2026_PST I_Time and work_weekly assessment I

Test Summary

- No. of Sections: 2
- No. of Questions: 30
- Total Duration: 60 min

Section 1 - MCQ

Section Summary

- No. of Questions: 20
- Duration: 30 min

Additional Instructions:

None

Q1. A certain number of men can do a piece of work in 40 days. Had there been 8 more men, it would have finished 10 days earlier. How many men were there?

- 40
- 30
- 24
- 22

Q2. Paul finishes 3/10 of a work in 6 days and then finishes the remaining work the assistance of Peter in 6 days. In what time can Peter alone finish the same work?

- 6
- 20
- 7
- 15

Q3. A and B together can do a piece of work in 7 days. If A does twice as much work as B in a given time, then how long A alone would take to do the work?

- 20
- 14
- 10.5

12

Q4. A can do a piece of work in 6 days for which B takes 8 days. C takes as long as A and B would take working together. How long will it take B and C to complete the work together?

25/7

12/5

24/7

27/4

Q5. A and B together can do a piece of work in 4 hours which A alone can do in 12 hours. In what time could B alone do it?

8 hours

9 hours

6 hours

5 hours

Q6. A and B working together can do a piece of work in 6 days. B alone can do it in 8 days. Supposing B works at it for 5 days, in how many more days A alone could finish it?

9

15

8

7.5

Q7. A is twice as good a workman as B; and together they finish a work in 14 days. In how many days can it be done by each separately?

22, 44

35, 70

28, 56

21, 42

Q8. A and B can complete a task in 30 days while working together. After A and B have finished working together for 11 days, B is called away and A, all by himself completes the task in the next 28 days. Had A been working alone, then find the number of days taken by him to complete the task?

$44\frac{4}{19}$

$28\frac{19}{30}$

$19\frac{14}{15}$

$4\frac{19}{48}$

Q9. Rahul does half as much work as Sameer in three fourth of the time.Both take 12 days to complete a job. How much time Sameer alone will take to complete the same job?

10

24

20

18

Q10. If 20 men complete one-third of a piece of work in 20 days, how many more men should be employed to finish the rest of the work in 25 days?

32

12

26

16

Q11. A can copy 75 pages in 25 hours. A and B together can copy 135 pages in 27 hours. In what time can B copy 42 pages?

21

42

8.4

14

Q12. A, B and C can do a piece of work in 6, 12 and 24 days respectively. In what time will they all together do it?

15 days

10 days

12 days

3 ($^{3}/_{7}$) days

Q13. There is sufficient food for 500 men for 40days. After 10days, 200 men leave the place. How many days will the rest of the food last for the rest of the men?

50

75

80

60

Q14. A and B working together could mow a field in 28 days and with the help of C they could have mowed it in 21 days. How long would C take by himself?

63

42

84

56

Q15. A and B together can do a piece of work in 4 4/5 days, B and C together can do it in 8 days and A, B and C together in 4 days. How long would A and C together take to do it?

8 days

6 days

12 days

24 days

Q16. If one man or two women or three boys can finish a work in 66 days, then how many days will one man, one woman and one boy together take to finish the same work?

32 days

36 days

28 days

33 days

Q17. If A takes half as long to do a piece of work as B takes and if C does it in the same time as A and B together and if all three working together would take 7 days, then how long would each take separately?

21, 42, 14

14, 35, 21

14, 42, 49

42, 35, 49

Q18. A can do a piece of work in 20 days and B can do it in 30 days. How long would they take to do it working together?

12 days

25 days

15 days

18 days

Q19. 1 man and 5 women are able to complete a piece of work in 20 days. Same amount of work is completed by 4 men in 8 days. Find the number of days required by 5 men and 1 woman to complete the same work.

8

6.25

9

10

Q20. If 5 men with 7 boys can earn Rs.127.50 in 6 days and 2 men with 3 boys can earn Rs.35 in 4 days, then find the time in which 7 men with 6 boys will earn Rs.750?

25

15

20

30

Section 2 - Fillups

Section Summary

- No. of Questions: 10
- Duration: 30 min

Additional Instructions:

None

Q1. 10 women can do a piece of work in 6 days, 6 men can do same work in 5 days and 8 children can do it in 10 days. What is the ratio of the efficiency of a woman, a man and a child respectively?

Q2. A and B can do a certain piece of work in 18 days, B and C can do it in 12 days and C and A can do it in 24 days. How long would each respectively take to do it working separately?

Q3. Rahul does half as much work as Sameer in three fourth of the time. If both take 12 days to complete a job, how much time will Sameer alone take?

