1. 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 :

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

2. A person 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 of the entire distance ?

(a) 65 (5/123) km/hr
(b) 60 km/hr
(c) 60 (5/123) km/hr
(d) 62 km/hr

3. A train moves with a speed of 30 kmph for 12 minutes and for next 8 minutes at a speed of 45 kmph. Find the average speed of the train :

(a) 37.5 kmph
(b) 36 kmph
(c) 48 kmph
(d) 30 kmph

4. A man goes from A to B at a uniform speed of 12 kmph and returns with a uniform speed of 4 kmph his average speed (in kmph) for the whole journey is :

(a) 8
(b) 7.5
(c) 6
(d) 4.5

5. A man travels a distance of 24 km at 6 kmph. Another distance of 24 km at 8 kmph and a third distance of 24 km at 12 kmph his average speed for the whole journey (in kmph) is

(a) 8 2/3
(b) 8
(c) 2 10/13
(d) 9

6. A man travels a distance of 24 km at 6 kmph. Another distance of 24 km at 8 kmph and a third distance of 24 km at 12 kmph his average speed for the whole journey (in kmph) is

(a) x+y / 2 xy
(b) 2 xy / x+y
(c) 2 / x+y
(d) 1/ x + 1/y

7. A man goes from Mysore to Bangalore at a uniform speed of 40 km/hr and comes back to Mysore at a uniform speed of 60 km/hr. His average speed for the whole journey is

(a) 48 kmph
(b) 50 kmph
(c) 54 kmph
(d) 55 kmph

8. One third of a certain journey is covered at the rate of 25 km/hr, one-fourth at the rate of 30 km/hr and rest at 50 km/hr. The average speed for the whole journey is

(a) 35 kmph
(b) 33 1/3 kmph
(c) 30 kmph
(d) 37 1/12 kmph

9. A man completes 30 km of a journey at the speed of 6
km/hr and the remaining 40 km of the journey in 5 hours. His average speed for the whole journey is

(a) 7 kmph
(b) 6 4/11 kmph
(c) 8 kmph
(d) 7.5 kmph

10. A man covers the journey from a station A to station B at a uniform speed of 36 km/hr and returns to A with a uniform speed of 45 km/hr. His average speed for the whole journey is :

(a) 40 kmph
(b) 40.5 kmph
(c) 41 kmph
(d) 42 kmph

11. The speed of a train going from Nagpur to Delhi is 100 kmph while its speed is 150 kmph when coming back from Delhi to Nagpur. Then the average speed during the whole journey is :

(a) 120 kmph
(b) 125 kmph
(c) 140 kmph
(d) 135 kmph

12. P travels for 6 hours at the rate of 5 km/hr and for 3 hours at the rate of 6 km/hr. The average speed of the journey in km/hr is

(a) 3 1/5
(b) 5 1/3
(c) 1 2/9
(d) 2 2/5

13. A train travelled at a speed of 35 km/hr for the first 10 minutes and at a speed of 20 km/hr for the next 5 minutes. The average speed of the train for the total 15 minutes is

(a) 30
(b) 23
(c) 31
(d) 29

14. On a journey across Kolkata, a taxi averages 50 km per hour for 50% of the distance, 40 km per hour for 40% of it and 20 km per hour for the remaining. The average speed (in km/hour) for the whole journey is :

(a) 42
(b) 40
(c) 35
(d) 45

15. A train runs from Howrah to Bandel at an average speed of 20 km/hr and returns at an average speed of 30 km/hr. The average speed (in km/hr) of the train in the whole journey is

(a) 20
(b) 22.5
(c) 24
(d) 25

16. A motorist travels to a place 150 km away at an average speed of 50 km/hr and returns at 30 km/hr. His average speed for the whole journey in km/hr is

(a) 37.5
(b) 37
(c) 35
(d) 40

17. A man goes to a place on bicycle at speed of 16 km/hr and comes back at lower speed. If the average speed is 6.4 km/hr in total journey, then the return speed (in km/hr) in total journey, then the return speed (in km/hr) is :

(a) 10
(b) 8
(c) 6
(d) 4

18. Durga walks 5 km from her home to school in 6 minutes, then bicycles back to home along the same route at 15 km per hour. Her sister Smriti makes the same round trip, but does so at half of Durga's average speed. How much time does Smriti spend on her round trip ?

