**Studytonight – Pipes and Cisterns- test 2 – Aditya Jain**

1. **A cistern can be filled by a tap in 4 hours while it can be emptied by another tap in 9 hours. If both the taps are opened simultaneously, then after how much time will the cistern get filled?**
2. 4.5 hrs
3. 5 hrs
4. 6.5 hrs
5. **7.2 hrs**
6. **Pipe A can fill a tank in 5 hours, pipe B in 10 hours and pipe C in 30 hours. If all the pipes are open, in how many hours will the tank be filled?**
7. 2
8. 2.5
9. **3**
10. 3.5
11. **Pipe A and B can fill a tank in 5 and 6 hours respectively. Pipe C can empty it in 12 hours. If all the three pipes are opened together, then the tank will be filled in?**
12. 20/17 hours
13. 2 hours
14. **60/17 hours**
15. 9/2 hours
16. **A pump can fill a tank with water in 2 hours. Because of a leak, it took 7/3 hours to fill the tank. The leak can drain all the water of the tank in?**
17. 7/3 hrs
18. 7 hrs
19. 8 hrs
20. **14 hrs**
21. **One pipe can fill a tank three times as fast as another pipe. If together the two pipes can fill the tank in 36 minutes, then the slower pipe alone will be able to fill the tank in?**
22. 81 min
23. 108 min
24. **144 min**
25. 192 min
26. **A tank in filled in 5 hours by three pipes A, B and C. The pipe C is twice as fast as B and B is twice as fast as A. How much time will pipe A alone take to fill the tank?**
    1. 20 hrs
    2. 25 hrs
    3. **35 hrs**
    4. Cannot be determined
27. **Two taps A and B can fill in 12 minutes and 15 minutes respectively. If both the taps are opened simultaneously, and the tap A is closed after 3 minutes, then how much more time will it take to fill the tank by tap B?**
    * + - 1. 7 min 15 sec
          2. 7 min 45 sec
          3. 8 min 5 sec
          4. **8 min 15 sec**
28. **12 buckets of water fill a tank when the capacity of each tank is 13.5 litres. How many buckets will be needed to fill the same tank, if the capacity of each bucket is 9 litres?**
29. 8
30. 15
31. 16
32. **18**
33. **Bucket P has thrice the capacity as bucket Q. It takes 60 turns for bucket P to fill the empty drum. How many turns it will take for both the buckets P and Q, having each turn together to fill the empty drum?**
    1. 30
    2. 40
    3. **45**
    4. 90
34. **Two pipes A and B can fill a tank in 15 minutes and 20 minutes respectively. Both pipes are opened together but after 4 minutes, pipe A is turned off. What is the total time required to fill the tank?**
    * + - 1. 10 min 20 sec
          2. 11 min 45 sec
          3. 12 min 30 sec
          4. **14 min 40 sec**
35. **Two pipes A and B can separately fill a cistern in 60 minutes and 75 minutes respectively. There is a third pipe in the bottom of the cistern to empty it. If all the three pipes are simultaneously opened, then the cistern is full in 50 minutes. In how much time, the third pipe alone can empty the cistern?**
36. 90 min
37. **100 min**
38. 110 min
39. 120 min
40. **Two pipes A and B can fill a tank in 6 hours and 4 hours respectively. If they are opened on alternate hours and if pipe A is opened first, in how many hours, the tank shall be full?**
41. 4
42. 4.5
43. **5**
44. 5.5
45. **A leak in the bottom of a tank can empty the full tank in 8 hours. An inlet pipe fills water at the rate of 6 litres a minute. When the tank is full, the inlet is opened and due to the leak, the tank is empty in 12 hours. How many litres does the cistern hold?**
    * + - 1. 7580
          2. 7960
          3. 8290
          4. **8640**
46. **Two pipes A and B can fill a cistern in 37.5 minutes and 45 minutes respectively. Both pipes are opened. The cistern will be filled in just half an hour, if the pipe B is turned off after?**
    * + - 1. 5 min
          2. **9 min**
          3. 10 min
          4. 15 min
47. **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 tank is?**
48. 10
49. 12
50. **14**
51. 16