Q4. Reenu can do a work in 15 days. Reenu and Meenu together can do the same work in 10 days. If they got Rs. 600 for that work, find the share of Reenu and Meenu respectively.

Q5. The work done by a man, a woman and a child is in the ratio of 3 : 2 : 1. There are 20 men, 30 women and 36 children in a factory. Their weekly wages amount to Rs.780, which is divided in the ratio of work done by the men, women and children. What will be the wages of 15 men, 21 women and 30 children for 2 weeks?

Q6. If 6 BSF or 10 CRPF companies can demolish a hideous terrorist outfit in Kashmir in 2 days, then how long will 4 BSF and 9 CRPF companies take to do the same?

Q7. A and B can do a certain piece of work in 18 days, B and C can do it in 12 days and C and A can do it in 24 days. How long would each respectively take to do it working separately?

Q8. A and B can do a piece of work in 12 days and B and C can do it in 15 days. If all the three work together, it can be finished in 10

days. How long will it take for A and C to do it together?

Q9. 5 men and 8 women can do a job in 8 days, while 4 men and 6 women can do it in 10 days. How many days will 10 men take to finish the job?

Q10. If 3 men and 5 boys can do as much work in 17 days as 5 men and 3 boys can do in 15 days, then the ratio of rate of working of a man and a boy is

Answer Key & Solution

Section 1 - MCQ

Q1

24

Solution

Suppose there were x men who can finish the job in 40 days,

so that one man can do it in 40x days.

Again if there were (x + 8) men,

they can do it in 40 – 10, i.e., in 30 days.

So that one man can do it in (x + 8) × 30 days.

=> 40x = 30 × (x + 8) or 10x = 240

x = 24 men.

Q2

15

Solution

Since Paul completes 3/10 work in 6 days

. ∴ he can complete the work in 20 days.

If Peter takes X days,

then for 7/10th of the work they will together take7/10(20x / 20 + X) = 6

X = 15 days.

Q3

10.5

Solution

If A takes X days, B takes 2X days

1/X + 1/2X = 1/7

Solving we get,

=> X=10.5 days.

A and B-----> 7 days

Efficiency of A= 2 unit and B= 1 unit

Total work= 7(1+2)= 21 units

Now A alone can complete the work in 21/2= 10.5 days

Q4

12/5

Solution

1/C = 1/6 + 1/8

=> C = 24/7 days.

1/B + 1/C =

1/X =>1/8 + 7/24 =

> X = 12/5 days.

Q5

6 hours

Solution

Efficiency

A + B = 4 hours - 3 unit/hour

A = 12 hours - 1 unit/hour

Total work = 12 units

B = 2 units/hour

Time = 12/2 = 6 hours

Q6

9

Solution

1/8 + 1/A = 1/6 => A = 24days.

When B works for 5 days, he finishes 5/8 of the work.

Remaining 3/8 of the work can be done by A in (3/8) × 24 = 9 days.

A&B-> 6 days

B-> 8 days

LCM= Total work = 24 units.

A&B 's efficiency= 24/4= 4 units

B's efficiency= 24/8= 3 units . Hence A's efficiency = 1 unit.

B worked for 5 days= 5*3= 15 units is completed.

Now A will finish the remaining work in (24-15)/1= 9 days.

Q7 21, 42

Solution

1/X + 1/2X = 1/14

=> X = 21 days.

2X = 42 days

=> A takes 21 days and B takes 42 days

Let Efficiency of A= 2 units and B= 1 unit.

A+B= 14*3= 42 units = Total work

A= 42/2= 21 days B= 42/1= 42 days

Q8 $44\frac{4}{19}$

Solution

According to the given question

30(A+B)= 11(A+B) + 28A

=> 19B= 9A.

Therefore A's efficiency= 19 units and B's efficiency = 9 units.

Total work = 30*(19+9) = 840 units

.=> Now A alone can do it in 840/19=$44^{4/19}$ days

Q9

20

Solution

If Sameer takes D days to do a job,

Rahul will take 2 × 3/4 D days to do the same job (= 3 D/2 days).

In 1 day, they both do 1/12 of the job.

=> Sameer's one day's job + Rahul's one day's job,= 1/D + 2/3D = 1/12

=> D = 20 days.

Q10

12

Solution

20 men takes 20days to complete 1/3 of the work i.e 20 * 20 = 400 (1/3 of the work)

X men takes 25 to complete (2/3) of the work i.e X * 25 = 800 (2/3 of the work)

X = 800/25 => X = 32.

