

G.S.C.E

Chapter Covered Time & Work and Time & Distance
(50 Questions with Options, Answers and Explanations)

Q1

There are two towns A and B. Anil goes from A to B at 30 kmph and comes back to the starting point at 70 kmph. What is his average speed during the whole journey?

- a) 21 b) 30 c) 42 d) 24

Q2

If a man walks at the rate of 3 kmph, he misses the train by only 8 minutes. However, if he walks at the rate of 4 kmph he reaches the station 7 minutes before the arrival of train. Find the distance covered by him to reach the station.

- a) 5 b) 7 c) 8 d) 3

Q3

A man travels for 4 hrs 20 min. If he covers the first half of the journey 45 kmph and the rest at 30 kmph. Find the total distance travelled by him.

- a) 156 b) 360 c) 312 d) 78

Q4

Walking $\frac{6}{7}$ of its usual speed, a train is 9 minutes late. Find usual time to cover the journey.

- a) 51 b) 52 c) 54 d) 55

Q5

Two bicyclists cover the same distance at 12 kmph and 13 kmph respectively. Find the distance travelled by each, if one takes 13 min larger than the other.

- a) 3.38 b) 338 c) 776 d) 33.8

Q6

A car can finish a certain journey in 9 hrs at a speed of 54 kmph. In order to cover the same distance in 6 hrs, the speed of the car must be increased by

- a) 54 b) 486 c) 28 d) 27

Q7

A train covers a certain distance in 40 minutes if it runs at a speed of 54 kmph on an average. The speed at which the train must run to reduce the time of journey to 30 min will be

- a) 72 b) 54 c) 36 d) 18

Q8

If a man running 18 kmph crosses a bridge in 6 min then the length of the bridge is

- a) 1500 b) 1600 c) 1700 d) 1800

Q9

Vikas can cover a certain distance in 1 hr 24 min by covering $\frac{2}{3}$ rd of the distance at 4 kmph and the rest at 5 kmph. The total distance is

- a) $\frac{7}{5}$ b) $\frac{5}{7}$ c) 16 d) 6

Q10

A man can travel for 12 hours 30 min. He covers half of the journey by the train at the rate of 30 kmph and rest half by the road at the rate of 20 kmph. The distance travelled by him is

- a) 30 b) 50 c) 150 d) 300

Q11

If a boy walks from his house to school at the rate of 3 kmph he reaches the school 10 minutes earlier than the scheduled time. However, if he walks at the rate of 2 kmph he reaches 20 minutes late. The distance of the school from the house is:

- a) 5 b) 7 c) 3 d) 10

Q12

If a student walks from his house to school at 3 kmph he is late by 25 min. However if he walks at 4 kmph he is late by 15 min only. The distance of his school from his house is

- a) 2 b) $\frac{1}{4}$ c) $\frac{1}{3}$ d) $\frac{1}{6}$

Q13

If a train runs at 30 kmph, it reaches its destination late by 10 min but if it runs 40 kmph it is late by 4 min. The correct time for the train to complete its journey is

- a) 10 b) 13 c) 14 d) 16

Q14

Excluding stoppages, the speed of a bus is 42 kmph and including stoppages, it is 35 kmph. For how many min does the bus stop per hour.

- a) 7 b) 8 c) 60 d) 10

Q15

Two men starting from the same place walk at the rate of 6 kmph and 6.5 kmph respectively. What time will they take to be 7.5 km apart if they walk in the same direction?

- a) 15 b) 7.5 c) .5 d) 17

Q16

Two cyclists start from the same place in the opposite direction. One goes towards north at 20 kmph and the other goes towards south at 12 kmph. What time will they take to be 64 km apart?

- a) 3 b) 32 c) 2 d) 1/2

Q17

Two trains start from stations A and B and travel towards each other at speeds of 20 kmph and 30 kmph respectively. At the time of their meeting the second train has travelled 60 km more than the first. Distance between A and B is :

- a) 84 b) 72 c) 36 d) 120

Q18

A thief steals a car at 1 p.m. and drives it at 30 kmph. The theft is discovered at 1.30 p.m. and the owner sets off in another car at 60 kmph. When will he overtake the thief?

