kmph

41. A car travelling with $\frac{5}{7}$ of its actual speed covers 42 km in 1 hr 40 min 48 sec. Find the actual speed of the car. (S.S.C. 2002)

(a) $17\frac{6}{7}$ km/hr (b) 25 km/hr (c) 30 km/hr (d) 35 km/hr

42. A train running at $\frac{7}{11}$ of its own speed reached a place in 22 hours. How much time could be saved if the train would have run at its own speed ?

(a) 7 hours (b) 8 hours (c) 14 hours (d) 16 hours

43. A man can reach a certain place in 30 hours. If he reduces his speed by $\frac{1}{15}$ th, he goes 10 km less in that time. Find his speed. (S.S.C. 2002)

(a) 4 km/hr (b) 5 km/hr (c) $5\frac{1}{2}$ km/hr (d) 6 km/hr

44. Walking $\frac{6}{7}$ th of his usual speed, a man is 12 minutes too late. The usual time taken by him to cover that distance is : (R.R.B. 2001)

(a) 1 hour (b) 1 hr 12 min. (c) 1 hr 15 min. (d) 1 hr 20 min

45. Starting from his house one day, a student walks at a speed of $2\frac{1}{2}$ kmph and reaches his school 6 minutes late. Next day he increases his speed by 1 kmph and reaches the school 6 minutes early. How far is the school from his house ? (S.S.C. 2004)

(a) 1 km (b) $1\frac{1}{2}$ km (c) $1\frac{3}{4}$ km (d) 2 km

46. A train when moves at an average speed of 40 kmph, reaches its destination on time. When its average speed becomes 35 kmph, then it reaches its destination 15 minutes late. Find the length of journey. (Bank P.O. 2003)

(a) 30 km (b) 40 km (c) 70 km (d) 80 km

47. Robert is travelling on his cycle and has calculated to reach point A at 2 P.M. if he travels at 10 kmph; he will reach there at 12 noon if he travels at 15 kmph. At what speed must he travel to reach A at 1 P.M. ? (D.M.R.C. 2003)

(a) 8 kmph (b) 11 kmph (c) 12 kmph (d) 14 kmph

48. If a train runs at 40 km'ph, it reaches its destination late by 11 minutes but if it runs at 50 kmph, it is late by 5 minutes only. The correct time for the train to complete its journey is :

(a) 13 min. (b) 15 min. (c) 19 min. (d) 21 min

49. A man covered a certain distance at some speed. Had he moved 3 kmph faster, he would have taken 40 minutes less. If he had moved 2 kmph slower, he would have taken 40 minutes more. The distance (in km) is : (S.S.C. 2003)

(a) 35 (b) $36\frac{2}{3}$ (c) $37\frac{1}{2}$ (d) 40

50. A car travels from P to Q at a constant speed. If its speed were increased by 10 km / hr, it would have taken one hour lesser to cover the distance. It would have taken further 45 minutes lesser if the speed was further increased by 10 km / hr. What is the distance between the two cities ?

(a) 420 km (b) 540 km (c) 600 km (d) 650 km

51. A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is :

(a) 100 kmph (b) 110 kmph (c) 120 kmph (d) 130 kmph

(M.A.T. 2003)

52. Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour ? **(N.I.F.T. 2002)**

(a) 9 (b) 10 (c) 12 (d) 20

53. A car covers a distance of 715 km at a constant speed. If the speed of the car would have been 10 km / hr more, then it would have taken 2 hours less to cover the same distance. What is the original speed of the car ?

(a) 45 km / hr (b) 50 km / hr (c) 55 km / hr (d) 65 km / hr

54. In covering a certain distance, the speeds of A and B are in the ratio of 3 : 4. A takes 30 minutes more than B to reach the destination. The time taken by A to reach the destination is : **(S.S.C. 1999)**

(a) 1 hour (b) $1\frac{1}{2}$ hours (c) 2 hours (d) $2\frac{1}{2}$ hours

55. In covering a distance of 30 km, Abhay takes 2 hours more than Sameer. If Abhay doubles his speed, then he would take 1 hour less than Sameer. Abhay's speed is :

(a) 5 kmph (b) 6 kmph (c) 6.25 kmph (d) 7.5 kmph

(M.A.T. 2003)

56. Three persons are walking from a place A to another place B. Their speeds are in the ratio of 4 : 3 : 5. The time ratio to reach B by these persons will be :

(a) 4 : 3 : 5 (b) 5 : 3 : 4 (c) 15 : 9 : 20 (d) 15 : 20 : 12

57. With a uniform speed a car covers the distance in 8 hours. Had the speed been increased by 4 km / hr, the same distance could have been covered in $7\frac{1}{2}$ hours. What is the distance covered ? **(Bank P.O. 2003)**

(a) 420 km (b) 480 km (c) 640 km

(d) Cannot be determined (e) None of these

58. Two men start together to walk to a certain destination, one at 3 kmph and another at 3.75 kmph. The latter arrives half an hour before the former. The distance is :

(a) 6 km (b) 7.5 km (c) 8 km (d) 9.5 km

59. If a person walks at 14 km / hr instead of 10 km / hr, he would have walked 20 km more. The actual distance travelled by him is : **(R.R.B. 2000)**

(a) 50 km (b) 56 km (c) 70 km (d) 80 km

60. In a flight of 600 km, an aircraft was slowed down due to bad weather. Its average speed for the trip was reduced by 200 km / hr and the time of flight increased by 30 minutes. The duration of the flight is : **(M.A.T. 2002)**

(a) 1 hour (b) 2 hours (c) 3 hours (d) 4 hours

61. It takes eight hours for a 600 km journey, if 120 km is done by train and the rest by car. It takes 20 minutes more, if 200 km is done by train and the rest by car. The ratio of the speed of the train to that of the car is : **(M.B.A. 2001)**

(a) 2 : 3 (b) 3 : 2 (c) 3 : 4 (d) 4 : 3