TIME & WORK-1_QUESTIONS

1. A person X can complete 20% of work in 8 days and another person Y can complete 25% of the same work in 6 days . If they work together , in how many days will 40% of the work be completed ?   CSAT (2020)
   (A) 6
   (B) 8
   (C) 10
   (D) 12

2. A lift has the capacity of 18 adults or 30 children . How many children can board the lift with 12 adults ?   CSAT (2018)
   (A) 6
   (B) 10
   (C) 12
   (D) 15

3. P works thrice as fast as Q, whereas P and Q together can work four times as fast as R . If P, Q and R together work on a job , in what ratio should they share the earnings ?
                                                   CSAT (2017)

   (A) 3 : 1 : 1
   (B) 3 : 2 : 4
   (C) 4 : 3 : 4
   (D) 3 : 1 : 4

4. Ram and Shyam work on a job together for four days and complete 60% of it . Ram takes leave then and shyam works for eight more days to complete the job . How long would Ram take to complete the entire job alone ?
                                                   CSAT (2016)
   (A) 6 days   (B) 8 days
   (C) 10 days   (D) 11 days

5. W can do 25% of a work in 30 days , X can do ¼ of the work in 10 days , Y can do 40% of the work in 40 days and Z can do 1/3 of the work in 13 days . Who will complete the work first?
                                                   CSAT (2016)
   (A) W   (B) X
   (C) Y   (D) Z

6. Two pipes A and B can fill a tank in 20 and 30 minutes respectively . If both the pipes are used together , then how long will it take to fill the tank ?   CSAT (2015)
   (A) 10 min
   (B) 12 min
   (C) 15 min
   (D) 25 min

7. In a garrison , there was food for 1000 soldiers for one month . After 10 days 1000 more soldiers joined the garrison .How long would the soldiers be able to carry on with the remaining food ?   CSAT (2013)
   (A) 25 days
   (B) 20 days
   (C) 15 days
   (D) 10 days

8. A contract on construction job specifies a penalty for delay of completion beyond a certain date as follows : rs. 200 for the first day , rs 250 for the second day , rs 300 for the third day , etc , the penalty for each succeeding day being rs 50 more than for the preceding day . How much money the contractor has to pay as penalty if he has delayed the work by 30 days ?   CSAT (2011)
   (A) 4950 rs
   (B) 4250 rs
   (C) 3600 rs
   (D) 650 rs

9. A village having a population of 4000, requires 150 litres of water per day . It has a cuboidal tank of diameter 20m ×15m × 6m. For how many days will the tank water of this tank last?   CSAT (2011)
   (A) 2days
   (B) 3 days
   (C) 4 days
   (D) 5 days

10. 12 men can complete a work in 8 days. 16 women can complete the same work in 12 days. 8 men and 8 women started working and worked for 6 days. How many more men are to be added to complete the remaining work in 1 day?
    (A) 12　　　　　(B) 15
    (C) 16　　　　　(D) 24

11. A is three times as efficient as B. A can able to finish a task in 90 days less than B, then find the number of days in which A and B can complete the task individually?
    (A) 45 & 135　　(B) 90 & 180
    (C) 35 & 125　　(D) 30 & 120

12. Some men can complete a book in 10 days. If there were three men more, it would take 2 days less to complete the book. How many men were in the beginning?
    (A) 8　　　　　(B) 15
    (C) 12　　　　　(D) 10

13. Two pipes A & B can fill a tank in 40 & 45 min respectively. And a drain pipe C can empty 15 L/min. If all the three working together can fill the tank in 24 min. Then what is the capacity of the tank?
    (A) 2750 ltr　　(B) 2400 ltr
    (C) 2500 ltr　　(D) 2700 ltr

14. A pipe, working at full speed, can fill an empty cistern in 2 hours. However, during the first hour it worked at one-twelfth of its capacity, during the second hour at one-ninth of its capacity, during the third hour at one-sixth of its usual capacity, during the fourth hour at one- fourth of its usual capacity and during the fifth hour it was only one-third as efficient as it was supposed to be. A second pipe also displayed similar performance, but if it worked at full speed would have filled the empty cistern in 4 hours. Together with a drain pipe that chained water out of the tank at a constant rate, the empty cistern could be filled in 10 hours, all the three pipes working con-currently. How many hours will it take the drain pipe to empty the filled cistern if no other pipe was functioning during the time?
    (A) 15 hours　　(B) 12 hours
    (C) 24 hours　　(D) 20 hours

15. One man can do as much work in one day as a woman can do in 2 days. A child does one-third the work in a day as a woman. If an estate owner hires 39 pairs of hands—men, women and children in the ratio 6 : 5 : 2 and pays them in all Rs. 1,113 at the end of the day's work, then what must the daily wages of a child be, if the wages are proportional to the amount of work done?
    (A) Rs 48　　　(B) Rs 45
    (C) Rs 36　　　(D) Rs 42

16. Two pipes A and B can fill a tank in 6 and 12 min respectively while pipe C can empty the tank in 8 min. If all the three pipes are opened together and after 4 min pipe C is closed, then find the time in which tank will be fill?
    (A) 6 min　　　(B) 10 min
    (C) 8 min　　　(D) 12 min

17. A pipe of diameter 'P' can fill a tank in 120 min. then the time taken by a pipe of diameter '4P' to fill the same tank?
    (A) $7\frac{1}{2}$ min　　(B) 8 min
    (C) $5\frac{1}{2}$ min　　(D) 12 min

18. Two pipes A and B together can fill a cistern in 8 hours. Had they been opened separately, then B would have taken 12 hours more than A to fill the cistern, then how much time will be taken by A to fill the cistern alone?
    (A) 10 hours　　(B) 12 hours
    (C) 14 hours　　(D) 8 hours

19. Pipe A fills a tank of 700 ltr capacity at the rate of 40 ltr a minute. Another pipe B fills the same tank at the rate of 30 ltr a minute. A pipe at the bottom of the tank drains the tank at the rate of 20 ltr a minute. If pipe A is kept open for a minute & then closed & then pipe C is kept open for a minute & then closed & the cycle repeated, how long will it take for the empty tank to overflow?
    (A) 42 min　　　(B) 40 min
    (C) $40\frac{1}{3}$ min　　(D) $40\frac{2}{3}$ min

20. **A can do 1/3 rd of a work in 10 days, B can do 3/5 th of the same work in 12 days and C can do 2/3 rd of the same work in 16 days. If all of them started working together, then in how many days the same work will be completed?**
    (A) 8 days   (B) 12 days
    (C) 6 days   (D) 15 days