More men to be employed = (32 – 20) = 12

Q11

21

Solution

By unit method

A can copy 3 pages in a hour (75/25)

A+B can copy 5 pages in a hour (135/27)

B can copy 2 pages in a hour

so B will take 21 hours to copy 42 pages

A can write 75 pages in 25 hrs , ie) 3 Pages per hour , In 2 hrs he can write 6 pages.

A + B can write 135 pages in 27 hrs ; A can write 75 pages in 25 hrs + 6 pages in 2 hrs , therefore 81 pages in 27 hrs.

B can write = 135 - 81 = 54 pages in 27 hrs ;

In 1 hr B can write 54/27 = 2 pages or 1 page in 27/54 hrs;

therefore B can write 42 pages in = 42 X 27/54 = 21 hrs

Q12

3 ($^{3}/_{7}$) days

Solution

A--------> 6 days

B--------> 12 days

C--------> 24 days

LCM= Total work= 24 units

Efficiency of A= 4 units/days , B= 2 units/days , C= 1 unit/days

Time taken by A+B+C= 24/7= 3(3/7) days

Q13

50

Solution

500 men x 40 days = 20000 (total food)

This is your standard equation for total food.

Now, for 10 days, 500 men will eat:

10x 500 = 5000

Food left = 15000.

Men left = 300

300 x no. Of days = 15000

No. Of days = 15000/300

= 50

Q14

84

Solution

1/21 – 1/28 = 1/C

=> C = 84 days.

Q15

6 days

Solution

A+B -------> 24/5 days = 5

B+C -------> 8 days = 3

A+B+C ---> 4 days = 6

Total work= 24 units

A= 3, B= 2, C= 1

A+C = 24/4 = 6 days

Q16

36 days

Solution

1 man = 66 days

2 women = 66 days

3 boys = 66 days

Let total work= 66 units

Efficiency of man= 66/66= 1 unit

Efficiency of 2 women= 66/66= 1 unit

Efficiency of 1 women= 0.5 unit= 1/2 unit

Efficiency of 3 boys = 66/66= 1 unit

Efficiency of 1 boy= 1/3 unit

Overall efficiency of One man, One women and 1 Boy= 1 + 1/2 + 1/3= (6+3+2)/6= 11/6

They will complete the work in 66/(11/6)= 36 days

Q17

21, 42, 14

Solution

1/X + 1/2X + (1/X + 1/2X) = 1/7.

=> 1/X + 1/2X = 1/14 => X = 21.

=> A takes 21 days, B takes 42 days, and C takes 14 days.

Q18

12 days

Solution

A---------> 20 daysB---------> 30 daysLCM= 60 units.

Calculating their efficiencies, A= 3 unit/day, B= 2 unit/day,

Time taken by A+B to complete the work = 60/5= 12 days

Q19

6.25

Solution

1M + 5W = 20 days = 8 units/day

4M = 8 --> 1M = 32 days = 5 units/day

Total work =160 units M = 5 units/day , W = 3/5 units/day

5M + 1W = 160/((5*5)+(3/5)) = 6.25 days

From the given data,

20 Men + 100 Women= 32 Men

12 Men= 100 Women

3 Men= 25 Women

Lets take efficiency of Men= 25 units and efficiency of Women= 3 units

Now total work= 32 Men= 32*25= 800 units

Now combined efficiency of 5 Men and 1 Women= 5(25) + (3)= 128

Time taken will be 800/128= 6.25 days

Q20

30

Solution

5 men + 7 boys earn Rs.127.50 in 6 days.

5 men + 7 boys earn Rs.21.25 in 1 day .... (i)

2 men + 3 boys earn Rs.35 in 4 days.

2 men + 3 boys earn Rs.8.75 in 1 day .... (ii)

Multiply (i) and (ii) by 2 and 5 respectively so that th the relations may become same.

10 men + 14 boys earn Rs.42.50 in 1 day ..... (iii)

10 men + 15 boys earn Rs.43.75 in 1 day .... (iv)

Subtracting (iii) from (iv), we get 1 boy earns Rs.1.25 in 1 day.

From (i), 5 men earn Rs.12.50 in 1 day.

=> 1 man earns Rs.2.50 in 1 day.

=> 7 men + 6 boys earn Rs.25 in 1 day.

=> 7 men + 6 boys earn Rs.750 in 30 days.

Section 2 - Fillups

Q1

4:8:3

Solution

Q2

144, $\frac{144}{7}$, $\frac{144}{5}$

Solution

Q3 20

Solution

Q4 Rs400,Rs200

Solution

Q5 Rs.1170

Solution

Q6 1.28 days

Solution

Q7 144, 144/7, 144/5

Solution

Q8 20 days

Solution

Q9 0

Solution

Q10 5:3

Solution