## TIME AND WORK

## IIMPORTANT FACTS AND FORMULAE

## Sheet No.-1

- If A can do a piece of work in $n$ days, then A's 1 day's work $=(1 / n)$.
- If $A$ 's 1 day's work $=(1 / n)$,then $A$ can finish the work in $n$ days.
- A is thrice as good a workman as $B$, then:

Ratio of work done by A and $\mathrm{B}=3: 1$.
Ratio of times taken by $A$ and $B$ to finish a work =1:3.

1. A completes a work in 12 days and $B$ complete the same work in 24 days. If both of them work together, then the number of days required to complete the work will be
A.) 8 days
B.) 6 days
C.) 7 days
D.) 5 days
2. If 4 men can colour 48 m long cloth in 2 days, then 6 men can colour 36 m long cloth in
A.) 1 days
B.) $1 \frac{1}{2}$ days
C.) $3 / 4$ day
D.) $1 / 2$ day
3. If 3 persons can do 3 times of a particular work in 3 days, then, 7 persons can do 7 times of that work in
A.) 7 days
B.) 7 days
C.) 4 days
D.) 3 days
4. Mangala completes a piece of work in 10 days, Raju completes the same work in 40 days. If both of them work together, then the number of days required to complete the work is
A.) 15 days
B.) 10 days
C.) 9 days
D.) 8 days
5. 12 men work 8 hours per day to complete the work in 10 days. To complete the same work in 8 days, working 15 hours a day, the number of men required
A.) 4 days
B.) 5 days
C.) 6 days
D.) 8 day
6. If 5 people undertook a piece of construction work and finished half the job in 15 days. If two people drop out, then the job will be completed in
A.) 25 days
B.) 20 days
C.) 15 days
D.) 10 days
7. 30 labourers working 7 hours a day can finish a piece of work in 18 days. If the labourers work 6 hours a day, then the number of labourers required to finish the same piece of work in 30 days will be
A.) 15 days
B.) 21 days
C.) 25 day
D.) 22 day
8. If 5 girls can embroider a dress in 9 days, then the number of days taken by 3 girls will be
A.) 20 days
B.) 10 days
C.) 14 days
D.) 15 days
9. $A$ and $B$ together can plough a field in 10 hours but by himself $A$ requires 15 hours. How long would $B$ take to plough the same field?
A.) 10 hours
B.) 20 hours
C.) 30 hours
D.) 40 hours
10. 16 men or 20 women can finish a work in 25 days. How many days 28 men and 15 women will take to finish this job?
A.) $1913 / 43$ days
B.) $1127 / 43$ days
C.) 8 days
D.) 10 days
11. A can do a piece of work in 5 days and $B$ can do the same work in 10 days. How many days will both take to complete the work?
A.) 5 days
B.) $31 / 3$ days
C.) 3 days
D.) 6 days
12. If 12 men can do a piece of work in 24 days, then in how many days can 18 men do the same work?
A.) 36
B.) 20
C.) 18
D.) 16
13. A group of workers accepted to do a piece of work in 25 days. If 6 of them did not turn for the work and the remaining workers did the work in 40 days, then the original number of workers was
A.) 22
B.) 20
C.) 18
D.) 16
14. If 8 men or 12 women can do a piece of work in 10 days, then the number of days required by 4 men and 4 women to finish the work is
A.) 8
B.) 10
C.) 12
D.) 4
15. If 8 men can dig a well in 18 days, then the number of days, 12 men will take to dig the same well will be
A.) 12 days
B.) 10 days
C.) 8 days
D.) 16 days
16. 39 men can repair a road in 12 days working 5 hours a day. In how many days will 30 men working 6 hours peer day complete the work?
A.) 10
B.) 13
C.) 14
D.) 15
17. A certain number of men can do a work in 40days. If there were 8 men more, it could be finished in 10 days less. How many men were there initially?
A.) 30
B.) 24
C.) 16
D.) 20
18. If 4 men or 6 boys can finish a work in 20 days. How long will 6 men and 11 boys take to finish the same work?
A.) 10 days
B.) 6 days
C.) 4 days
D.) 3 days
19. A works twice as fast as B. if B can complete a work in 12 days independently. The number of days in which $A$ and $B$ can together finish the work?
A.) 18 days
B.) 8 days
C.) 6 days
D.) 4 days
20. $A$ and $B$ can do a piece of work in 4 days. If $A$ can do it alone in 12 days, $B$ will finish the work in
A.) 4 days
B.) 6 days
C.) 8 days
D.) 10 days
21. 5 men can do a piece of work in 6 days while 10 women can do it in 5 days. In how many days can 5 women and 3 men do it?
A.) 4
B.) 5
C.) 6
D.) 8
22. A work could be completed in 100 days. However, due to the absence of 10 workers, it was completed in 110 days then, the original number of workers was
A.) 100
B.) $\quad 110$
C.) 55
D.) 50
23. A particular job can be completed by a team of 10 men in 12 days. The same job can be completed by a team of 10 women in 6 days. How many days are needed to completed the job if the two teams work together?
A.) 4
B.) 6
C.) 18
D.) 9
24. A can do a piece of work in 12 days, while B can do it in 8 days with the help of $C$, they finish the work in 4 days. Then C alone can do the work in
A.) 24 days
B.) 20 days
C.) 16 days
D.) 4 days
25. A job can be completed by 12 men in 12 days. How many extra days will be needed to complete the job if 6 men leave after working for 6 days?
A.) 12
B.) 10
C.) 8
D.) 6
26. Worker $A$ takes 8 hours to do a job. Worker $B$ takes 10 hours to do the same job. How long should it take, worker $A$ and worker $B$, working together but independently, do the same job?
A.) $41 / 9$ hours
B.) $42 / 9$ hours
C.) $44 / 9$ hours
D.) $45 / 9$ hours
27. Three workers working all days can do a work in 10 days. But one of them having other employment can work only half time. In how many days the work can be finished?
A.) 15 Days
B.) 24 Days
C.) 16 Days
D.) 12 Days
28. Sam, Bob and Kim can do a job alone in 15 days, 10 days and 30 days respectively. Sam is helped by Bob and Kim every third day. In how many days will the job be completed?
A.) 9 days
B.) $81 / 3$ days
C.) 8 days
D.) $61 / 3$ days
29. Prakash alone can complete a job in 12 hours, Jayant alone can complete the same job in 6 hours. How many hours will they take together to complete the job?
A.) 4
B.) 6
C.) 2
D.) 8
30. 56 men completes a work in 12 days. How many men will be required to complete the work in 16 days?
A.) 38
B.) 24
C.) 42
D.) 48
31. Six men or tern boys can do a piece of work in fifteen days. How long would it take for 12 men and 5 boys to do the same piece of work?
A.) 6 days
B.) 28 days
C.) 25 days
D.) 7 days