(a) 120 min
(b) 40 min
(c) 160 min
(d) 80 min

19. A car travels from A to B at the rate of 40 km/h and returns from B to A at the rate of 60 km/hr. Its average speed during the whole journey is

(a) 48 kmph
(b) 50 kmph
(c) 45 kmph
(d) 60 kmph

20. Gautam goes to office at a speed of 12 kmph and returns home at 10 kmph. His average speed is :

(a) 11 kmph
(b) 22 kmph
(c) 10.9 kmph
(d) 12.5 kmph

21. A man travels 50 km at speed 25 km/hr and next 40 km at 20 km/hr and there after travels 90 km at 15 km/h. His average speed is :

(a) 18 kmph
(b) 25 kmph
(c) 20 kmph
(d) 15 kmph

22. To cover a distance of 216 km in 3.2 hours, what should be the average speed of the car in metre/second ?

(a) 67.5 m/sec
(b) 33.75 m/sec
(c) 37.5 m/sec
(d) 18.75 m/sec

23. To cover a distance of 234 km, in 1.6 hours what should be the average speed of the car in metre/second ?

(a) 40.625 m/sec
(b) 146.25 m/sec
(c) 73.125 m/sec
(d) 81.25 m/sec

24. To cover a distance of 225 km in 2.5 hours what should be the average speed of the car in metre/second ?

(a) 90 m/sec
(b) 45 m/sec
(c) 50 m/sec
(d) 25 m/sec

25. A car travels a certain distance at 70 km/hr, and comes back at 30 km/hr. Find the average speed for total journey.

(a) 42 (b) 50 (c) 34 (d) 58

26. A train is travelling at a rate of 45 km/hr, how many seconds it will take to cover a distance of 4/5 km?

(a) 36 s
(b) 64 s
(c) 90 s
(d) 120 s

27. An aeroplane covers a certain distance at a specific speed of 240 km in 5 hrs, to cover the same distance in 1(2/3) hours, it must travel at a speed of :

(a) 300 kmph
(b) 360 kmph
(c) 600 kmph
(d) 720 kmph

28. A man walking at the rate of 5 km/hr, crosses a bridge in 15 minutes. The length of the bridge (in metres) is

(a) 600
(b) 750
(c) 1000
(d) 1250

29. An athlete runs 200 metres race in 24 seconds. His speed (in km/hr) is :

(a) 20
(b) 24
(c) 28.5
(d) 30

30. A car travelling at a speed of 40 km/hr can complete a journey in 9 hours. How long will it take to travel the same distance at 60 km/hr ?
(a) 6 hrs (b) 3 hrs (c) 4 hrs (d) 4 ½ hrs

31. A man travelled a certain distance by train at the rate of 25 kmph. And walked back at the rate of 4 kmph. If the whole journey took 5 hours 48 mins, the distance was

(a) 25
(b) 30
(c) 20
(d) 15

32. 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 :

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

33. A boy runs 20 km in 2.5 hours, how long will he take to run 32 km at double the previous speed ?

(a) 2
(b) 2 ½
(c) 4 ½
(d) 5

34. A man riding his bicycle covers 150 metres in 25 seconds. What is his speed in km per hour ?

(a) 25
(b) 21.6
(c) 23
(d) 20

35. The speed of a bus is 72 km/hr, the distance covered by the bus in 5 seconds is

(a) 100 m
(b) 60 m
(c) 50 m
(d) 74.5 m

36. A train starts from a place A at 6 am and arrives at another place B at 4:30 pm on the same day. If the speed of the train is 40 km per hour, find the distance travelled by the train ?

