CLASS - VII

1. A regular Prism, whose faces, edges and vertices are 5, 9 and 6 respectively is
   1) Rectangular Prism 2) Square Prism
   3) Triangular Prism 4) None

2. In a right angled isoscales triangle, the length of the hypotenuse is $4\sqrt{2}$ cms then the length of its side is
   1) 4cm 2) 5cm 3) 2cm 4) 8cm

3. Sum of all the factors of a perfect number, 'n' is
   1) n 2) 2n 3) n-1 4) n-2

4. The value of (a+z)+(b+y)+(c+x)+.....+(m+n) if a=1, b = 2, c = 3.....
   1) 260 2) 135 3) 351 4) 130

5. Which of the following is not an axim related to congruency of triangle
   1) Angle - Angle - Angle 2) Side - Angle - Side
   3) Side - Side - Side 4) Angle - Side - Angle

6. The ratio of length and breadth of a rectangle, if their length and breadth are 720cms and 6mts is
   1) 120 : 1 2) 360 : 2 3) 6 : 5 4) 5 : 6

7. If a line intersects two or more lines at different points then it is called
   1) Bisector 2) Transversal
   3) Perpendicular 4) Trisector

8. Split 18 into sum of 4 one digit numbers such that if we place them side by side, you will get a famous constant which is
   1) 9351 2) 6174 3) 8253 4) 1629

9. If the sub-triplicate ratio of a given ratio is 8: 27 then the given ratio is
   1) 2 : 3 2) $8^3 : 27^3$ 3) $8^2 : 27^2$ 4) 3 : 2

10. If the difference between the exterior angle of a triangle and its adjecent angle is equal to 120^0 then the adjecent angle is equal to
    1) 60^0 2) 30^0 3) 45^0 4) 80^0

11. P.C.Mahalanobis and C.R.Rao are the Indian Mathematicians worked in which branch of mathematics
    1) Number Theory 2) Statistics
    3) Trigonometry 4) Plane geometry

12. $\sqrt[3]{5}$ in which 3 and 5 are called as
    1) Index and Radical 2) Radicand and Radical
    3) Index and Radicand 4) Radical sign and Indiax

13. Digits when raised to any power occurs the same digit in units place of the resultant. Such digits are
    1) 1, 4, 6 2) 1, 6, 8 3) 1, 5, 6 4) 1, 5, 9

14. There are total 100 notes of denominations Rs.100 and Rs.50 notes altogether in a purse. The total value is Rs.8950. Then how many Rs.100 and Rs.50 notes are there in the purse?
    1) 79, 21 2) 69, 31 3) 89, 11 4) 63, 37

15. A right angled triangle does not belong to which of the following category
    1) Isoscles triangle 2) Scalene triangle
    3)Equilateral triangle 4) 1 and 2

16. In the letters A.I.M.Ed, the sum of the exterior angles in the letter 'A' as appears in it is equal to 220^0 then the angle at the vertex is
    1) 110^0 2) 70^0 3) 40^0 4) 60^0

17. A square card board sheet of 14cm side is made into a largest circle by removing the additional part. The area of the removed part is
    1) 154 sq.cm 2) 196 sq.cm. 3) 56 sq.cm 4) 42 sq.cm

18. From a 9'6" length of a stick, 2'8" length of stick was removed. Then the length of the remaining stick is
    1) 6'8" 2) 7'2" 3) 6'10" 4) 7'8"

19. The point 'C' divides the line segment AB of length 24cms such that the length of CB = 15cms. Then the ratio of the length of line segments AB : AC is
    1) 3 : 5 2) 3 : 8 3) 8 : 3 4) 5 : 3

20. The mean of the middle 3 scores of 5 different scores is 16. Mean of the extreme two scores is 18.5. Then the mean of the 5 different scores is
    1) 17.25 2) 17 3) 42.5 4) 18

21. Which of the following number is divisible by 2, 3, 4, 6, 8, and 9
    1) 1347312 2) 2531124 3) 3014604 4) 1137096

22. No. of lines that can be drawn through 'n' non - collinear points is
    1) $\frac{n(n+1)}{2}$ 2) $\frac{n(n-1)}{2}$ 3) $\frac{(n+1)}{2}$ 4) $\frac{(n-1)}{2}$

23. A cylinder shaped tin of height 10 cms and perimeter of the base 88 cms is wrapped with a white paper. Then the area of the white paper is
    1) 440 sq.cm 2) 110 sq.cm 3) 880 sq.cm 4) 220 sq.cm

