Time and Work

Type I - Formula

1) 6 men can pack 12 boxes in 7 days by working for 7 hours a day. In how many days can 14 men pack 18 boxes if they work for 9 hours a day?
A) 3.5 days B) 5 days C) 7.5 days D) 12 days

2) Ram and Mohan together can complete typing a book of 1575 pages in 25 days working 15 hrs per day. Ram is 20% more efficient than Mohan. A page contains an average of 275 words, then how many words can ram type in an hour?
A) 525 B) 600 C) 625 D) 630 E) 645

3) 50 persons can do a work in 12 days, working 6 hours/day. 60 persons can do the same work in 8 days, working x hours per day. The value of x is
A)15 B)$7\frac{1}{2}$ C)$5\frac{2}{3}$ D)5

4) A certain number of men can complete a job in 30 days. If there were 10 men less it would be completed in 30 days more. How many men are required to complete this job in 20 days?
A) 30 men B) 20 men C) 40 men
D) 10 men E) 25 men

5) 40 men undertook to do a work in 50days. After 25days they found only 1/3rd of the work is complete. Find how many more men they need to complete the work on time.
A) 40 B) 50 C) 60 D) 70 E) 30

6) A contractor takes a contract to do a work in 30days by 30 men. He found that 10 men were absent in first 10 days. If all men become regular after 10 days then how many more men will be required to complete the work on time?
A) 35 B) 5 C) 25 D) 7 E) 6

Type II- Variables Based Questions

1) 'A' can do a piece of work in 20 days and 'B' can do the same work in 15 days. How long will they take to finish the work, if both work together?
A)15 days B)10 days C)$8\frac{4}{7}$ days D)20 days

2) A can do a piece of work in 20 days and B can do the same piece of work in 30 days. Find in how many days both can do the work?
A)28 B)20 C)34 D)12

3) A can do 2/5 work in 8 days. B can do 3/5 work in 18 days. In how many days together they can do 3/4 work?
A) 8 days B) 9 days C) 7 days
D) 10 days E) 12 days

4) A, B and C can complete a piece of work in 12, 24 and 36 days respectively. In how many days will they together complete the same work?
A)$5\frac{6}{11}$ days B)4 days
C)$6\frac{6}{11}$ days D)6 days

5) Working alone, Typewriters A, B, C can do a certain typing job, consisting of a large number of pages, in 12, 15 and 18 hours, respectively. What is the ratio of the time it takes Typewriter A to do the job, working alone at its rate, to the time it takes Type writer B and C to do the job, working together at their individual rate?
A)$\frac{4}{11}$ B) ½ C) 15/22 D)22/15

6) P can complete a work in 12 days working 8 hours a day.Q can complete the same work in 8 days working 10 hours a day. If both p and Q work together, working 8 hours a day, in how many days can they complete the work?
A) 60/11 B) 61/11 C) 71/11 D) 72/11

7) A and B can do a piece of work in 10 h. B and C can do it in 15 h, while A and C take 12 h to complete the work. B independently can complete the work in
A)12 h B)16 h C)20 h D)24 h

8) A and B can do a piece of work in 72 days. B and C can do it in 120 days. C and A can do it in 90 days. In how many days all three together can do the work?
A)80days B)120days C)100days
D)60days E) 150 days

9) A mas can build a tank in 12 h. After working for 6 h, he took the help of a boy and finished the work in another 5 h. The time that the boys will take alone to complete the work is
A)30 h B)45 h C)60 h D)64 h

10) 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?
A)9 days B)7 days C)5 days
D)3 days E)None of these

11) A can finish a work in 18 days and B can do the same work in half the time taken by A. then, working together, what part of the same work they can finish in a day ?
A) Total work B) One-fourth work
C) Half work D) Two-third work

12) P can finish a work in 25 days and Q can do the same work in 20 days. Q worked for 8 days and left the job. In how many days, P alone can finish the remaining work?
A)5 days B)10 days C)15 days D)17 days

