



## Time and Work Questions with detailed Solutions PDF

Time and Work questions are a very common type of questions asked in almost every competitive exam. These questions carry a weightage of 2-3 questions (4-6 marks) in SSC exams and 1-2 questions in bank exams. To get a good rank in competitive exams, you should have a good hold on the concepts of Time, Work and Efficiency.

Here are some tips for solving Time and Work questions: Use LCM method to determine work, read carefully what is asked in the question, try making calculations easy by avoiding using fractions, Use shortcuts and formulas.

So, we have attached 10 questions of Time and Work for you to practice with. You should aim to solve these questions in less than half a minute for each.

## Practice Questions on Time and Work

You can also download the Time and Work questions and answers pdf. Just click on the **Download PDF** button. So let's start with the very first question.

**Q:1** The total wages given to Aman and Gaurav to finish a work in 6 days while working together is Rs. 1170. If the time taken by Aman alone to complete that work is 18 days, then what is the per day share of Gaurav?

1. Rs. 120
2. Rs. 135
3. Rs. 130
4. Rs. 140

(**Difficulty: 3, Estimated Time: 20 Seconds**) This was a test of your concepts!

**Q:2** 8 men, 6 women, 4 children can complete a work in 3 days, 8 days and 24 days. Find in the number of days in which they can complete the work if all of them work together.

1. 6 days
2. 1 days
3. 2 days
4. 4 days

(**Difficulty: 3, Estimated Time: 20 Seconds**) Try using short tricks, they will save your time

**Q:3** A is thrice as good as B and therefore is able to finish a job in 50 days less than B. Working together, they can do it in:

1. 15.75 days

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- 16 days
- 18.75 days
- 18 days

(**Difficulty: 2, Estimated Time: 10 Seconds**) This was an easy one! Did you get it right?

**Q:4** A and B are deployed to clean a field for Rs. 2450. A cleaned  $\frac{1}{4}$  of the field in 5 days and then B joined. They cleaned the remaining field together in 10 more days. Find the amount of wages earned by B.

- Rs. 616.5
- Rs. 615.5
- Rs. 610
- Rs. 612.5

(**Difficulty: 3, Estimated Time: 20 Seconds**) A basic one! These type of questions are very common

**Q:5** There are 3 friends Ram, Bhola, and Sona and they work together in a company. The efficiency of Ram is  $\frac{4}{3}$  of the efficiency of Bhola and the efficiency of Bhola is  $\frac{3}{2}$  of the efficiency of Sona. If they completed work in 8 days then, find in how many days Sona can complete the work alone.

- 36 days
- 72 days
- 42 days
- 21 days

(**Difficulty: 3, Estimated Time: 20 Seconds**) We're halfway through. Have you got all your questions correct so far?

**Q:6** A man started a work alone and the construction charge for this work is 75000 rupees. He can complete the work in 15 days but he left the work after 10 days. After this, if two boys complete the remaining work in 5 days, then find the money earned by the man.

- Rs. 35000
- Rs. 40000
- Rs. 45000
- Rs. 50000

(**Difficulty: 4, Estimated Time: 30 Seconds**) This was a hard nut to crack, be prepared for such questions in exam!

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**Q:7** A and B together can complete a particular task in 4 days. If A alone can complete the same task in 12 days. How many days will B take to complete the task if he works alone?

1. 5 Days
2. 2 Days
3. 7 Days
4. 9 Days

**(Difficulty: 3, Estimated Time: 20 Seconds)** Be ready for such questions in your exams!

**Q:8** A, B and C working separately can do a piece of work in 60, 120 and 80 days respectively. A and B started working, then after 20 days, A left the work and C joined them. In how much time do they completed the total work?

1. 46
2. 43
3. 36
4. 44

**(Difficulty: 2, Estimated Time: 15 Seconds)** This was an interesting question!

**Q:9** Three masons were tasked to build a wall together, each of them alone could build a wall in 15 days. There was another person, Manish who didn't want the wall to be built, so he used to destroy a part of the wall every day. He alone can destroy a completely built wall in 7 days. If the wall is being built by 3 masons simultaneously and simultaneously being destroyed by Manish, then in how many days will the wall be completed once?

1. 12 days
2. 17.5 days
3. 15 days
4. 20.5 days

**(Difficulty: 3, Estimated Time: 20 Seconds)** If you have a good understanding, you might have wrapped it up in 10 seconds!