- a) 2 A.M. b) 3 P.M. c) 2 P.M. d) 7 P.M.

Q19

In covering a certain distance, the speeds of A and B are in the ratio of 5:6. A takes 20 min more than B to reach the destination. The time taken by A to reach the destination is

- a) 3 b) 4 c) 3.5 d) 2

Q20

A motorist covers a distance of 40 km in 30 min by moving at a speed of x kmph for the 1st 10 min then moving at double the speed for next 10 min and move at the original speed rest of the journey. Then x is equal to

- a) 45 b) 60 c) 30 d) 40

Q21

A and B are two towns. Mr. Raju covers the distance from A to B on cycle at 30 kmph and returns to A by a tonga running at uniform speed of 20 kmph. His average speed during the whole journey is

- a) 24 b) 36 c) 48 d) 72

Q22

A car completes a certain journey in 12 hrs. It covers half the distance at 30 kmph and rest at 40 kmph. The total distance of the journey is:

- a) 411 b) 411.4 c) 411.42 d) 400

Q23

An aeroplane travels distances 2000 km, 800 km, 400 km at the rate of 500 km/hr, 400 km/hr, 200 km/hr respectively. The average speed (in kmph) is :

- a) 200 b) 250 c) 300 d) 400

Q24

A boy goes to school from his village at 4 kmph and returns back at 3 kmph. If he takes 6 hrs in all the distance between the village and the school is:

- a) 10 b) 10.28 c) 10.29 d) 10.30

Q25

Two buses travel to a place at 20 kmph and 30 kmph respectively. If the second bus takes 5 hrs less than the first for the same journey, the length of journey is

- a) 300 b) 150 c) 175 d) 160

Q26

'A' works twice as fast as 'B'. If both of them together take 6 days to complete the work, in how many days can 'B' alone complete the same?

- a) 10 b) 17 c) 18 d) 20

Q27

If 10 people, working 8 hours a day, can complete a task in 24 days, how many people working 10 hours a day would be required to complete the same task in 16 days?

- a) 16 b) 18 c) 11 d) 12

Q28

If 10 men can complete a piece of work in 30 days how many men are required to complete the same job in 25 days?

- a) 10 b) 6 c) 12 d) 15

Q29

A person works twice as fast as a woman. A woman works twice as fast as a child. If 16 persons can complete a job in 12 days, how many days would be required for 32 women and 64 boys together to complete the same job?

- a) 6 b) 7 c) 8 d) 10

Q30

To complete a task in 45 days, a contractor employs 45 people for the same. Upon reviewing the work after 30 days, he notices that only half of the task is completed. In order to meet the deadline of 45 days, how many extra people must he employ now?

- a) 35 b) 40 c) 45 d) 50

Q31

If 2 men are equivalent to 5 women and 2 women are equivalent to 5 children, in how many days can the work be completed by one man alone if the same work can be completed by 100 children in 10 days?

- a) 120 b) 130 c) 140 d) 160

Q32

If 20 workers can complete a task in 45 days, how many more workers will be required to complete it in 30 days?

- a) 7 b) 10 c) 13 d) 14

Q33

Shoba can complete a piece of work in 4 hours while Shiva can complete the same in 6 hours. If Shoba and Shiva work together, how long will they take to complete the work?

- a) 1.4 b) 3.4 c) 4.3 d) 2.4

Q34

8 men can complete a work in 36 days. If 4 men are withdrawn after 10 days, how many days would the remaining men require to complete the remaining?

- a) 52 b) 26 c) 25 d) 78

Q35

A and B can together finish a work in 40 days. They worked at it for 30 days and then B left. The remaining work was done by A alone in 30 more days. A alone can finish the work in

- a) 110 b) 30 c) 120 d) 115

Q36

A and B together can do a piece of work in 12 days which B and C together can do in 16 days. After A working at it for 5 days and B for 2 days C finishes in 11 days. In how many days C alone will do the work?