13) A, B and C can do a piece of work individually in 8, 10 and 15 days, respectively. A and B start working but A quits after working for 2 days. After this, C joins B till the completion of work. In how many days will work be completed?
A)53/9days B)34/7days
C)85/13days D)53/10days

14) A and B together can do a piece of work in 40 days. A having worked for 20 days, B finishes the remaining work

alone in 60 days. In How many days shall B finish the whole work alone?
A) 60 B) 70 C) 80 D) 90

15) P and Q can complete a job in 24 days working together. P alone can complete it in 32 days. Both of them worked together for 8 days and then P left. The number of days Q will take to complete the remaining work is ?
A) 56 days B) 54 days
C) 60 days D) 64 days

16) A can do a work in 30 days and B in 40 days. They together work for 12 days and work is completed by C in 3 days. Find in how many days C can do the same work alone?
A) 10 B) 12 C) 8
D) 15 E) 16

17) A and B can do a piece of work in 25 days and 50 days respectively. If they start working together and a person C alone does the work for last 4 days then work is done in 14 days. Find in how many days C can do the work alone?
A) 8 days B) 10 days
C) 20 days D) 25 days E) 15 days

18) A and B can complete a work in 12 and 20 days respectively. After 4 days, they are joined by C who can complete the same work in 24 days, how much work will remain uncompleted after 2 more days?
A) 53/60 B) 41/60 C) 13/60
D) 11/60 E) 7/60

19) A and B can do a work in 30 days. They started together but after 10 days B left the work. If A did the remaining work in 40 days, then find in how many days B can alone do the work?
A) 40 days B) 50 days C) 30 days
D) 60 days E) 55 days

20) A and B started a work together and after 7 days A left the work and B did the remaining work in 56 days. Then find in how many days A alone can do the same work if A and B together can do the work in 21 days.
A) 30 days B) 27 days C) 28 days
D) 29 days E) None of these

21) Ramesh and Ram can do a piece of work in 24 and 30 days respectively. They both started and worked for 6 days. Ram then leaves the work and another their friend Rohit joins the work and completed the remaining work with Ramesh in 11 days. Find how many days are taken by Rohit alone to finish the work?
A) 110 days B) 132 days C) 150 days
D) 120 days E) none of these.

22) A, B and C can complete a piece of work in 10, 12 and 15 days respectively. A left the work 5 days before the completion of the work B left two days after A had left the work. Find the number of days required to complete the work?
A) 7 days B) 5 days C) 10 days
D) 12 days E) 8 days

Type III - Efficiency Based Questions

1) A can complete a work in 24 days. If he is half as efficient as B, then in how many days they both can complete a job working together?
A) 8 days B) 14 days C) 17 days
D) 5 days E) 10 days

2) A can complete 40% of work in 12 days. To complete the remaining work in next 12 days B joins him. How much more efficient is A than B?
A) 80% B) 200% C) 50%
D) 100% E) None of these

3) P is thrice as good a workman as Q and together they finish a piece of work in 24 days. The number of days taken by P alone to finish the work is:
A)25 days B)22 days C)32 days
D)34 days E)None of these

4) Monika is twice as good as Sonika and together they complete a piece of work in 20 days. In how many days will Monika alone will finish the work?
A) 22 days B) 30 days C) 37 days D) 52 days

5) A works twice as fast as B. If B can complete a work in 18 days independently, the number of days in which A and B can together finish the work is:
A) 4 days B) 6 days C) 8 days D) 10 days

6) A is thrice efficient as B and C is twice as efficient as B. what is the ratio of number of days taken by A,B and C, when they work individually?
A) 2:6:3 B) 2:3:6
C) 1:2:3 D) 3:1:2

