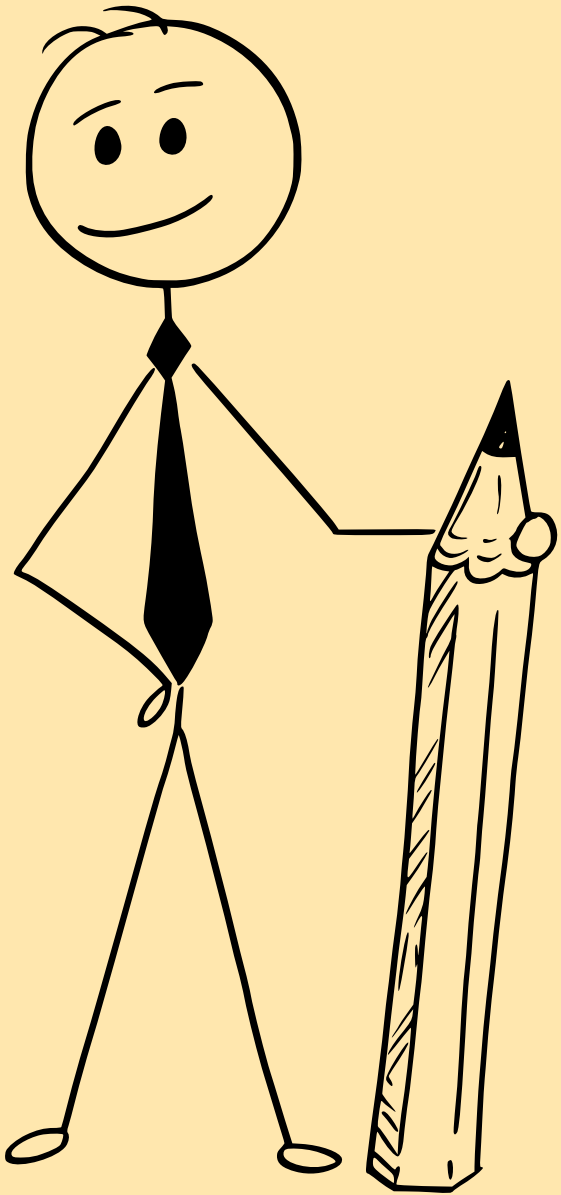
DPP

DAILY PRACTICE PROBLEMS TIME AND WORK- 20,21



CSAT

1. Two pipes can fill a tank in 10 hours and 12 hours respectively while a third pipe empties the full tank in 20 hours. If all the three pipes operate simultaneously, in how much time the tank will be filled?
   (a) 7 hrs
   (b) 8 hrs
   (c) 7 hrs 30 min
   (d) 8 hrs 30 min

2. An electric pump can fill a tank in 3 hours. Because of a leak in the tank, it took 3½ hours to fill the tank.
   The leak can drain out all the water of the tank in:
   (a) 10:30 hrs
   (b) 12 hrs
   (c) 21 hrs
   (d) 24 hrs

3. If two pipes function simultaneously, the reservoir will be filled in 12 hours. One pipe fills the reservoir 10 hours faster than the other. How many hours it takes the second pipe to fill the reservoir?
   (a) 25 hrs
   (b) 28 hrs
   (c) 30 hrs
   (d) 35 hrs

4. 12 buckets of water fill a tank when the capacity of each bucket is 13.5 liters. How many buckets will be needed to fill the same tank, if the capacity of each bucket is 9 liters?
   (a) 8
   (b) 16
   (c) 15
   (d) 18

5. Three pipes A, B and C can fill a tank in 6 hours.
   After working at it together for 2 hours, C is closed and A and B can fill the remaining part in 7 hours.
   The number of hours taken by C alone to fill the cistern, is:
   (a) 10
   (b) 12
   (c) 14
   (d) 16

6. A leak in the bottom of tank can empty the full tank in 8 hours. An inlet pipe fills water at the rate of 6 liters per minute. When the tank is full, the inlet is opened and due to the leak, the tank is empty in 12 hours. How many liters does the cistern hold?
   (a) 7580
   (b) 7960
   (c) 8290
   (d) 8640