- a) 12 b) 18 c) 23 d) 24

Q37

A, B and C are employed to do a piece of work for Rs. 600. A and C are supposed to finish $\frac{5}{6}$ of the work together. How much shall be paid to B?

- a) 100 b) 110 c) 75 d) 65

Q38

Suresh can complete a work in 4 days whereas Raja can complete it in 6 days. Raju works $1\frac{1}{2}$ times as fast as Suresh. How many days will it take for the three together to complete the work?

- a) $1\frac{5}{19}$ b) $2\frac{5}{19}$ c) $3\frac{5}{19}$ d) $\frac{5}{19}$

Q39

A tap can fill a tank in 20 min. Another tap empty it in 40 min. If both the taps are opened simultaneously, in how much time will the tank get filled?

- a) 10 b) 15 c) 30 d) 40

Q40

Two pipes independently can fill a tank in 24 min and 40 min respectively. If both of them are opened simultaneously, in how much time would the tank be full?

- a) 15 b) 10 c) 30 d) $\frac{1}{15}$

Q41

A tap can fill the tank completely in 10 hrs while another tap can empty it in 20 hrs. If both the taps are get open, in how much time would the tank get full?

- a) 21 b) 20 c) 30 d) 25

Q42

Due to leak at the bottom of Cistern, it takes 8 hrs to get filled fully. If there would have been no leakage, it would have taken one hr less to get filled fully. If the Cistern is full, how long would it take for the leakage to empty the same?

- a) 56 b) $\frac{1}{8}$ c) $\frac{1}{56}$ d) $\frac{1}{28}$

Q43

Pipes A and B can fill a tank in 2 hrs and 3 hrs respectively and pipe C can empty the full tank in 4 hrs. If all the pipes are opened together, how much time will be needed to make the tank full?

- a) $\frac{10}{7}$ b) $\frac{11}{7}$ c) $\frac{7}{11}$ d) $\frac{12}{7}$

Q44

Two pipes A and B can fill a tank in 20 min, 25 min respectively. If both the pipes are opened simultaneously after how much time B should be closed so that the tank is full in 15 min?

- a) $1\frac{1}{4}$ b) $3\frac{1}{4}$ c) $5\frac{1}{4}$ d) $6\frac{1}{4}$

Q45

To fill a Cistern, pipes A,B and C takes 15 min, 12 min and 10 min respectively. The time in min that the three pipes together will take to fill the Cistern is

- a) 3 b) 4 c) 15 d) 37

Q46

Two pipes can fill a tank in 4 hrs and 8 hrs respectively while third pipe empties the full tank in 10 hrs. If all the three pipes operate simultaneously, in how much time the tank will be filled?

- a) $\frac{4}{11}$ b) $\frac{5}{11}$ c) $\frac{40}{11}$ d) $\frac{7}{11}$

Q47

A Cistern can be filled in 8 hrs but it takes 9 hrs due to leak in its bottom. If the Cistern is full, then the time that the leak will take to empty is

- a) 36 b) 48 c) 37 d) 72

Q48

A electric pump can fill a tank in $\frac{7}{2}$ hrs. Because of a leak in the tank, it took $4\frac{1}{2}$ hrs to fill the tank. The leak can drain out all the water of the tank in:

- a) 3 b) $3\frac{5}{8}$ c) $4\frac{3}{8}$ d) $5\frac{5}{8}$

Q49

A tank can be filled by a tap in 30 min and by another tap in 60 min. Both taps are kept open for 5 min and the first tap is shut off. After this the tank will be completely filled in

- a) 30 b) 45 c) 20 d) 25

Q50

A leak in the bottom of a tank can empty the full tank in 5 hrs. An inlet pipe fills water at the rate of 3 lit a min. When the tank is full, the inlet is opened and due to the leak the tank is emptied in 6 hrs. The capacity of the tank (in lit) is

- a) 5000 b) 5100 c) 5300 d) 5400