7) A, B and C have to complete a work. They decide to divide work in the ratio 2 : 3 : 5 respectively. Their rates of work is in the ratio 1 : 2 : 3. If it takes 12 days by A to complete his part of work, then how much of work can they complete in 8 days?
A) 2/5 B) 4/7 C) 2/3
D) 4/5 E) 3/7

8) A is 50% more efficient than B. If A can do a work in 30 days, then find in how many will C do the work if C is 20% efficient of A and B together?
A) 15 days B) 30 days C) 20 days
D) 10 days E) None of these

9) A is 30% more efficient than B. How much time will they, working together, take to complete a job which A alone could have done in 23 days?
A) 9 days B) 11 days
C) 13 days D) 15 days

Type IV- Alternate Working

1) P and Q can do a work in 4 hours and 12 hours respectively. P starts the work at 9am and they work alternately for one hour each. When will the work be completed?
A) 3 am B) 12 pm C) 1 pm D) 3 pm

2) A alone can complete a work in 16 days and B alone in 12 days. Starting with A, they work on alternate days. The total work will be completed in?
A) 12 days B) 13 days
C) $13\frac{5}{7}$days D) $13\frac{3}{4}$ days

3) A and B alone can do a piece of wok in 8 and 18 days respectively. In how many days the work will be completed if they both work on alternate days starting with B?
A) $6\frac{5}{9}$ days B) 5 days C) $10\ \frac{7}{9}$ days
D) $10\frac{9}{7}$ days E) $6\frac{2}{9}$ days

4) A, B, and C can do a work in 18, 30, and 45 days respectively. If they start work with A works the first day, C the second day and B the third and fourth day. If this process continues than find in how many days they will complete the work?
A) $26\frac{2}{3}$ days B) 28 days C) $27\ \frac{2}{3}$ days
D) 27 days E) $27\ \frac{1}{3}$ days

5) K can build a wall in 30 days. L can demolish that wall in 60 days. If K and L work on alternate days, when will the wall be completed?
A) 120 days B) 119 days
C) 118 days D) 117 days

6) A, B and C can do a piece of work in 11 days,20 days and 55 days respectively, working alone. How soon can the work be done if A is assisted by B and C on every third day?
A) 7 days B) 8 days C) 9 days D) 10 days

7) A, B and C can separately do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on alternative days?
A) 12 days B) 15 days C) 18 days D) 16 days

Type V- Wages

1) P and Q were assigned to do a work for an amount of 1200. P alone can do it in 15 days while Q can do it in 12 days. With the help of R they finish the work in 6 days. Find the share of R?
A) 120 B) 240 C) 360 D) 180

2) Ram and Shyam undertook a work for Rs 5600. Ram alone can do the work in 5 days and Shyam alone can do the work in 9 days. If they work together, then what will be the difference (in Rs.) in the amount they receive?
A) 1800 B) 2400 C) 1600 D) 2200

3) S, T and U can complete a work in 40, 48 and 60 days respectively. They received Rs 10800 to complete the work. They begin the work together but T left 2 days before the completion of the work and U left 5 days before the completion of the work. S has completed the remaining work alone. What is the share of S(in Rs) from total money?
A) 4320 B) 4500 C) 4860 D) 4960

4) A and B undertake a project worth Rs. 54000. A alone can do the work in 10 days. They work together for 3 days. After 3 days, B works alone for 3 days and A completes the remaining work in 3 more days. What is the share of B in the earnings?
A) Rs. 21600 B) Rs. 33400 C) Rs. 27800
D) Rs. 35780 E) None of these

5) Kiran can do a work in 20 days, while Karan can do the same work in 25 days. They started the work jointly. Few days later Suman also joined them and thus all of them completed the whole work in 10 days. All of them were paid total Rs.1000. What is the share of Suman?
A) 200 B) 400 C) 100 D) 300 E) 500

6) Arun can do a piece of work in 10 days, Bala in 15 days. They work together for 5 days, the rest of the work is finished by Chitra in two more days. If they get Rs. 5000 as wages for the whole work, what are the daily wages of Arun, Bala and Chitra respectively (in Rs)?
A) 600, 400, 500 B) 200, 300, 400
C) 500, 300, 400 D) 600, 500, 300
E) 400, 300, 200