7. A cistern has two taps which fill it in 12 min. and 15 min, respectively. There is also a waste pipe in the cistern. When all the three are opened, the empty cistern is full in 20 minutes. How long will the waste pipe take to empty the full cistern?
   (a) 8 min
   (b) 10 min
   (c) 12 min
   (d) 16 min

8. Working 7 hours daily 24 men can complete a piece of work in 27 days. In how many days would 14 men complete the same piece of work working 9 hours daily?
(a) 36 days
(b) 30 days
(c) 32 days
(d) None of these

9. 4 men or 6 women can finish a piece of work in 20 days. In how many days can 6 men and 11 women finish the same work?
(a) 9 days
(b) 6 days
(c) 7 days
(d) None of these

10. A does half as much work as B in three- fourths of the time. If together they take 18 days to complete a work, how much time shall B take to do it?
(a) 30 days
(b) 35 days
(c) 40 days
(d) 66 days

11. Two men undertake to do a piece of work for Rs. 600. One alone could do it in 6 days and the other in 8 days. With the assistance of a boy they finish it in 3 days. Boy's share should be
(a) Rs. 300
(b) Rs. 225
(c) Rs. 75
(d) Rs. 100

12. 5 men and 2 boys working together can do four times as much work per hour as a man and a boy together. The work done by a man and a boy should be in the ratio
(a) 1:2
(b) 2:1
(c) 1:3
(d) 4:1

13. One tap can fill a cistern in 2 hours and another can empty the cistern in 3 hours. How long will they take to fill the cistern if both the taps are opened?
(a) 6 hours
(b) 7 hours
(c) 6.30 hours
(d) None of these

14. A tap can fill a tank in 25 minutes and another can empty it in 50 minutes. Find whether the tank will be filled up or emptied and in how many minutes?
(a) Tank is filled up in 50 minutes
(b) Tank is emptied in 25 minutes
(c) Tank is filled up in 25 minutes
(d) None of these

15. Two taps A and B can fill a tank in 10 hours and 15 hours, respectively. If both the taps are opened together the tank will be full in:
(a) 8 hours
(b) 6 hours
(c) 5 hours
(d) None of these

16. Ramesh takes twice as much time as Mahesh and thrice as much time as Suresh to complete a job. If working together, they can complete the job in 4 days, then the time taken by each of them separately to complete the work is
(a) 36, 24 and 16 days
(b) 20, 16 and 12 days
(c) 24, 42 and 18 days
(d) None of these

17. 5 men can complete a work in 2 days, 4 women can complete the same work in 3 days and 5 children can do it in 3 days. 1 man, 1 women and 1 child, working together, can complete the work in
(a) 6 days
(b) 4 days
(c) 8 days
(d) None of these

18. 10 men can complete a piece of work in 15 days and 15 women can complete the same work in 12 days. If all the 10 men and 15 women work together, in how many will the work get completed?
a) $6\frac{2}{3}$ days
b) $8\frac{1}{3}$ days
c) $7\frac{2}{3}$ days
d) None of these

19. A is thrice as good as B and is therefore able to finish a piece of work in 60 days less than B. Find the time in which they can do it, working together.
a) $22\frac{3}{4}$ days
b) $22\frac{1}{2}$ days
c) 24 days
d) None of these

20. Two pipes A and B can fill a cistern in 12 minutes and 15 minutes respectively but a third pipe C can empty the full tank in 6 minutes, A and B are kept open for 5 minutes in the begining and then C is also opened.In what time is the cistern emptied?
a) 30 min
b) 33 min
c) $37\frac{1}{2}$ min
d) 45 min

Difficulty level- Easy

ANSWER KEY

1. ANS: c)	2. ANS: c)	3. ANS: c)	4. ANS: d)	5. ANS: c)
6. ANS: d)	7. ANS: b)	8. ANS: a)	9. ANS: b)	10. ANS: d)
11. ANS: c)	12. ANS: b)	13. ANS: a)	14. ANS: a)	15. ANS: b)
16. ANS: d)	17. ANS: b)	18. ANS: a)	19. ANS: b)	20. ANS: d)