(a) 420 km
(b) 230 km
(c) 320 km
(d) 400 km

37. A man walks 'a' km in 'b' hours, the time taken to walk 200 metres is

(a) 200 b/a hrs
(b) b/5a hrs
(c) b/a hrs
(d) ab/200 hrs

38. A bullock cart has to cover a distance of 120 km, in 15 hours. If it covers half of the journey in (3/5)th time, the speed to cover the remaining distance in the time left has to be

(a) 6.4 kmph
(b) 6.67 kmph
(c) 10 kmph
(d) 15 kmph

39. A train covers a certain distance in 210 minutes at a speed of 60 kmph. The time taken by the train, to cover the same distance at a speed of 80 kmph is

(a) 3 5/8 hrs
(b) 2 5/8 hrs
(c) 4 5/8 hrs
(d) 3 hrs

40. A man rides at the rate of 18 km/hr, but stops for 6 mins, to change horses at the end of every 7th km. The time that he will take to cover a distance of 90 km is

(a) 6 hrs
(b) 6 hrs 12 min
(c) 6 hrs 18 min
(d) 6 hrs 24 min

41. A man is walking at a speed of 10 kmph, after every km, he takes a rest for 5 minutes. How much time will he take to cover a distance of 5 km ?

(a) 60
(b) 50
(c) 40
(d) 70

42. A train is running at a speed of 116 km/hr. the distance covered by the train in metres in 18 seconds is :

(a) 900
(b) 1160
(c) 508
(d) 580

43. A man travels 3/4 th of the distance of his journey by bus, 1/6 th by rickshaw and 2 km on foot. The total distance travelled by the man is :

(a) 12
(b) 18
(c) 20
(d) 24

44. To cover a certain distance with a speed of 60 km/hr, a train takes 15 hours. If it covers the same distance in 12 hours, what will be its speed ?

(a) 65
(b) 70
(c) 75
(d) 80

45. A train is moving at a speed of 54 km/hr. How many seconds it will take to cover a distance of 450 metres ?

(a) 60
(b) 30
(c) 45
(d) 36

46. In covering a certain distance, the speed 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:

(a) 1 hr
(b) 1 ½ hr
(c) 2 hr
(d) 2 ½ hr

47. The speed of A and B are in the ratio 3:4 takes 20 minutes more than B to reach a destination. In what time does A reach the destination ?

(a) 1 1/3 hrs
(b) 2 hrs
(c) 2 2/3 hrs
(d) 1 2/3 hrs

48. The ratio of length of two trains is 5:3 and the ratio of their speed is 6:5 the ratio of time taken by them to cross a pole is

(a) 5:6
(b) 11:8
(c) 25:18
(d) 27:16

49. A train starts from A at 7 am towards B with speed 50 km/hr. Another train starts from B at 8 am with speed 60 km/hr towards A. Both of them meet at 10 am at C. The ratio of the distance AC to BS is

(a) 5:6
(b) 5:4
(c) 6:5
(d) 4:5

50. Two trains started at the same time, one from A to B and the other from B to A. If they arrived at B and A respectively 4 hours and 9 hours after they passed each other, the ratio of the speed of the two trains was

(a) 2:1
(b) 3:2
(c) 4:3
(d) 5:4

51. The speed of two trains are in the ratio 6 : 7. If the second train runs 364 km in 4 hours, then the speed of first train is

(a) 60
(b) 72
(c) 78
(d) 84

52. Three cars travelled distance in the ratio 1 : 2: 3. If the ratio of the time of travel is 3 : 2 : 1 , then the ratio of their speed is

(a) 3:9:1
(b) 1:3:9
(c) 1:2:4
(d) 4:3:2

53. A cyclist, after cycling a distance of 70 km on the second day, finds that the ratio of distance covered by him on the first two days is 4 : 5. If he travels a distance of 42 km, on the third day, then the ratio of distance travelled on the third day and the first day is:

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

54. A certain distance is covered by a cyclist at a certain speed. If a jogger covers half the distance in double time, the ratio of the speed of the jogger to that of the cyclist is

(a) 1:4
(b) 4:1
(c) 1:2
(d) 2:1

55. Two people A and B are at a distance of 260 km from each other at 9:00 am, A immediately starts moving towards B at a speed of 25 km/hr and at 11:00 am, B starts moving towards A at a speed of 10 km/hr. At what time (in pm) will they meet each other ?

