Paper-02

Class-IX -Simultaneous-Linear Equations & Compound Interest …Marks -Total 100 max time: 120 min

1. One day Phil bought 5 loaves of bread and 3 muffins for a total of Rs 8. A few days later, at the same supermarket, he bought 2 loaves of bread and 6 muffins for a total of Rs5.60. What is the price of a single loaf of bread and a single muffin?

2. Mayfield High School sold tickets for a school musical. Seats in the auditorium cost Rs6 each and balcony seats cost Rs4. A total of 200 tickets was sold and Rs960 was collected. How many of each type of ticket was sold?

3. Paul collects baseball cards and football cards. The number of baseball cards is 10 more than twice the number of football cards. In total, Paul has 70 cards. How many of each type card does Paul have?

4. At the moment Alf is twelve times older than his grandson John. In five years time Alf will be 55 years older than John. What are their present ages.

5. Ten years ago, P was half of Q's age. If the ratio of their present ages is 3:4, what will be the total of their present ages?

6.Present ages of Kiran and Syam are in the ratio of 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Syam's present age in years?

7. If 6 years are subtracted from the present age of Ajay and the remainder is divided by 18, then the present age of Rahul is obtained. If Rahul is 2 years younger to Denis whose age is 5 years, then what is Ajay 's present age?

8. What is the difference between the compound interests on Rs. 5000 for 1½ years at 4% per annum compounded yearly and half-yearly?

9. There is 80% increase in an amount in 8 years at simple interest. What will be the compound interest of Rs. 14,000 after 3 years at the same rate?

10. The compound interest on Rs. 30,000 at 7% per annum is Rs. 4347. The period (in years) is:

11. The least number of complete years in which a sum of money put out at 20% compound interest will be more than doubled is

12. A sum of money placed at compound interest doubles itself in 4 years. In how many years will it amount to 8 times?

13. The compound interest on Rs. 20,000 at 8% per annum is Rs. 3,328. What is the period (in year)?

14. A sum is invested at compounded interest payable annually. The interest in the first two successive years was Rs. 400 and Rs. 420. The sum is

15. P is able to do a piece of work in 15 days and Q can do the same work in 20 days. If they can work together for 4 days, what is the fraction of work left?

16. P can lay railway track between two stations in 16 days. Q can do the same job in 12 days. With the help of R, they completes the job in 4 days. How much days does it take for R alone to complete the work?

17. 6 men and 8 women can complete a work in 10 days. 26 men and 48 women can finish the same work in 2 days. 15 men and 20 women can do the same work in - days.

18. P, Q and R can complete a work in 24, 6 and 12 days respectively. The work will be completed in --- days if all of them are working together.

19. 1. A man's speed with the current is 15 km/hr and the speed of the current is 2.5 km/hr. The man's speed against the current is:

20. A boat running upstream takes 8 hours 48 minutes to cover a certain distance, while it takes 4 hours to cover the same distance running downstream. What is the ratio between the speed of the boat and speed of the water current respectively?

Marks(5 X 20= 100)