PROBLEMS ON TRAINS

1. How many seconds will a train 60 m in length, travelling at the rate of 42 km/h, take to pass another train 84m long, proceeding in the same direction at the rate of 30 km/h?
(a) 20 sec   (b) 30 sec   (c) 40 sec   (d) 50 sec   (e) None of these

2. Two trains running at the rate of 45 km and 36 km an hour respectively, on parellel tracks in opposite directions, are observed to pass each other in 8 sec., when they are running in the same direction at the same rate as before, a person sitting in the faster train observes that he passes the other in 30 sec. Find the length of trains.
(a) 70m,100m   (b)65m,95m   (c)75m,105m   (d)80m,110m   (e) None of these

3. A train 75 m long overtook a person who was walking at the rate of 6 km/h and passed him in $7\frac{1}{2}$ seconds. Subsequently, it overtook a second person, and passed him in $6\frac{3}{4}$ seconds. At what rate was the second person traveling?
(a) 1 km/h   (b) 2 km/h   (c) 3 km/h   (d) 4 km/h   (e) None of these

4. two trains 128 m and 122 m long are running towards each other on parallel lines at 48kmph and 42 kmph respectively. In what time will they clear off each other from the moment they meet?
(a) 10 sec   (b) 12 sec   (c) 9 sec   (d) 14 sec   (e) None of these

5. The speed of two trains are in the ratio of 6 : 5. They are running in opposite direction on parallel track. If each takes 2 seconds to cross a pole, then how much time they will take to cross each other?
(a) 2 sec   (b) 3 sec   (c) 4 sec   (d) 6 sec   (e) None of these

6. Two trains of length 120 m and 90 m respectively with the same speed pass a static pole in 8 sec and 6 sec respectively. In what time they will cross each other, if they are moving in opposite direction?
(a) 14 sec   (b) 6 sec   (c) 20 sec   (d) 7 sec   (e) None of these

7. A train travelling at the speed of 50kmph leaves from a station. Another train travelling at speed of 60 kmph leaves the same station after 7 hrs in the same direction. They will meet after what distance?
(a) 1800km   (b) 2100km   (c) 2400km   (d) 2700 km   (e) None of these

8. A train of length 150 m takes 40 sec to cross a tunnel of length 300 m. The speed of the train is:
(a) 47 km/h   (b) 46 km/h   (c) 40.5 km/h   (d) 45.5 km/h   (e) None of these

9. A man in a train notices that he can count 21 poles in 2 min. If they are known to be 50 m apart, then at what speed is the train travelling?
(a) 15 km/h   (b) 30 km/h   (c) 45km/h   (d) CND   (e) None of these

10. Two trains of equal length are running on parallel lines in the same direction at 50 km/h and 40 km/h. The faster train passes the slower train in 3 min. The length of each train is:
(a) 250 mt   (b) 300 mt   (c) 350 mt   (d) 400 mt   (e) None of these

11.Two trains starts simultaneously.The first train moves from Mumbai to Baroda,whereas the second train moves from Baroda to Mumbai.After they meet at a point in between,they respectively take 81 hrs and 64 hrs to reach their destinations.What is the ratio of their speed?
(a)8:9   (b)17:8   (c)26:11   (d)35:11   (e)None of these

12.Two trains are moving in opposite directions on two parallel tracks.How many seconds will they take to cross each other if the sum of their lengths is 216 m, and sum of their speed is 72m/s ?
(a)3sec   (b)4sec   (c)2 sec   (d)5sec   (e)None of these