(a) 5 PM
(b) 6 PM
(c) 6:30 PM
(d) 7 PM

56. A truck covers a distance of 550 metre in one minute where as a bus covers a distance of 33 km in ¾ hour. Then the ratio of their speeds is :

(a) 1:3
(b) 2:3
(c) 3:4
(d) 1:4

57. A car travels 80 km, in 2 hours and a train travels 180 km, in 3 hours. The ratio of the speed of the car to that of the train is :

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

58. The speeds of three cars are in the ratio of 1 : 3 : 5, the ratio among the time taken by these cars to travel the same distance is

(a) 3:5:15
(b) 15:3:5
(c) 15:5:3
(d) 5:3:1

59. A man starts running from point P at 11:00 am with a speed of 10 km/hr. He runs for 2 hours and then takes a 1 hour rest. He continues this till he is caught by another man who starts at 2:00 pm from point P and runs non-stop at a speed of 15 km/hr towards the first man. At what time (in pm) will the first man be caught ?

(a) 6:20
(b) 4:40
(c) 6:00
(d) 5:30

60. If a man walks 20 km at 5 km/hr, he will be late by 40 minutes. If he walks at 8 km/hr, how early from the fixed time will he reach ?

(a) 15 min
(b) 25 min
(c) 50 min
(d) 1 ½ min

61. If a man reduces his speed to (2/3), he takes 1 hour more in walking a certain distance. The time (in hours) to cover the distance with his normal speed is :

(a) 2
(b) 1
(c) 3
(d) 1.5

62. A students rides on bicycle at 8 km/hour and reaches his school 2.5 minutes late. The next day he increases his speed to 10 km/hour and reaches school 5 minutes early. How far is the school from his house ?

(a) 5/8 km (b) 8 km (c) 5 km (d) 10 km

63. If a train runs at 40 km/hour, it reaches its destination late by 11 minutes, but if it runs at 50 km/hour, it is late by 5 minutes only. The correct time (in minutes) for the train to complete the journey is

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

64. A boy is late by 9 minutes if he walks to school at a speed of 4 km/hr. If he walks at the rate of 5 km/hr, he arrives 9 minutes early. The distance to his school is

(a) 9 km
(b) 5 km
(c) 4 km
(d) 6 km

65. A car can cover a certain distance in 4(1/2) hours, if the speed is increased by 5 km/hours, it would take ½ hour less to cover the same distance. Find the slower speed of the car

(a) 50 kmph
(b) 40 kmph
(c) 45 kmph
(d) 60 kmph

66. Shri X goes to his office by scooter at a speed of 30 km/h and reaches 6 minutes earlier. If he goes at a speed of 24 km/h, he reaches 5 minutes late. The distance of his office is

(a) 20 km
(b) 21 km
(c) 22 km
(d) 24 km

67. A student goes to school at the rate of 2(1/2) km/h and reaches 6 minutes late. If he travels at the speed of 3 km/h, he is 10 minutes early. The distance (in km) between the school and his house is

(a) 5
(b) 4
(c) 3
(d) 1

68. A train covers a distance between station A and Station B in 45 minutes. If the speed of the train is reduced by 5 km/hr, then the same distance is covered in 48 minutes. The distance between station A and B is

(a) 60 km
(b) 64 km
(c) 80 km
(d) 55 km

69. A car left 3 minutes early than the scheduled time and in order to reach the destination 126 km away in time, it has to slow its speed by 6 km/hr from the usual. What is the usual speed (in km/hr) of the car ?

