Time and work

1. A can do a certain job in 25 days which B alone can do in 20 days. A started the work and was joined by B after 10 days. The number of days taken in completing the work was

(A) $12\frac{1}{2}$

(B) $14\frac{2}{9}$

(C) 15

(D) $16\frac{2}{3}$

Answer: (D) $16\frac{2}{3}$

2. A can finish a work in 18 days and B can do the same work in 15 days. B worked for 10 days and left the job. In how many days A can finish the remaining work

(A) 6 days

(B) 8 days

(C) 5 days

(D) 9 days

Answer: (A) 6 Days.

3. A does a work in 10 days and B does the same work in 15 days. In how many days they together will do the same work?

(A) 5 days

(B) 6 days

(C) 8 days

(D) 4 days

Answer: (B) 6 Days

4. A can do a piece of work in 10 days and B can do the same work in 12 days. How long will they take to finish the work, if both work together?

(A) 6 days

(B) $5\frac{5}{11}$ days

(C) 7 days

(D) 8 days

Answer: (B) $5\frac{5}{11}$ days

5. A and B together can complete a work in 15 days. B alone can complete the same work in 45 days. Then

(A) A is twice as good workman as B

(B) B is twice as good workman as A

(C) A is thrice as good workman as B

(D) B is thrice as good workman as A

Answer: (A) A is twice as good workman as B.

6. A, B and C can complete a piece of work in 24, 6 and 12 days respectively, working together they will complete the same work in

(A) $3\frac{3}{7}$ days

(B) $4\frac{2}{7}$ days

(C) $10\frac{3}{7}$ days

(D) $12\frac{1}{4}$ days

Answer: (A) $3\frac{3}{7}$ days

7. First pipe can fill a tank in 12 hours. Second pipe can fill the same tank in 6 hours. Third pipe in 4 hours. How long will it take to fill the tank if all the 3pipes are opened simultaneously?

(A) 2 hrs

(B) 3 hrs

(C) 4 hrs

(D) 12 hrs

Answer: (A) 2 hrs.

8. Seven men working 9 hours a day can do a piece of work in 30 days. In how many days will 10 men working for 7 hours a day do the same work?

(A) 28 days

(B) 30 days

(C) 32 days

(D) 27 days

Answer: (D) 27 Days.

9. A can do a certain job in 12 days. B is 60% more efficient than A. How many days does B alone take to do the same job?

(A) 6 days

(B) 7.5 days

(C) 8 days

(D) 8.5 days

Answer: (B) 7.5 days

10. 140 men can finish a piece of work in 11 days. How many days will 110 men take to finish the same work?

(A) 15 days

(B) 12 days

(C) 13 days

(D) 14 days

Answer: (D) 14 days

11. A tank can be filled by an inlet tap in 10 hours and it can be emptied by an outlet pipe in 12 hours. If both the inlet tap and outlet pipe are opened, find the time taken to fill the tank

(A) 120 hrs

(B) 60 hrs

(C) 30 hrs

(D) 15hrs

Answer: (B) 60 hrs

12. Two taps can fill a tank in 30 minutes and 40 minutes. Another tap can empty it in 24 minutes. If the tank is empty and all the three taps are kept open, in how much time the tank will be filled?

(A) 1/2 hour

(B) 2 hours

(C)1 1/2 hours

(D) 1 hour

Answer: (D) 1 hour

13. A can complete 1/4 part of a work in 20 days. A can complete remaining 3/4 part of the work in

(A) 10

(B) 20

(C) 30

(D) 60

Answer: (D) 60

14. A can do certain job in 12 days. B is 60% more efficient than A. How many days does B alone take to do the same job?

(A) 8.5 days

(B) 6.5 days

(C) 9.5 days

(D) 7.5 days

Answer: (D) 7.5 days

15. A and B can do a piece of work in 18 days. B and C in 24 days; C and A in 36 days. In how many days can they do it all working together?

(A) 16

(B) 12

(C) 13

(D) 26

Answer: (A) 16

16. If 24 persons can do 180 jobs in 15 days, then find the number of persons required to do 240 jobs in 12 days.

(A) 38

(B) 40

(C) 42

(D) 44

Answer: (B) 40

17. If A and B together complete a work in 20 days. If A alone completes the work in 24 days, then B alone completes the work in

(A) 14 days

(B) 44 days

(C) 120 days

(D) 48 days

Answer: (C) 120 days

18. A tap can fill a tank in 15 minutes. Another tap can empty it in 20 minutes. Initially the tank is empty, if both the taps start functioning at the same time, when will the tank become full?

