## Time speed and Distance Test

Instruction: In the following questions, select the correct choice among the alternatives given below the question.

1. Walking at $\frac{3}{4}$ of his normal speed, Abhishek is 16 minutes late in reaching his office. The usual time taken by him to cover the distance between his home and his office is:
(a) 48 min
(b) 60 min
(c) 42 min
(d) 62 min
2. Two trains for Bhopal leave Delhi at 9 a.m. and 8.30 a.m. and travel at $90 \mathrm{~km} / \mathrm{hr}$ and $80 \mathrm{~km} / \mathrm{hr}$ respectively. How many kilometers from Delhi will the tow trains be together?
(a) 360 km
(b) 320 km
(c) 270 km
(d) 280 km
3. Prabhat covers a distance in 40 minutes if he drives at a speed of 60 $\mathrm{km} / \mathrm{hr}$ on a average. Find the speed at which he must drive at to reduce the time of the journey by $\mathbf{2 5 \%}$
(a) $60 \mathrm{~km} / \mathrm{hr}$
(b) $70 \mathrm{~km} / \mathrm{hr}$
(c) $75 \mathrm{~km} / \mathrm{hr}$
(d) $80 \mathrm{~km} / \mathrm{hr}$
4. Without stoppage, a train travels a certain distance with an average speed of $60 \mathrm{~km} / \mathrm{hr}$, and with stoppage, it covers the same distance with an average speed of $40 \mathrm{~km} / \mathrm{hr}$. on an average, how many minutes per hour does the train stop during the journey?
(a) $20 \mathrm{~min} / \mathrm{hr}$
(b) $15 \mathrm{~min} / \mathrm{hr}$
(c) $10 \mathrm{~min} / \mathrm{hr}$
(d) $12 \mathrm{~min} / \mathrm{hr}$
5. Salabh, during his journey, travels for 20 minute at a speed of $30 \mathrm{~km} / \mathrm{hr}$, another 30 minutes at a speed of $50 \mathrm{~km} / \mathrm{hr}$, next 1 hour at a speed of $50 \mathrm{~km} / \mathrm{hr}$ and last 1 hour at a speed of $60 \mathrm{~km} / \mathrm{hr}$. what is the average speed of the entire journey?
(a) $51.18 \mathrm{~km} / \mathrm{hr}$
(b) $48 \mathrm{~km} / \mathrm{hr}$
(c) $63 \mathrm{~km} / \mathrm{hr}$
(d) $39 \mathrm{~km} / \mathrm{hr}$
6. The wheel of an engine $4 \frac{2}{7}$ metres in circumference makes seven revolutions in 4 seconds. Find the speed of the train in $\mathbf{k m} / \mathrm{hr}$ :
(a) $18 \mathrm{~km} / \mathrm{hr}$
(b) $24 \mathrm{~km} / \mathrm{hr}$
(c) $36 \mathrm{~km} / \mathrm{hr}$
(d) $27 \mathrm{~km} / \mathrm{hr}$
7. A man riding on a bicycle at a speed of $15 \mathrm{~km} / \mathrm{hr}$ crosses a bridge in 15 minutes. Find the length of the bridge.
(a) 1 km
(b) 2 km
(c) $2 \frac{1}{2} \mathrm{~km}$
(d) $1 \frac{1}{4} \mathrm{~km}$
8. A train goes from a station $A$ to another station $B$ at a speed of $64 \mathbf{k m} / \mathrm{hr}$ but returns to $A$ at a slower speed. It its average speed for the trip is 56 $\mathrm{km} / \mathrm{hr}$, the return speed of the train nearly:
(a) $48 \mathrm{~km} / \mathrm{hr}$
(b) $50 \mathrm{~km} / \mathrm{hr}$
(c) $52 \mathrm{~km} / \mathrm{hr}$
(d) $47.4 \mathrm{~km} / \mathrm{hr}$
9. On a tour a man travels at the rate of $\mathbf{6 4} \mathbf{~ k m} / \mathrm{hr}$ for the first $160 \mathrm{~km} / \mathrm{hr}$ for the first 160 km , then travels the next 160 km at the rate of $80 \mathrm{~km} / \mathrm{hr}$ the average speed in km per hour for the first $80 \mathrm{~km} / \mathrm{hr}$ the average speed in $\mathbf{k m}$ per hour for the first 320 km of the train is:
(a) $35.55 \mathrm{~km} / \mathrm{hr}$
(b) $71.11 \mathrm{~km} / \mathrm{hr}$
(c) $36 \mathrm{~km} / \mathrm{hr}$
(d) 72 $\mathrm{km} / \mathrm{hr}$