Type VI - Equations

1) Ten women can do a work in six days. Six men can complete the same work in five days. What is the ratio between the capacity of a man and a woman?
A) 1:2 B) 2:1 C) 2:3 D) 3:2

2) 28 Men and 52 women working together completes a work in 22.5 days. 35 men and 65 women working together on same work will complete it in how many days?
A) 16 B) 18 C) 19 D) 21

3) 10 boys can complete a work in 7 days and 10 girls take 14 days to complete the work. How many days will 5 boys and 10 girls take to complete the work ?
A) 13 days B) 10 days
C) 7 days D) 16 days

4) 5 Men can do a piece of work in 6 days. 6 Women can do 40% of same work in 4 days and 3 Children can do 75% of same work in 6 days. If 2 Men, 3 Women and 1 Child start work alternately, then who will be the last to complete the work?
A) Men B) Women C) Child
D) Can't be determined E) None of these

5) 20 men can complete a work in 14 days and 20 women can complete the same work in 18 days. 7 men and 9 women started the work. After working for some days, they were replaced by 10 men and 10 women who complete the remaining work in 9 days. How much work was completed by initially employed men and women?
A) 2/5 B) 3/7 C) 4/7
D) 3/8 E) None of these

6) If 32 men and 24 women can do a work in 2 days and 13 men and 18 women can do the same work in 4 days then find in how many days will 11 men do the work?
A) 16days B)8days C)4days
D)12days E) none of these

7) 5 men and 7 women can complete a work in 13 days while 4 men and 6 women can complete it in 16 days. Find in how many days will 2 men and 6 women complete the work?
A) 24 days B) 22 days C) 20 days
D) 28 days E) 26 days

Type VII – Garrison / soldiers

1) In a fort there was sufficient food for 200 soldiers for 31 days. After 27 days, 120 soldiers left the fort. For how many extra days will the rest of the food last for the remaining soldiers?
A) 12 days B) 10 days
C) 8 days D) 6 days

2) A garrison of 2000 men has provisions for 54 days. At the end of 15 days, a reinforcement arrives, and it is now found that the provisions will last only for 20 days more. What is the reinforcement?
A) 1900 B) 2100 C) 1700 D) 2000

3) A garrison has sufficient food for 75 soldiers for a period of 90 days. After 10 days, one-third of the soldiers leave. After another 10 days, 5 soldiers return. From this day on, how many days will the food last?
A) 80 B) 90 C) 100 D) 110 E) 120

4) A contractor takes a road construction project to finish it in 40 days and for that he engaged 200 men. After 30 days he employed 100 more men in this project, then the work finished on time. Find if the 100 more men would not worked then how many more days required to finish the work ?
A) 8 days B) 10 days C) 12 days
D) 7 days E) None of these.

Answers:-

Type I		Type II						Type III		Type IV	
Q.No.	Ans	Q.No.	Ans	Q.No.	Ans	Q.No.	Ans	Q.No.	Ans	Q.No.	Ans
1	A	1	C	9	C	17	B	1	A	1	D
2	D	2	D	10	E	18	E	2	D	2	D
3	B	3	B	11	C	19	D	3	C	3	C
4	A	4	C	12	C	20	C	4	B	4	C
5	A	5	D	13	D	21	D	5	B	5	D
6	B	6	A	14	C	22	A	6	A	6	B
		7	D	15	D			7	D	7	B
		8	D	16	A			8	D		
								9	C		

Type V		Type VI		Type VII	
Q.No.	Ans	Q.No.	Ans	Q.No.	Ans
1	A	1	B	1	B
2	C	2	B	2	A
3	C	3	C	3	C
4	A	4	A	4	E
5	C	5	B		
6	A	6	B		
		7	E		