(A) 1 hour

(B) 3 hours

(C) 2 hours

(D) 4 hours

Answer: (A) 1 hour

19. Three men A, B and C can complete a job in 8, 12 and 16 days respectively. A and C work together for 2 days then C leaves and B joins. In how many days can A and B finish the work?

(A) 1

(B) 3

(C) 4

(D) 5

Answer: (B) 3

20. A man and woman are engaged in a work. A man can do a piece of work in 4 days and the woman can do in 12 days. Find how many days will they take to finish it together?

(A) 6 days

(B) 5 days

(C) 4 days

(D) 3 days

Answer: (D) 3 days

21. A can do a piece of work in 20 days and B can do it in 25 days. Both of them finished the work and earned Rs. 3,600. Then A's share is

(A) Rs. 1,600

(B) Rs. 2,000

(C) Rs. 3,000

(D) Rs. 3,100

Answer: (B) Rs. 2,000

22. If 22 men can build a wall of 110 meter in 10 days. The length of a similar wall built by 30 men in 6 days is

(A) 100 mts

(B) 90 mts

(C) 80 mts

(D) 70mts

Answer: (B) 90 mts

23. A, B and C together earn Rs. 300 per day. While A and C together earn Rs. 188 and B and C together earn Rs. 152. The daily earning of C is

(A) Rs. 68

(B) Rs. 150

(C) Rs. 112

(D) Rs. 40

Answer: (D) Rs. 40

24. If 12 men and 16 women can do a piece of work in 5 days. 13 men and 24 women can do it in 4 days. Then the ratio of the daily work done by a man to that of a woman is

(A) 3 : 1

(B) 2 : 3

(C) 2 : 1

(D) 4 : 5

Answer: (C) 2 : 1.

25. A and B can do a work in 12 days. B and C in 15 days. C and A in 20 days. If A, B and C work together they will complete the work in

(A) $15\frac{2}{3}$ days

(B) 5 days

(C) 10 days

(D) $6\frac{5}{7}$ days

26. Two taps can fill a tank in 45 minutes and 60 minutes. Another tap can empty it in 30 minutes. If the tank is empty and all the 3 taps are kept open in how much time the tank will be filled?

(A) 3 hours

(B) 4 hours

(C) 6 hours

(D) 12 hours

Answer: (B) 4 Hours.

Time and Work - Set 2

1. A, B and C can complete a piece of work in 24, 6 and 12 days respectively. If they work together, in how many days they will complete the same work?

(A) 1 / 24 day

(B) 7 / 24 day

(C) 24 / 7 days

(D) 24 / 11 days

Answer: (C) 24 / 7 days.

2. 12 men complete the 2400 sq. m ploughing work in 10 days. How many men are required to complete 3600 sq. m ploughing work in 18 days?

(A) 10 men

(B) 15 men

(C) 18 men

(D) 20 men

Answer: (A) 10 men.

3. 2 men and 7 boys can do a piece of work in 14 days, 3 men and 8 boys can do the same in 11 days. In how many days, 3 times the work can be completed by 8 men and 6 boys?

(A) 21 days

(B) 18 days

(C) 24 days

(D) 36 days

Answer: (A) 21 Days.

4. A can do a work in 10 days and B can do the same work in 15 days. They earn Rs. 1500 together. How will they share this amount?

(A) Rs. 850 and Rs.650

(B) Rs. 900 and Rs. 600

(C) Rs. 950 and Rs. 550

(D) Rs. 1000 and Rs. 500

Answer: (B) Rs. 900 and Rs. 600.

5. If 6 men and 8 boys can do a piece of work in 10 days while 26 men and 48 boys can do the same work in 2 days, then what is the time taken by 15 men and 20 boys to complete the same type of work?

(A) 4 days

(B) 5 days

(C) 6 days

(D) 7 days

Answer: (A) 4 days.

6. If 40 men working 8 hours a day, can write 1920 pages in 4 days, then 60 men working 6 hours a day, can write how many pages in 2 days?

(A) 980

(B) 1080

(C) 1180

(D) 1280

Answer: (B) 1080.

7. A man is engaged in an office on contractual basis for 30 days. In the terms and conditions of his appointment it is mentioned that he will get Rs. 150 per day and if he is absent, an amount of Rs. 25 per day will be deducted. On completion of his contract, he receives Rs. 3625 only. For how many days was he present in the office?