(a) 56
(b) 63
(c) 94.5
(d) 126

70. If a boy walks from his house to school at the rate of 4 km per hour, he reaches the school 10 minutes earlier than the scheduled time. However, if he walks at the rate of 3 km per hour, he reaches 10 minutes late. Find the distance of his school from his house

(a) 5
(b) 4
(c) 6
(d) 4.5

71. A train travelling at a speed of 55 km/hr travels from place X to place Y in 4 hours, if its speed is increased by 5 km/hr, then the time of journey is reduced by

(a) 25 min
(b) 35 min
(c) 20 min
(d) 30 min

72. If a train runs at 70 km/hr, it reaches its destination late by 12 minutes, But if it runs at 80 km/hr, it is late by 3 minutes. The correct time to cover the journey is

(a) 58 min
(b) 2 hrs
(c) 1 hr
(d) 59 min

73. Rameshwar goes on a trip on his motorcycle and rides for 405 km. If he rides for 6 hours at a speed of 45 km/hr, find at what speed he travels for the remaining 3 hours of the journey ?

(a) 55 kmph
(b) 53 kmph
(c) 45 kmph
(d) 40 kmph

74. A motorcyclist left 6(6/9) minutes later than the scheduled time but in order to reach its destination 21 km, away on time, he had to increase his speed by 12 km/hr from the usual speed. What is the usual speed (in kmph) of the motorcyclist ?

(a) 28
(b) 35
(c) 42
(d) 64

75. A bus starts running with the initial speed of 33 km/hr and its speed increases every hour by certain amount. If it takes 7 hours to cover a distance of 315 km, what will be hourly increment (in km/hr) in the speed of the bus

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

76. A bus left 60 minutes later than the scheduled time but in order to reach its destination 48 km away in time, it had to increase the speed by 4 km/hr from the usual speed. What is usual speed (in km/hr) of the bus ?

(a) 9
(b) 12
(c) 15
(d) 8

77. A bus starts running with the initial speed of 21 km/hr and its speed increases every hour by 3 km/hr. How many hours will it take to cover a distance of 252 km?

(a) 3 (b) 5 (c) 8 (d) 10

78. A racing car going at a average speed of 108 km/hr, takes 15 minutes to complete a lap on a racing track, by how much should it increase its speed (in km/hr) to complete the lap in 12 minutes ?

(a) 24
(b) 21
(c) 27
(d) 30

79. Train A takes 45 minutes more than train B to travel a distance of 450 km, due to engine trouble speed of train B falls by a quarter, so it takes 30 minutes more than train A to complete the same journey, What is the speed of train A (in km/hr) ?

(a) 90
(b) 120
(c) 100
(d) 110

80. A thief is noticed by a policeman from a distance of 200m. The thief starts running and the policeman chases him. The thief and the policeman run at the rate of 10 km/hr and 11 km/hr respectively. What is the distance between them after 6 minutes ?

(a) 100 m
(b) 190 m
(c) 200 m
(d) 150 m

81. A moving train, 66 metres long, overtakes another train of 88 metres long, moving in the same direction in 0.168 minutes. If the second train is moving at 30 km/hr, at what speed if the first train moving ?

(a) 85 (b) 50 (c) 55 (d) 25

82. A constable is 114 metres behind thief. The constable runs 21 metres and the thief runs 15 metres in a minute. In what time will the constable catch the thief ?

(a) 19 min
(b) 18 min
(c) 17 min
(d) 16 min

83. How much time does a train, 50 m long, moving at 68 km/hr take to pass another train, 75 m long, moving at 50 km/hr in the same direction ?