**Q:10** A can do a piece of work in 40 days, B can do the same piece of work in 30 days whereas C can finish it in 20 days. They worked together for 3 days. After 3 days B left and A and C together finished the remaining task. If they are paid Rs 2000 for the complete work then find the share of B.

1. Rs 100

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2. Rs 150

3. Rs 200

4. Rs 250

(Difficulty: 2, Estimated Time: 15 Seconds) This was an easy one. Did you guess them all correctly?

## Answer Key

Let's check out your score in this test.

1. (3)	2. (3)	3. (3)	4. (4)	5. (1)
6. (4)	7. (5)	8. (4)	9. (3)	10. (3)

Comment below your score, considering each question has 1 mark only. If you scored 8 to 10, congratulations! You are one step closer to selection. If you have scored 5 to 8 marks, then you are doing well, keep it up. If you have scored less than 5 marks then you need to work a little harder on this subject. But don't worry, we are here to help you master the subject.

Let's check the answers and solutions and try to find out what went wrong.

## Answers and Solutions

**Q:1** The correct answer is **Option 3** i.e. **Rs. 130**.

Aman and Gaurav working together finish the work = 6 days

Aman alone to complete that work = 18 days

Let's assume the total work = 18 unit

Efficiency of Aman and Gaurav = 3

Efficiency of Aman = 1

So, the efficiency of Gaurav = 3 - 1 = 2

So, the ratio of the amount given to finish the work of Aman : Gaurav =  $(1170/3) \times (1) : (1170/3) \times (2)$

390 : 780

So, the amount given to Gaurav for each day =  $780/6 = 130$

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**Q:2** The correct answer is **Option 3** i.e. **2 days**.

8 men, 6 women, 4 children can complete a work in 3 days, 8 days and 24 days

$$8m \times 3 = 6w \times 8 = 4c \times 24$$

Efficiency -

$$\text{man} = 4$$

$$\text{women} = 2$$

$$\text{children} = 1$$

Now

total work = 8 men  $\times$  efficiency of one man  $\times$  time

$$= 8 \times 4 \times 3$$

$$= 96 \text{ unit}$$

Hence

If all works together, work completed in one day

$$= 8 \times 4 + 6 \times 2 + 4 \times 1$$

$$= 32 + 12 + 4$$

$$= 48 \text{ unit}$$

$$\text{So, total time} = 96/48$$

$$= 2 \text{ days}$$

**Q:3** The correct answer is **option 3** i.e. **18.75 days**.

The ratio of time taken by A and B = 1 : 3

If difference of time is  $(3 - 1) = 2$  days, B takes 3 days.

$\Rightarrow$  if difference of time is 50 days, B takes  $(3/2 \times 50) = 75$  days

So, A takes  $75 - 50 = 25$  days to do the work.

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A's 1-day work =  $(1/25)$

B's 1-day work =  $(1/75)$

(A + B)'s 1-day work =  $(1/25) + (1/75) = (4/75)$

⇒ A and B together can do the work in  $75/4 = 18.75$  days.

**Q:4** The correct answer is **Option 4** i.e. **Rs. 612.5**.

A cleaned  $1/4$  of the field in 5 days

So,

A will clean  $1/2$  of the field in 10 days

The remaining area of the field which is cleaned by A and B together =  $(1 - 1/4) = 3/4$

So,

Area cleaned by B in 10 days =  $(3/4 - 1/2) = 1/4$

Hence,

Total area of field cleaned by A =  $(1/4 + 1/2) = 3/4$

So, the ratio in which the wages will be shared =  $3/4 : 1/4 = 3 : 1$

Hence,

Amount of wages earned by B =  $(2450 \times 1/4) = \text{Rs. } 612.5$

**Q:5** The correct answer is **Option 1** i.e. **36 days**.

Given,

The efficiency of Ram =  $4/3$  of the efficiency of Bhola

So,

Ram =  $4/3 \times$  Bhola

⇒ Ram/Bhola =  $4/3$  .....(i)

The efficiency of Bhola is  $3/2$  of the efficiency of Sona

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So,

$$\text{Bhola} = \frac{3}{2} \times \text{Sona}$$

$$\Rightarrow \text{Bhola/Sona} = \frac{3}{2}$$

Now,

Efficiency:- Ram = 4 units , Bhola = 3 units and Sona = 2 units

So,

9 units of work are completed per day

$$\text{Total work in 8 days} = 9 \times 8 = 72 \text{ units}$$

Hence,

$$\text{Time taken by Sona to complete total work alone} = \frac{72}{2} = 36 \text{ days}$$

**Q:6** The correct answer is **option 4** i.e. **Rs. 50000**.

The Man can complete the work in 15 days.