(A) 20 days

(B) 22 days

(C) 25 days

(D) 27 days

Answer: (C) 25 Days.

8. P and Q can do a job in 5 days and 10 days respectively. They began work together but P leaves after some days and Q finishes the remaining job in 4 days. After how many days did P leave?

(A) 4

(B) 3

(C) 2

(D) 1

Answer: (C) 2.

9. A and B can do the work in 8 days and B and C can do the same work in 12 days. A, B and C can do the same work in 6 days. In how many days both A and C can do the same work?

(A) 4

(B) 6

(C) 8

(D) 12

Answer: (C) 8.

10. 7 men can complete a work in 52 days. In how many days will 13 men finish the same work?

(A) 20 days

(B) 13 days

(C) 7 days

(D) 28 days

Answer: (D) 28 Days.

11. If 12 compositors can compose 60 pages of a book in 5 hours, how many compositors will compose 200 pages of the book in 20 hours?

(A) 8

(B) 10

(C) 12

(D) 11

Answer: (B) 10.

12. A and B can do a piece of work in 18 days; B and C can do it in 24 days; A and C can do it in 36 days. All working together can complete in

(A) 12 days

(B) 13 days

(C) 14 days

(D) 16 days

Answer: (D) 16 Days.

13. 4 men and 6 women finish a job in 8 days, while 3 men and 7 women finish in 10 days. In how many days will 10 women working together finish it?

(A) 24

(B) 32

(C) 36

(D) 40

Answer: (D) 40.

14. Ramesh is thrice as good as workman as Bipan and is therefore able to finish a piece of work in 40 days less than Bipan. Find the tike in which they can do it working together?

(A) 10 days

(B) 15 days

(C) 16 days

(D) 18 days

Answer: (B) 15 Days.

15. X men can complete a work in y days and y women can complete the same work in x days. Find the number of days the same work can be completed by a group x y men and women.

(A) 4 days

(B) 3 days

(C) 2 days

(D) 1 day

Answer: (D) 1 Day.

16. 15 men can complete a work in 54 days then 9 men can complete the same work in

(A) 45

(B) 51

(C) 90

(D) 100

Answer: (C) 90.

17. 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 has been working at it for 5 days and B for 7 days, C finishes it in 13 days. In how many days C alone will do the work?

(A) 16 days

(B) 24 days

(C) 36 days

(D) 48 days

Answer: (B) 24 Days.

18. 10 women can complete a work in 7 days and 10 children take 14 days to complete the same work. How many days will 5 women and 10 children take to complete the work.

(A) 3

(B) 5

(C) 7

(D) None of these

Answer: (C) 7.

19. Two pipes can fill a tank in 10hours and 12hours respectively while a third pipe empties the full tank in 20hours. If all the three pipes operate simultaneously in how much time the tank will be filled?

(A) 7 hours

(B) 8 hours

(C) 7 hours 30 min

(D) 8 hours 30 min

Answer: (C) 7 hours 30 min.

20. A and B can do a piece of work in 30 days, while B and C can do the same work in 24 days and C and A in 20 days. In what time can A alone can do it?

(A) 30 days

(B) 48 days

(C) 36 days

(D) 45 days

Answer: (B) 48 Days.

21. If p men working p hours per day for p days produce p units of a product, then how many units of product will be produced by n men working n hours per day for n days.

(A) $\frac{p^2}{n^2}$

(B) $\frac{p^3}{n^2}$

(C) $\frac{n^2}{p^2}$

(D) $\frac{n^3}{p^2}$

Answer: (D) $\frac{n^3}{p^2}$

22. A and B can do a work in 4 days. If A alone does the same in 12 days, in how many days C and B alone can complete that work?

(A) 6

(B) 10

(C) 8

(D) 3

Answer: (A) 6.

23. Sixteen man can complete a work in12 days. Twenty-four children can complete the same work in 18 days. Twelve men and eight children started working and after eight days 3 more children joined them. How many days will they now take to complete the remaining work?

(A) 2 days

(B) 4 days

(C) 6 days

(D) 8 days

Ans: (B) 4 days.

Time and Work - Set 3

1. Two pipes can fill a water tank separately by 12 minutes and 20 minutes a waste pipe can drain off in 30 gallon / min. If all the three pipes are open the tank fills in 30 minutes, then the capacity of water tank is

(A) 300 gallons

(B) 400 gallons

(C) 500 gallons

(D) 600 gallons

Answer: (A) 300 gallons.

