

1. A boat takes 19 hours for travelling downstream from point A to point B and coming back to a point C which is at midway between A and B. If the velocity of the stream is 4 kmph and the speed of the boat in still water is 14 kmph, what is the distance between A and B ?  
A) 180 km  
B) 160 km  
C) 140 km  
D) 120 km
2. A man goes down stream with a boat to some destination and returns upstream to his original place in 5 hours. If the speed of the boat in still water and the stream are 10km/hr and 14km/hr respectively, the distance of the destination from the starting place is  
A) 16 km  
B) 18 km  
C) 21 km  
D) 25 km
3. P can complete a work in 12 days working 8 hours a day. Q can complete the same work in 8 days working 10 hours a day. If both P and Q work together, working 8 hours a day, in how many days can they complete the work?  
A) 60/11  
B) 61/11  
C) 71/11  
D) 72/11
4. 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
5. When I was married 10 years ago my wife is the 6th member of the family. Today my father died and a baby born to me. The average age of my family during my marriage is same as today. What is the age of Father when he died ?  
A) 50 yrs  
B) 60 yrs  
C) 70 yrs  
D) 65 yrs
6. At what time between 4 and 5 o'clock will the hands of a watch point in opposite directions?  
A) 54 past 4  
B)  $(53 + 7/11)$  past 4  
C)  $(54 + 8/11)$  past 4  
D)  $(54 + 6/11)$  past 4
7. Find the missing number in the following series?

3, 5, 5, 19, 7, 41, 9, ?

A) 71

B) 61

C) 79

D) 69

8. 8, 15, 28, 53, ?, 199

A) 101

B) 102

C) 103

D) 104

9. The greatest number which on dividing 1657 and 2037 leaves remainders 6 and 5 respectively, is:

A) 123

B) 127

C) 235

D) 305

10. The difference of two numbers is 14. Their LCM and HCF are 441 and 7. Find the two numbers ?

A) 63 and 49

B) 64 and 48

C) 62 and 46

D) 64 and 49

11. A certain number of men can finish a piece of work in 100 days. If there were 10 men less, it would take 10 days more for the work to be finished. How many men were there originally?

A) 75

B) 82

C) 100

D) 110

12. the diagonal of a rectangle is 17cm long and its perimeter is 46 cm. Find the area of the rectangle.

A) 110

B) 120

C) 130

D) 140

13. d the length of a rope by which a cow must be tethered in order that it may be able to graze an area of 9856 sq meters.

A) 56m

B) 16m

C) 14m

D) 76m

14. right triangle with sides 3 cm, 4 cm and 5 cm is rotated the side of 3 cm to form a cone. The volume of the cone so formed is:

- A) 12 pi cub.cm
  - B) 15 pi cub.cm
  - C) 16 pi cub.cm
  - D) 20 pi cub.cm
15. the length of the longest pole that can be placed in a room 12 m long 8m broad and 9m high.
- A) 14m
  - B) 15m
  - C) 16m
  - D) 17m
16. man sitting in a train which is traveling at 50 kmph observes that a goods train, traveling in opposite direction, takes 9 seconds to pass him. If the goods train is 280 m long, find its speed.?
- A) 60
  - B) 62
  - C) 64
  - D) 65
17. A girl introduced a boy as the son of the daughter of the father of her uncle. The boy is girl's
- A) Brother
  - B) Son
  - C) Uncle
  - D) Son-in-law
18. In a family, there are six members A, B, C, D, E and F. A and B are a married couple, A being the male member. D is the only son of C, who is the brother of A. E is the sister of D. B is the daughter-in-law of F, whose husband has died. How is E related to C ?
- A) Sister
  - B) Daughter
  - C) Cousin
  - D) Mother
19. A man is facing north-west. He turns 90o in the clockwise direction, then 180o in the anticlockwise direction and then another 90o in the same direction. Which direction is he facing now?
- A) South
  - B) South-west
  - C) South-east
  - D) East
20. 8 litres are drawn from a cask full of wine and is then filled with water. This operation is performed three more times. The ratio of the quantity of wine now left in cask to that of the water is 16 : 65. How much wine the cask hold originally?
- A) 18 litres
  - B) 24 litres
  - C) 32 litres

D) 42 litres

21. A mixture of 150 liters of wine and water contains 20% water. How much more water should be added so that water becomes 25% of the new mixture?

A) 10 liters

B) 20 liters

C) 30 liters

D) 40 liters

22.  $(51 + 52 + 53 + \dots + 100)$  is equal to

23. A number when divided by 296 leaves 75 as remainder. When the same number is divided by 37, the remainder will be:

A) 1

B) 3

C) 5

D) 2

24. Consider the word ROTOR. Whichever way you read it, from left to right or from right to left, you get the same word. Such a word is known as palindrome. Find the maximum possible number of 5-letter palindromes.

A) 17756

B) 17576

C) 12657

D) 12666

25. A box contains 100 balls, numbered from 1 to 100. If three balls are selected at random and with replacement from the box, what is the probability that the sum of the three numbers on the balls selected from the box will be odd?

A)  $\frac{1}{6}$

B)  $\frac{1}{3}$

C)  $\frac{1}{2}$

D)  $\frac{1}{4}$