10. A man is walking at a speed of $9 \mathrm{~km} / \mathrm{hr}$. after every km he takes rest for 9 minutes. How much time will he take to cover a distance of $\mathbf{2 7} \mathbf{~ k m}$ ?
(a) 6 hrs
(b) 6 hrs 45 min
(c) 6 hrs 54 min
(d) 6 hrs 35 min
11. A man covers a certain distance between his house and office on scooter, having an average speed of $60 \mathrm{~km} / \mathrm{hr}$ he is late by 20 min . however, with a speed of $80 \mathrm{~km} / \mathrm{hr}$ he reaches his office 10 min earlier. Find the distance between his house and office.
(a) 120 km
(b) 90 km
(c) 80 km
(d) 60 km
12. Ram travels at the rate of $3 \mathrm{~km} / \mathrm{hr}$ and he reaches 15 minutes late. If he travels at the rate of $4 \mathrm{~km} / \mathrm{hr}$, he reaches 15 minutes earlier. The distance Ram has to travel is:
(a) 1 km
(b) 6 km
(c) 7 km
(d) 12 km
13. A boy walking at a speed of $45 \mathrm{~km} / \mathrm{hr}$ reaches his school 10 minutes late. Next time he increases his speed by $15 \mathrm{~km} / \mathrm{hr}$ but still he is late by 5 minutes. Find the distance of his school from his house.
(a) 10 km
(b) 12 km
(c) 25 km
(d) 15 km
14.A man walks to a town at the rate of $5 \frac{1}{2} \mathrm{~km} / \mathrm{hr}$ and rides back at the rate of $10 \mathrm{~km} / \mathrm{hr}$. how far he walked, if the total time of the journey is 6 hours 12 minutes?
(a) 31 km
(b) 29 km
(c) 22 km
(d) 17 km
15.A motor car does a journey in 9 hrs , the first half at $\mathrm{km} / \mathrm{hr}$ and second half at $15 \mathbf{k m} / \mathrm{hr}$. find the distance
(a) 120 km
(b) 100 km
(c) 124 km
(d) 96 km
14. The distance between two station $A$ and $B$ is 220 km . a train leaves $A$ towards $B$ at an average speed of $15 \mathrm{~km} / \mathrm{hr}$. another train starts from $B$, 20 minutes earlier than the train $A$, and moves towards $A$ at an average speed of $20 \mathrm{~km} / \mathrm{hr}$. how far from $A$ will the two trains meet?
(a) 180 km
(b) 320 km
(c) 190 km
(d) 260 km
17.The distance between two stations $A$ and $B$ is 220 km . A train leaves $A$ towards $B$ at an average speed of $80 \mathrm{~km} / \mathrm{hr}$. after half an hour another train leaves B towards $A$ at an average speed of $100 \mathbf{k m} / \mathrm{hr}$. find the distance from $A$ to the point where the two trains meet.
(a) 180 km
(b) 120 km
(c) 160 km
(d) 80 km
18.Two men $A$ and $B$ start from a place $P$ walking 4 km and $5 \mathrm{~km} / \mathrm{hr}$ respectively. How many km will they be apart at the end of 4 hours. If they walk in same direction?
(a) 3 km
(b) 4 km
(c) 2 km
(d) 4.5 km
19.Two men $A$ and $B$ start from a place $P$ walking at $5.5 \mathrm{~km} / \mathrm{hr}$ and 6.5 $\mathrm{km} / \mathrm{hr}$ respectively. How many km will they be apart at the end of 5 hrs . If they walk in the opposite directions?
(a) 60 km
(b) 50 km
(c) 45 km
(d) 30 km
20.Two men $A$ and $B$ walk from $P$ and $Q$, a distance of 22 km , at 5 and 6 $\mathbf{k m}$ an hour respectively. $B$ reaches $Q$, returns immediately and meets $A$ at $\mathbf{R}$. find the distance from $P$ to $R$.
(a) 16 km
(b) 18 km
(c) 20 km
(d) 15 km

Answers to the above questions

| Questions <br> no. | Answers |
| :--- | :--- |
| 1. | (a) |
| 2. | (a) |
| 3. | (d) |
| 4. | (a) |
| 5. | (a) |
| 6. | (d) |
| 7. | (d) |
| 8. | (b) |
| 9. | (b) |


| 10. | (c) |
| :--- | :--- |
| 11. | (a) |
| 12. | (b) |
| 13. | (d) |
| 14. | (c) |
| 15. | (a) |
| 16. | (c) |
| 17. | (b) |
| 18. | (b) |
| 19. | (a) |
| 20. | (c) |

