Mental Ability

Ganit Bodh Series

Self Evaluation Test -17 (Problems on Venn Diagram,Calender & Clock)

1. In a class of 25 students, 12 have taken mathematics, 8 have taken mathematics but not biology. Find the number of those who have taken biology but not mathematics. Each student has taken either mathematics or biology or both.
   a) 4 b) 13
   c) 8 d) 17
2. In a survey of 25 students, it was found that 15 had taken mathematics, 12 had taken physics and 11 had taken chemistry, 5 had taken mathematics and chemistry, 9 had taken mathematics and physics, 4 had taken physics and chemistry and 3 had taken all the three subjects. Then find the number of students that had taken only two of the subjects .
   a) 4 b) 5
   c)11 d) 9
3. A college awarded 38 medals in Football, 15 in Basketball and 20 in Cricket. If these medals went to a total of 58 men and only three men go medals in all the three sports. Then how many received medals in exactly two of the three sports?
   a) 9 b) 8
   c) 18 d) None
4. In a survey of 100 students, the number of students, studying the various languages were found to be: English only 18, English but not Hindi 23, English and Sanskrit 8, English 26, Sanskrit and Hindi 8, no language 24. Then how many students were studying Sanskrit and Hindi but not English?
   a) 0 b) 5
   c) 3 d) 8
5. A market research group conducted a survey of 1000 consumers and reported that 720 consumers liked product A and 450 consumers liked product B. Then what is the maximum number that must have like both the products?
   a) 170 b) 280
   c) 450 d) none
6. In a survey it was found that 21 people liked product A, 26 liked product B and 29 liked product C. If 14 people liked products A and B, 12 people liked product C and A, 14 people liked products B and C and 8 liked all the three products.Then how many liked product B only.
   a) 6 b) 11
   c) 3 d) 20
7. In a town of 10,000 families it was found that 40% family buy newspaper A, 20% families buy newspaper B and 10% families buy newspaper C, 5% families buy A and B, 3% buy B and C and 4% buy A and C. If 25 families buy all the three newspaper, Then find the number of families which buy B only
   a) 325 b) 3125
   c) 1225 d) 175
8. Of the members of three athletic teams in a certain school 21 are in the basket ball team, 26 in hockey team and 29 in the football team. 14 play hockey and basket ball, 15 play hockey and football, 12 play football and basketball and 8 play all the three games. Then how many members are there in all who play only football ?
   a) 10 b) 5
   c) 3 d) 18
9. A survey of 500 television viewers produced the following information; 285 watch football, 195 watch hockey, 115 watch basketball, 45 watch football and basketball, 70 watch football and hockey, 50 watch hockey and basketball, 50 do not watch any of the three games. Then how many watch only one the three games?
   a) 350 b)345
   c) 325 d) 305
10. For a certain test, a candidate could offer English or Hindi or both the subjects. Total number of students was 500, of whom 350 appeared in English and 90 in both the subjects Then how many appeared in English only?
    a) 260 b) 240
    c) 150 d) 245
11. In a group of 120 people, 50 speak both English and Hindi and 30 people speak English but not Hindi. All the people speak at least one of the two languages. Then how many people speak Hindi?
    a) 40 b) 80
    c) 70 d) 90
12. In a survey of 60 people, it was found that 25

people read newspaper H, 26 read newspaper T, 26 read newspaper I, 9 read both H and I, 11 read both H and T, 8 read both T and I, 3 read all the three newspapers. Then the number of people who read exactly one newspaper is

a) 30 b) 40
c) 45 d) 50

13. In a group of 70 people, 37 like coffee, 52 like tea and each person likes at least one of the two drinks. Then how many like both coffee and tea?

a) 28 b) 15
c) 33 d)19

14. In X and Y are two sets such that $X \cup Y$ has 18 elements, X has 8 elements and Y has 15 elements.Then how many elements does $X \cap Y$ have?

a) 5 b) 7
c) 6 d) 8

15. In a group of 400 people, 250 can speak Hindi and 200 can speak English. Then how many can speak both Hindi and English , if everyone speak at least one of the two language?

a) 60 b) 50
c) 25 d) can't say

16. If minute hand is faster twice than the actual speed. Then what will be angle between Minute hand and hour hand after 2 hours when, both started at 12.

(a) 0^0 (b) 10^0
(c) 60^0 (d) None of these

17. What is angle between Minute hand and hour hand at 8:30

(a) 15^0 (b) 0^0
(c) 45^0 (d) None

18. If Anamika was born on October 1, 1974 on Tuesday and married on May 6, 2011. What was the day on May 6, 1999?

(a) Wednesday
(b) Tuesday
(c) Thursday
(d) Saturday

19. A man was born on May 24, 1969. What will be the day on his birthday. when he will complete 30 years.

(a) Saturday
(b) Friday
(c) Thursday
(d) None

20. What is the angle between Minutes hand and hour hand at 4.30

(a) 30^0 (b) 25^0
(c) 45^0 (d) None