24. Two persons "A" and "B" bought some pens for Rs.200/- and Rs.500/- respectively and sold them for Rs.240/- and Rs.575/- respectively. Who gained more
    1) B 2) A 3) Both gain equally 4) Can't decide

25. If a > b and x is a negative number then which of the following relation holds good
    1) ax > bx 2) ax < bx 3) ax = bx 4) None

26. The cost of two books are in the ratio 3 : 5. If the cost of each of them increases by Rs.20/-,the ratio is altered to 13 : 21. What is the inital cost of each of them?
    1) Rs.240, Rs.400 2) Rs.240, Rs.440
    3) Rs.360, Rs.540 4) Rs.300, Rs.500

27. Absolute prime among the following
    1) 19 2) 23 3) 29 4) 31

28. Divide 40 by $\frac{1}{2}$ and add ten. What is the answer
    1) 30 2) 50 3) 90 4) 20

29. Dividend property of proportion among the follwoing if a : b :: c : d then
    1) b : a :: d : c 2) a : c :: b : d
    3) (a + b) : b :: (c + d) : d 4) (a - b) : b : : (c - d) : d

30. Sum of any two primes is even. This statement is
    1) Always true 2) Always false
    3) always true except for the prime 2 4) Can't decide

31. The interior angles of a triangle are 70^0 and 35^0, then an exterior angle is

1) 110^0 2) 145^0 3) 110^0 *or* 145^0 4) None

32. The mathematician who introduced the system of decimal fractions

1) Newton 2) Napier 3) Gauss 4) Ramanujan

33. The missing letter in the series Y, W, T, P, __, E

1) G 2) H 3) K 4) Q

34. If x : y = 3 : 2 then (2x+3y) : (3x+2y)=

1) 12 : 19 2) 12 : 20 3) 3 : 4 4) 12 : 13

35. We can get Ramanujan number from

1) 7 x 11 x 17 2) 7 x 13 x 19 3) 7 x 23 x 9 4) 7 x 19 x 3

36. A number is as much grater than 36, as is less than 86. The number is .....

1) 51 2) 61 3) 71 4) 25

37. In a zoo the ratio of the pigeons and rabbits is 2 : 3. Total heads are 200 then total legs =

1) 560 2) 580 3) 680 4) 640

38. 12 men working 8hrs a day can complete a work in 10days. To complete the same work in 8 days, working 15 hrs a day, the number of men required

1) 4 2) 5 3) 6 4) 8

39. If $4800=2^x \times 3^y \times 5^z$ then 5z - y =

1) $2x-3$ 2) $x+3$ 3) $3x-5$ 4) 1 and 2

40. The numbers x - 4, x - 2, x + 2, and x + 10 are in proportion. Then x =

1) 8 2) 10 3) 6 4) 12

41. The mode of the data : 21, 12, 24, 16, 12 ,18, 24, 16, 18, 21 is

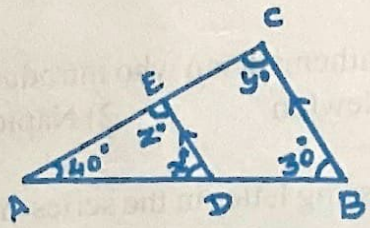
1) 12 2) 18.5 3) 16 4) No mode

42. 4km + 4m + 4cm = ... km

1) 4.004004 2) 4.0404 3) 4.00404 4) 4.04004

43. In a code language SHIP → HSRK; BANK → YZMP then FILE →
1) USPV 2) UROV 3) VROU 4) VSPU

44 . In the figure $DE \| BC$ $\angle B = 30^0, \angle A = 40^0$ then $x+y+z=$



1) 230^0 2) 240^0
3) 250^0 4) 260^0

45. The unit digit in the sum of $2^{2015} + 5^{2016} + 6^{2017} + 9^{2018}$ is .....
1) 0 2) 2 3) 4 4) 9

46. At 15 minutes past 2, the hour hand and minute hand of a clock form an angle of .....
1) 30^0 2) 5^0 3) $7\frac{1}{2}^0$ 4) $22\frac{1}{2}^0$

47. The value of z in the series 11, 10, 101, 100, x, y, z
1) 1001 2) 10001 3) 100001 4) 10000

48. In an entrance examination 60% marks are required to get a seat. Gopi got 232 marks and lost his seat by 8 marks. Maximum marks of the test
1) 500 2) 600 3) 400 4) 300

