

A division of PHIE Learning Center

## GATE Aptitude Practice Questions

### Time and Distance

- Q.No. 1** The distance between Delhi and Agra is 233 km. A car  $P$  started travelling from Delhi to Agra and another car  $Q$  started from Agra to Delhi along the same road 1 hour after the car  $P$  started. The two cars crossed each other 75 minutes after the car  $Q$  started. Both cars were travelling at constant speed. The speed of car  $P$  was 10 km/hr more than the speed of car  $Q$ . How many kilometers the car  $Q$  had travelled when the cars crossed each other?
- (A) 66.6  
(B) 75.2  
(C) 88.2  
(D) 116.5
- Q.No. 2** Two trains started at 7AM from the same point. The first train travelled north at a speed of 80km/h and the second train travelled south at a speed of 100 km/h. The time at which they were 540 km apart is \_\_\_\_\_ AM.
- (A) 9                      (B) 10                      (C) 11                      (D) 11.30
- Q.No. 3** Two cars start at the same time from the same location and go in the same direction. The speed of the first car is 50 km/h and the speed of the second car is 60 km/h. The number of hours it takes for the distance between the two cars to be 20 km is \_\_\_\_.
- (A) 1                      (B) 2                      (C) 3                      (D) 6
- Q.No. 4** An automobile travels from city A to city B and returns to city A by the same route. The speed of the vehicle during the onward and return journeys were constant at 60 km/h and 90 km/h, respectively. What is the average speed in km/h for the entire journey?
- (A) 72                      (B) 73                      (C) 74                      (D) 75
- Q.No. 5** Trucks (10 m long) and cars (5 m long) go on a single lane bridge. There must be a gap of at least 20 m after each truck and a gap of at least 15 m after each car. Trucks and cars travel at a speed of 36 km/h. If cars and trucks go alternately, what is the maximum number of vehicles that can use the bridge in one hour?
- (A) 1440                      (B) 1200                      (C) 720                      (D) 600

- Q.No. 6** Budhan covers a distance of 19 km in 2 hours by cycling one fourth of the time and walking the rest. The next day he cycles (at the same speed as before) for half the time and walks the rest (at the same speed as before) and covers 26 km in 2 hours. The speed in km/h at which Budhan walks is
- (A) 1                      (B) 4                      (C) 5                      (D) 6
- Q.No. 7** It takes 10 s and 15 s, respectively, for two trains travelling at different constant speeds to completely pass a telegraph post. The length of the first train is 120 m and that of the second train is 150 m. The magnitude of the difference in the speeds of the two trains (in m/s) is \_\_\_\_\_.
- (A) 2.0                      (B) 10.0                      (C) 12.0                      (D) 22.0
- Q.No. 8** Michael lives 10 km away from where I live. Ahmed lives 5 km away and Susan lives 7 km away from where I live. Arun is farther away than Ahmed but closer than Susan from where I live. From the information provided here, what is one possible distance (in km) at which I live from Arun's place?
- (A) 3.00                      (B) 4.99                      (C) 6.02                      (D) 7.01
- Q.No. 9** Four branches of a company are located at M, N, O, and P. M is north of N at a distance of 4 km; P is south of O at a distance of 2 km; N is southeast of O by 1 km. What is the distance between M and P in km?
- (A) 5.34                      (B) 6.74                      (C) 28.5                      (D) 45.49
- Q.No. 10** A train that is 280 metres long, travelling at a uniform speed, crosses a platform in 60 seconds and passes a man standing on the platform in 20 seconds. What is the length of the platform in metres?
- Q.No. 11** A man can row at 8 km per hour in still water. If it takes him thrice as long to row upstream, as to row downstream, then find the stream velocity in km per hour.

**Key-**

Q.No.	Ans.
1	B
2	B
3	B
4	A
5	A
6	D
7	A
8	C
9	A
10	560
11	4

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