But he worked for only 10 days.

If we take the capacity of man  $x$  unit per day.

$$\text{Then total work} = 15x$$

$$\text{Also, } 15x = 75000 \text{ rupees}$$

$$\text{Hence money earned by man} \Rightarrow 10x = \left(\frac{75000}{15x}\right) \times 10x = \text{Rs. } 50000$$

**Q:7** The correct answer is **Option 5** i.e. **6 Days**.

If A and B together can do a piece of work in  $x$  day and A alone can do it in  $y$  days, then B alone can do the work in  $\frac{xy}{(y-x)}$  days.

According to the question,

$$\text{A and B together finish a piece of work} = x = 4 \text{ days}$$

$$\text{'A' alone completes the piece of work} = y = 12 \text{ days.}$$

By the short trick approach:

B alone can do the whole work in

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$$(4 \times 12)/(12 - 4) = 48/8 = 6 \text{ days.}$$

**Q:8** The correct answer is **Option 4** i.e. **44**.

Since, no. of days taken by A, B and C to complete the work alone is 60, 120 and 80 days respectively,

Hence total work = LCM of 60, 120 and 80 = 240 units

Thus, Efficiency of A =  $240/60 = 4$  units

Efficiency of B =  $240/120 = 2$  units

Efficiency of C =  $240/80 = 3$  units

Now, A and B worked together for 20 days, So total work done in 20 days = Efficiency of (A + B)  $\times 20 = (4 + 2) \times 20 = 120$  units

Work left to be completed =  $240 - 120 = 120$  units

According to question, this work is completed by B and C together

So, no. of days taken by B and C to complete the remaining work = Remaining work/Efficiency of (B + C)

$$\Rightarrow 120/(3 + 2) = 120/5 = 24 \text{ days}$$

Hence, total time taken by A, B and C to complete the work =  $20 + 24 = 44$  days

**Q:9** The correct answer is **option 3** i.e. **15 days**

Each person can complete the work in 15 days

so, 3 of them together can complete the work in  $15/3 = 5$  days

I.e. each day, they can complete  $100/5 = 20\%$  of

work

Now, manish can destroy the complete wall in 7 days

so each day, he can destroy,  $100/7 = 14.28\%$  of wall

If all of them work together, (building and destroying)

Total effective work each day =  $20\% - 14.28\% = 5.72\%$  of work each day

Since on the last day, before Manish destroys the wall, the wall gets completed once, work will be done whole 20%.



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Hence, task that would be done simultaneously by masons and Manish =  $100 - 20 = 80\%$

No. of days to complete the 80% work =  $80/5.72 = 13.98$  or 14 days

Now, since on the last day the wall completes before Manish breaks it, hence total no. of days =  $14 + 1 = 15$  days

**Q:10** The correct answer is **option 3** i.e. **Rs 200**

L.C.M of 40, 20, 30 = 120

Let there be 120 units of work to be finished

Since, A can do 120 units of work in 40 days so, he does  $120/40 = 3$  units per day

Since, B can finish 120 units in 30 days so, he does  $120/30 = 4$  units per day

Since, C can finish 120 units in 20 days, he does  $120/20 = 6$  units per day

They worked together for 3 days

So work done in 5 days =  $3 \times (3 + 6 + 4) = 13 \times 3 = 39$  units

Remaining work =  $120 - 39 = 81$

Units of work done by A and C in one day =  $3 + 6 = 9$

Time taken by A and C =  $81/9 = 9$  days

Total units of work done by A =  $3 \times (9 + 3) = 36$  units

Total units of work done by B =  $4 \times 3 = 12$  units

Total units of work done by C =  $6 \times (9 + 3) = 72$  units

Share of B =  $12/120 \times 2000 = \text{Rs } 200$

So, this is it for today. We will meet again with another new topic. Till then, you can practice the questions again by downloading the PDF of Time and Work.