(a) 5 sec
(b) 10 sec
(c) 20 sec
(d) 25 sec

84. Two trains travel in the same direction at the speed of 56 km/h and 29 km/h respectively. The faster train passes a man in the slower train in 10 seconds. The length of the faster train (in metres) is

(a) 100
(b) 80
(c) 75
(d) 120

85. A bus moving at a speed of 45 km/h overtakes a truck 150 metres ahead going in the same direction in 30 seconds. The speed of the truck is

(a) 27 kmph
(b) 24 kmph
(c) 25 kmph
(d) 28 kmph

86. Two trains start from a certain place on two parallel tracks in the same direction. The speed if the trains are 45 km/hr and 40 km/hr respectively. The distance between the two trains after 45 minutes will be

(a) 2 km 500 m
(b) 2 km 750 m
(c) 3 km 750 m
(d) 3 km 250 m

87. A boy started from his house by bicycle at 10 am, at a speed of 12 km per hour, his elder brother started after 1 hr 15 mins by scooter along the same path and caught him at 1:30 pm. The speed of the scooter will be (in km/hr)

(a) 4.5
(b) 36
(c) 18 2/3
(d) 9

88. A policeman goes after a thief who has 100 metres start, if the policeman runs a kilometre in 8 min, and the thief a km in 10 min, the distance covered by the thief before he is over powered is

(a) 350 m
(b) 400 m
(c) 320 m
(d) 420 m

89. Two trains are running 40 km/hr and 20 km/hr respectively in the same direction. The fast train completely passes a man sitting in the slow train in 5 seconds. The length of the fast train is

(a) 23 2/9 m
(b) 27 m
(c) 27 7/9 m
(d) 23 m

90. A train is moving at a speed of 80 km/h and covers a certain distance in 4.5 hrs. The speed of the train to cover the same distance in 4 hours is

(a) 100 kmph
(b) 70 kmph
(c) 85 kmph
(d) 90 kmph

91. Two trains 180 metres and 120 metres in length are running towards each other on parallel tracks, one at the rate 65 km/hr and another at 55 km.hr. In how many seconds will they be clear of each other from the moment they meet ?

(a) 6
(b) 9
(c) 12
(d) 15

92. Two trains, of same length, are running on parallel tracks in the same direction with speed 60 km/hr and 90 km/hr respectively. The latter completely crosses the former in 30 seconds. The length of each train (in metres) is

(a) 125
(b) 150
(c) 100
(d) 115

93. Two trains, 80 metres and 120 metres long, are running at a speed of 25 km/hr and 35 km/hr respectively in the same direction on parallel tracks. How many seconds will they take to pass each other ?

(a) 48 (c) 70
(b) 64 (d) 72

94. A goods train starts running from a place at 1 pm, at the rate of 18 km/hr. Another goods train starts from the same place at 3 pm in the same direction and overtakes the first train at 9 pm. The speed of the second train in km/hr is

(a) 24
(b) 30
(c) 15
(d) 18

95. Two trains 125 metres and 115 metres in length, are running towards each other on parallel lines, one at the rate of 33 km/hr. How much time (in seconds) will they take to pass each other from the moment they meet ?

(a) 8
(b) 10
(c) 12
(d) 15

96. A thief steals a car at 1:30 pm and drives it off at 40 km/hr. The theft is discovered at 2:00 pm and the owner sets off in another car at 50 km/hr. He will overtake the thief at

(a) 5 PM
(b) 4:00 PM
(c) 4:30 PM
(d) 6 PM

97. Two trains start from stations A and B and travel towards each other at speeds of 50 kmph and 60 kmph respectively. At the time of their meeting, the second train has travelled 120 km more than the first. The distance between A and B is

(a) 1200 km (c) 1320 km
(b) 1440 km (d) 990 km

98. The distance between two places A and B is 60 km. Two cars start at the same time from A and B, travelling at the speed of 35 km/h and 25 km/h, respectively. If the cars run in the same direction, then they will meet after (in hours)

(a) 6.5
(b) 6.2
(c) 6
(d) 6.52

99. A train 'B' speeding with 100 kmph crosses another train C, running in the same direction, in 2 minutes. If the length of the train B and C be 150 metre and 250 metre respectively, what is the speed of the train C (in kmph) ?

(a) 75
(b) 88
(c) 95
(d) 110

100. A passenger train running at the speed of 80 km/hr leaves the railway station 6 hours after a goods train leaves and overtakes it in 4 hours. What is the speed of the goods train ?

(a) 32 kmph
(b) 50 kmph
(c) 45 kmph
(d) 64 kmph