1. A can do a piece of work in 20 days. He work at it for 5 days and then B finishes it in 10 more days. In how many days will A and B together finish the work?
1. 8 days   2. 10 days   3. 12 days   4. 6 days

2. 6 men can do a piece of work in 12 days. How many men are needed to do the work in 18 days?
1. 3 men   2. 6 men   3. 4 men   4. 2 men

3. 15 men could finish a piece of work in 210 days. But at the end of 100 days, 15 additional men are employed. In how many more days will the work be complete?
1. 80 days   2. 60 days   3. 55 days   4. 50 days

4. A cistern is normally filled in 5 hours. However, it takes 6 hours when there is leak in its bottom. If the cistern is full, in what time shall the leak empty it?
1. 6 hour   2. 5 hour   3. 30 hour   4. 15 hour

5. A can do a work in 18 days, B in 9 days and C in 6 days. A and B start working together and after 2 days C joins them. In how many days will the work be completed?
1. $4\dfrac{1}{3}$ days   2. 4 days   3. $4\dfrac{2}{3}$ days   4. 5 days

Directions for questions 6 – 10 : Read the following and answer the questions that follow.

A set of 10 pipes (set X) can fill 70% of a tank in 7 minutes. Another set of 5 pipes (set Y) fills 37.5% of the tank in 3 minutes. A third set of 8 pipes (set Z) can empty 50% of the tank in 10 minutes.

6. How many minutes will it take to fill the tank if all the 23 pipes are opened at the same time?
1. 5 minutes   2. $5\dfrac{5}{7}$ minutes   3. 6 minutes   4. None of these

7. If only half the pipes of sex X are closed and only half the pipes of set Y are open and all other pipes are open. How long will it take to fill 49% of the tank?
1. 16 minutes   2. 13 minutes   3. 7 minutes   4. None of these

8. If 4 pipes are closed in set Z. and all others remain open, how long will it take to fill the tank?
1. 5 minutes   2. 6 minutes   3. 7 minutes   4. 7.5 minutes

9. If the tank is half full and set X and set Y are closed, how many minutes will it take for set Z to empty the tank if alternate taps of set Z are closed.
1. 12 minutes   2. 20 minutes   3. 40 minutes   4. 16 minutes

10. If one pipe is added for set X and set Y each, and set Z's capacity is increased by 20% on its original value and all the taps are opened at 2:58 pm, then at what time does the tank get filled? (if it is initially empty)
1. 3:05 pm   2. 3:04 pm   3. 3:10 pm   4. 3:03 pm

11. Apurva can do a piece of work in 12 days. Apurva and Amit complete the work together and were paid Rs 54 and Rs 81 respectively. How many days must they have taken to complete the work?
1. 4 days   2. 4.5 days   3.4.8 days   4. 5 days

Question 1 – 4 :: A jailor decided to play a game with his prisoners who were extremely adept at logical analysis. The prisoners were Aristotle, Bach, Coutin, Dell & Einstein. He gave them each a box of money and said " Each of you have received a box of currency. All boxes look identical from outside." The jailor then asked each prisoner to secretly open the boxes and look at the currency inside . he then said " three of you have a box containing Indian Rupees; two of you have a box containing US Dollars, I shall now give each of you a chit containing information about the box of exactly one other person." He did so and asked them to open the chit and see the information provided to them. " None of you will be able to tell the exact currency of any third person". Then he announced " Bach has a box containing Indian Rupees " Aristotle immediately said " I know the currency of all 5 people." After some time Einstein also said " so do I, now." Assume; a prisoner speaks up as soon as he is able to deduce the currency of all five prisoners."

1. Apart from Bach, the prisoners with Indian currency were:
(a)Einstein and Dell   (b)Aristotle and Einstein   (c)Coutin and Dell   (d)Aristotle and Coutin

2.The prisoners give US Dollars were:
 (a)Coutin and Dell   (b)Dell and Einstein   (c)Aristotle and Einstein   (d)Aristotle and Dell

3.Whose currency was written in the chit which Aristotle received?
(a)Bach   (b) Einstein   (c) Dell   (d) coutin

4.Einstein did not receive a chit containing the currency of:
(a)Aristotle   (b) Bach   (c) Dell   (d) Coutin