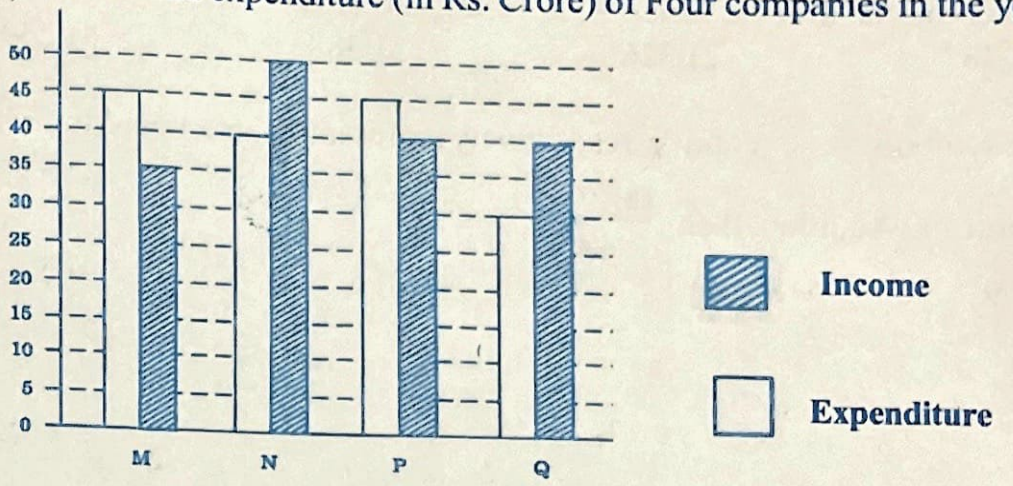
49. Ravi took a loan of Rs.65000 in a bank. After 6 years he paid an amount Rs. 1,00,100 and cleared the loan. If simple interest is calculated, the rate of interest = -----
1) 9% 2) 11% 3) 12% 4) 6%

50. The distance from Vijayawada to Hyderabad is 282kms. Raghu is an old man. For every 2 hours drive he must take 1 hr rest. If he started at 8 AM from Vijayawada with a speed of 47 kmph the time he reach Hyderabad ....
1) 2 pm 2) 4 pm 3) 3 pm 4) 5 pm

51. $10 - [\,10 - \{10 - (10 - \overline{10-1})\}] =$
A) 1 B) 9 Truth Statement is
1) only A 2) Only B 3) A or B 4) Neither A nor B

52. The statitician who worked on 'Cramer - Rao Inequality' and 'Fisher - Rao Theorem' is.
1) R.S.Rao 2) A.N.Rao 3) C.R.Rao 4) P.V.Rao

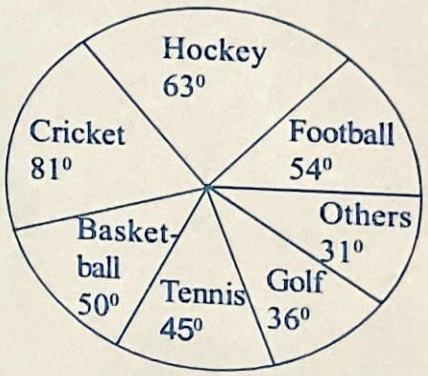
(53 - 54) Income and expenditure (in Rs. Crore) of Four companies in the year 2017



53. The companies M and N together had a precentage profit/ loss of
1) 12% loss 2) 12 % Profit 3) 10% loss 4) No loss or profit

54. Which company earned the maximum percentage profit
1) M 2) N 3) P 4) Q

(55 - 56) The spendings of a country on various sports are shown below



55. How much percent more is spent on Hockey than that on Golf?
1) 27% 2) 35%
3) 37.5% 4) 75%

56. If the total amount spent on sports during the year is Rs.1,80,00,000; the amount spent on Basketball exceeds that on Tennis by
1) Rs.2,50,000 2) Rs.3,60,000
3) Rs.3,75,000 4) Rs. 25,00,000

57. If x, y and z are in continued proportion then $(x + y + z)(x - y + z) =$
1) $x^2 - y^2 + z^2$ 2) $x^2 - y^2 - z^2$
3) $x^2 + y^2 + z^2$ 4) $x^2 + y^2 - z^2$

58. There is a mixture of milk and water in two containers. The ratio of milk and water in first container is 13 : 9 and in second container is 11 : 5. In which container more water is mixed
1) Second container 2) First container
3) Both are same 4) Can't decide

59. What comes next in the series 1, 3, 10, 21, 64, 129 ___
1) 387 2) 326 3) 388 4) 259

60. If the symbols +, -, x and ÷ respectively represent Subtraction, Multiplication, Division and Addition, then $\frac{18\times(6-3)}{4+2}$
1) 9 2) 1 3) 8 4) 3