

PIPES AND CISTERNS

- Q.1 - 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 ?
 a) 2 b) 2.5 c) 3 d) 3.5
- Q.2- Pipes 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 :
 a) $2\frac{9}{17}$ hrs b) $\frac{9}{17}$ hrs c) $3\frac{9}{17}$ hrs d) $1\frac{9}{17}$ hrs
- Q.3- 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 ?
 a) 90 min. b) 100 min. c) 110 min. d) 120 min
- Q.4- A pump can fill a tank with water in 2 hours. Because of a leak, it took 4 hours to fill the tank. The leak can drain all the water of the tank in :
 a) hrs b) 7 hours c) 8 hrs d) 14 hrs
- Q.5- Two taps A and B can fill a tank in 5 hours and 20 hours respectively. If both the taps are open then due to a leakage, it took 30 minutes more to fill the tank. If the tank is full, how long will it take for the leakage alone to empty the tank ?
 a) hrs b) 9 hrs c) 18 hrs d) 36 hrs
- Q.6 - Two pipes A and B together can fill a cistern in 4 hours. Had they been opened separately, then B would have taken 6 hours more than A to fill the cistern. How much time will be taken by A to fill the cistern separately ?
 a) 1 hrs b) 2 hrs c) 6 hrs d) 8 hrs.
- Q.7- 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 :
 a) 81 min b) 108 min c) 144 min d) 192 min
- Q.8- A tank is 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 ?
 a) 20 hrs b) 25 hrs c) 35 hrs d) cannot be determine
- Q.9- 12 buckets of water fill a tank when the capacity of each tank 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) 15 c) 16 d) 18
- Q.10- 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 ?
 a) 30 b) 40 c) 45 d) 90
- Q.11- Two pipes A and B can fill a tank 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 ?
 a) 7 min 15 sec b) 7 min 45 sec c) 8 min 5 sec d) 8 min 15 sec
- Q.12- Two pipes A and B can fill a tank in 15 minutes and 20 minutes respectively. Both the pipes are opened together but after 4 minutes, pipe A is turned off. What is the total time required to fill the tank ?
 a) 10 min 40 sec b) 11 min 45 sec c) 12 min 30 sec d) 14 min 40 sec.

- Q.13- Two pipes A and B can fill a tank in 15 hours and 20 hours respectively while a third pipe c can empty the full tank in 25 hours .All the three pipes are opened in the beginning .After 10 hours C is closed .In how much time, will the tank be full?
a) 12 hrs b) 13 hrs c) 16 hrs d) 18 hrs
- Q.14- A large tanker can be filled by two pipes A and B in 60 minutes and 40 minutes respectively. How many minutes will it take to fill the tanker from empty state if B is used for half the time and A and B fill it together for the other half ?
a) 15 min b) 20 min c) 27.5 min d) 30 min
- Q.15- Two pipes A and B can fill a cistern in 12 minutes and 15 minutes respectively while a third pipe C can empty the full tank in 6 minutes. A and B are kept open for 5 minutes in the beginning and then C is also opened .In what time is the cistern emptied ?
a) 30 min b) 33 min c) 36 min d) 45 min
- Q.16- 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?
a) 4 b) 4 1/2 c) 5 d) 5 1/2
- Q.17- Three taps A , B, and C can fill a tank in 12 ,15 and 20 hours respectively .If A is open all the time and B and C are open for one hour each alternately ,the tank will be full in:
a) 6 hrs b) 7hrs c) 5 hrs d) 8hrs
- Q.18- Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes . The capacity of the tank is :
a) 60 gallons b) 100 gallons c) 120 gallons d) 180 gallons
- Q.19- Two pipes A and B can fill a cistern in 37 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 :
a) 5 min b) 9 min c) 10 min d) 15 min
- Q.20 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 :
a) 10 b) 12 c) 14 d) 16

ANSWER KEY

1	C
2	C
3	B
4	D
5	D
6	C
7	C
8	C
9	A
10	C
11	D
12	A
13	A
14	D
15	D
16	D
17	B
18	C
19	B
20	C