Pipes and Cistern

1) Two pipes can fill a tank in 8 hours and 10 hours .If two pipes are operate simultaneously, In how much time will the tank be filled?
A)4hrs 18min B)10min C)4hrs
D)12hrs 10min E)None of these

2) A tap can fill a tank in 12 minutes and another tap can empty the tank in 6 minutes.If the tank is already full and then both the taps are opened the tank will be
A.Filled in 6 minutes B.Emptied in 6 minutes
C.Filled in 6 minutes D.Emptied in 12 minutes
E.None of these

3) A pump can fill the tank in 4 hours. Because of a leak in the tank i took 5(1/2) hours to fill the tank. If the tank is full, how much time will the leak take to empty it ?
A)14hrs B)14hrs 20min C)14hrs 40min
D)14hrs 45min E)None of these

4) Two pipes fill the tank in 12min and 15min.There is also a waste pipe in the tank. When all the three are opened, the empty tank is full in 20 min.How long will the waste pipe take to empty the tank ?
A)10 min B)20 min C)30 min
D)35 min E)None of these

5) A tap can fill a tank completely in 6 hours. After half the tank is filled , one more similar tap is opened. What is the total time taken to fill the tank completely ?
A.4hrs 20min B.3hrs 30min C.3hrs 10min
D.4hrs 30min E.None of these

6) A tap can fill a tank in 6hrs.After half the tank is filled, three more similar taps are opened. What is the total time taken to fill the tank completely ?
A)3hrs B)3hrs 15 min C)3hrs 45 min
D)4hrs E)None of these

7) Two pipes can fill a tank in 6hours and 8 hours .While a third pipe empties the full tank in 12hours.If all the three pipes are operate simultaneously, In how much time will the tank be filled ?
A)4 hours B)4hours 48min C)5hours
D)5hours 48min E)None of these

8) Two pipes A and B can fill a tank in 20 min. and 40 min. respectively. A water pipe C can empty the tank in 20 min. First A and B are opened. After 7 min, C is also opened. In how much time, the tank is full?
A.30m B.20m C.25m D.19m E.None of these

9) Two pipes A and B can fill a tank in 4 hours and 5 hours respectively. If they are opened on alternate hours and if pipe B is opened first, in how many hours, the tank fill in
A.7hrs B.6hrs C.4.30hrs
D.5hrs E.None of these

10) Three taps P,Q and R can fill a tank in 10,20 and 30 hours respectively. If A is open all the time and Q and R are open for one hour each alternatively ,the tank will be fill in
A)7 hours B)7 hours 30min C)7hours 45min
D)7hours 20 min E)None of these

11) Bucket A has thrice the capacity as bucket B. It takes 20 turns for bucket B to fill the empty drum. How many turns it will take for both the buckets A and B having each turn together to fill the empty drum
A.12 B.10 C.15 D.16 E.None of these

12) Tap A can fill the empty tank in 12hrs but due to leak in the bottom it is filled in 15hrs.If the tank is full ,then tap is closed.In how many hours the leak can empty the tank ?
A.60hrs B.50hrs C.45hrs
D.30hrs E.None of these

13) Three pipes A, B and C can fill a cistern in 6 hours. After working at it together for 2 hours, C is closed and A and B can fill the remaining part in 6 hours. The number of hours taken by C alone to fill the cistern is
A.12hrs B.10hrs C.18hrs
D.8hrs E.None of these

14) Two pipes A and B can fill a tank in 10 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.12m B.10m C.8m
D.16m E.None of these

15) Pipes A, B and C can fill a tank in 3, 4 and 6 hours respectively. If all the pipes are opened together and after 30 minutes pipes B and C are turned off, find the total time in which the tank is full.
A.2(3/8)hrs B.1(1/7)hrs C.2(2/7)hrs
D.3(1/3)hrs E.None of these

16) Two pipes M and N can fill a tank in 30 and 45 minutes respectively. If both the pipes were open for few minutes after N was closed and the tank was full in 25 minutes, find the time for pipe N was open.
A.8.16m B.7.5min C.5min
D.10.2m E.None of these

17) A cistern is filled by 3 pipes A, B and C with uniform flow. The second pipe B takes3/2 times the time taken by A to fill the tank, while C takes twice the time taken by B to fill the tank. If all the three pipes can fill the tank in 7 hours, find the time required by pipe A alone to fill the tank.
A.10hrs B.12hrs C.14hrs
D.15hrs E.None of these

18) Pipes A and B can fill a cistern in 15 hours together. But if these pipes operate separately A takes 40 hours less than B to fill the tank. In how many hours the pipe A will fill the cistern working alone?
A) 60 B) 20 C) 40 D) 15 E) 25

19) Pipe A is 4 times faster than pipe B and takes 45 minutes less to fill a tank. When both the pipes are opened together than the time in which the tank will be full.
a) 10 min b) 12 min c) 15 min
d) 18 min e) None of these

20) Two pipes P and Q can fill a tank in 20 minutes and 30 minutes respectively. There is a waste pipe which withdraws water at the rate of 8 litres per minute. Now the tank is full and If all the pipes are opened simultaneously the tank is emptied in 60 minutes. Find the capacity of the tank.
a) 60ltr b) 70ltr c) 80ltr
d) 90ltr e) None of these

21) A pipe can empty a tank in 60 minutes alone. Another pipe whose diameter is twice the diameter of first pipe is also opened. Now find the time in which both pipe will empty the tank together.
a) 8 min b) 10 min c) 12 min
d) 14 min e) None of these

22-23) Each of the questions given below consists of a statement and / or a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement(s) is / are sufficient to answer the given question. Read the both statements and

Give answer (A) if the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.
Give answer (B) if the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
Give answer (C) if the data either in Statement I or in Statement II alone are sufficient to answer the question.
Give answer (D) if the data even in both Statements I and II together are not sufficient to answer the question.
Give answer(E) if the data in both Statements I and II together are necessary to answer the question.

22) How much time will the leak take to empty the full cistern?
I. The cistern is normally filled in 9 hours.
II.It takes one hour more than the usual time to fill the cistern because of la leak in the bottom.

23) How long will it take to empty the tank if both the inlet pipe A and the outlet pipe B are opened simultaneously?
I. A can fill the tank in 16 minutes.
II.B can empty the full tank in 8 minutes.

Answers:-

Q.No	Ans	Q.No.	Ans	Q.No.	Ans.	Q.No.	Ans.	Q.No.	Ans.
1	A	6	C	11	C	16	B	21	C
2	D	7	B	12	A	17	C	22	E
3	C	8	D	13	C	18	B	23	E
4	A	9	C	14	A	19	B		
5	D	10	A	15	A	20	C		