2. A can do a piece of work in 15 days and B can do it in 20 days. They work together for 6 days and then A goes away. In how many days B will finish the remaining work?

(A) 4 days

(B) 5 days

(C) 6 days

(D) 7 days

Answer: (C) 6 days.

3. A and B together can do a work in 8 days. Where A alone can do the work in 12 days, B alone can do the work in

(A) 12

(B) 24

(C) 8

(D) 20

Answer: (B) 24.

4. A and B can do a work in 8 days, B and C in 12 days, C and A in 24 days. If A, B and C work together, then the number of days, they will complete the work is

(A) 6

(B) 7

(C) 8

(D) 4

Answer: (C) 8.

5. A and B working together can finish a piece of work in 20 days while B alone can do it in 30 days. In how many days can A alone finish the work?

(A) 20

(B) 30

(C) 50

(D) 60

Answer: (D) 60.

6. A and B can together finish a work in 30 days. They worked at it for 20 days and then B left. The remaining work was done by A alone in 20 more days. A alone can finish the work in

(A) 48 days

(B) 50 days

(C) 54 days

(D) 60 days

Answer: (D) 60 days

7. A can do a piece of work in 40 days. He works for 8 days and then B completed it in 16 days. How long will they work together to complete the work?

(A) 13 1/3 days

(B) 12 days

(C) 16 days

(D) 11 days

Answer: (A) 13 1/3 days.

8. If 30 men can do a piece of work in 24 days, in how many days will 12 men do it?

(A) 30

(B) 44

(C) 60

(D) 76

Answer: (C) 60.

9. Two taps A and B can fill a tank in 10 hours and 15 hours respectively. Both the taps are opened for 4 hours and then B is turned off. The time taken by A to fill the remaining tank is

(A) 12 / 5 hrs

(B) 13 / 10 hrs

(C) 6 hrs

(D) 10 / 3 hrs

Answer: (D) 10 / 3 hrs.

10. Two pipes A and B can fill a tank in 10 hours and 15 hours respectively. Find the time taken to fill the tank when both the pipes are turned on simultaneously.

(A) 6 hrs

(B) 5 hrs

(C) 30 hrs

(D) 12 hrs

Answer: (A) 6 hrs.

11. A and B can do a work in 12 days, B and C can do it in 15 days, C and A can do it in 20 days. Then the number of days required to complete the work A, B, C together is

(A) 5

(B) 10

(C) 15

(D) 20

Answer: (B) 10.

12. 4 men and 6 women finish a job in 8 days, while 3 men and 7 women finish it in 10 days. In how many days will 10 women finish it?

(A) 32

(B) 24

(C) 36

(D) 40

Answer: (D) 40.

13. A and B undertake to do a piece of work for Rs. 600. A alone can do it in 6days while B alone can do it in 8 days. With the help of C, they finish it in 3 days. Find the share of C.

(A) Rs. 75

(B) Rs. 100

(C) Rs. 150

(D) Rs. 50

Answer: (A) Rs. 75.

14. A and B can do a piece of work in 12 days. B and C in 15 days. C and A in 20 days. All the three together will complete the work in

(A) 15 days

(B) 5 days

(C) 10 days

(D) 12 days

Answer: (C) 10 Days.

15. 8 children and 12 men complete a certain piece of work in 9 days. Each child takes twice the time taken by a man to finish the work. In how many days will 12 men finish the same work?

(A) 12 days

(B) 18 days

(C) 15 days

(D) 36 days

Answer: (A) 12 Days.

16. 7 men can complete a work in 12 days. They started the work and after 5 days, two men left. In how many days will the work be completed by the remaining men?

(A) 5.8 days

(B) 6.8 days

(C) 9.8 days

(D) 8 days

Answer: (C) 9.8 days.

17. 8 men and 12 women can complete a work in 10 days while 6 men and 8 women in 14 days. Number of days taken by a man alone to complete the work is

(A) 210

(B) 70

(C) 280

(D) 140

Answer: (D) 140.

18. If 9 girls can prepare 135 garlands in 3 hours, number of girls to prepare 270 garlands in 1 hour is

(A) 20

(B) 54

(C) 43

(D) 19

Answer: (B) 54

19. If 7 spiders make 7 webs in 7 days, then 1 spider will make 1 web in how many days?

(A) 1

(B) 7/2

(C) 7

(D) 49

Answer: (C) 7.

20. If 56 men can do a piece of work in 42 days, number of men do the same work in 14 days?

(A) 156

(B) 168

(C) 119

(D) 148

Answer: (B) 168.