OBJECTIVE TYPE QUESTIONS: CLASS-8

1. The number which is subtracted from $\frac{-6}{11}$ to get $\frac{8}{9}$ is
(a) $\frac{34}{99}$ (b) $\frac{-142}{99}$ (c) $\frac{142}{99}$ (d) $\frac{-34}{99}$

2. Which of the following pairs is equivalent ?
(a) $\frac{-20}{12}, \frac{5}{3}$ (b) $\frac{16}{-30}, \frac{-8}{15}$ (c) $\frac{-18}{36}, \frac{-20}{44}$ (d) $\frac{7}{-5}, \frac{-5}{7}$

3. $\frac{-5}{4}$ is a rational number which lies between
(a) 0 and $\frac{-5}{4}$ (b) -1 and 0 (c) -1 and -2 (d) -4 and -5

4. Which of the following rational numbers is the greatest ?
(a) $\frac{-17}{24}$ (b) $\frac{-13}{16}$ (c) $\frac{7}{-8}$ (d) $\frac{-31}{32}$

5. The sum of the digits of the denominator in the simplest form of $\frac{112}{528}$ is
(a) 4 (b) 5 (c) 6 (d) 7

6. The standard form of the sum $\frac{3}{4}+\frac{5}{6}+\left[\frac{-7}{12}\right]$ is _____.
(a) 1 (b) $\frac{-1}{2}$ (c) $\frac{1}{12}$ (d) $\frac{1}{22}$

7. $\left(\frac{3}{4}-\frac{5}{8}\right)+\frac{1}{2}$ = _____.
(a) $\frac{15}{64}$ (b) 1 (c) $\frac{5}{8}$ (d) $\frac{1}{16}$

8. $\frac{3}{4}\div\left(\frac{5}{8}+\frac{1}{2}\right)$ = _____.
(a) $\frac{13}{10}$ (b) $\frac{2}{3}$ (c) $\frac{3}{2}$ (d) $\frac{5}{8}$

9. $\frac{3}{4}\times\left(\frac{5}{8}\div\frac{1}{2}\right)$ = _____.
(a) $\frac{5}{8}$ (b) $\frac{2}{3}$ (c) $\frac{15}{32}$ (d) $\frac{15}{16}$

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10. Which of these rational numbers which have additive inverse ?
(a) 7 (b) $\frac{-5}{7}$ (c) 0 (d) all of these.

11. Closure property is not true for division of rational numbers because of the number.
(a) 1 (b) -1 (c) 0 (d) $\frac{1}{2}$.

12. $\frac{1}{2}-\left(\frac{3}{4}-\frac{5}{6}\right)\neq\left(\frac{1}{2}-\frac{3}{4}\right)-\frac{5}{6}$ illustrates that subtraction does not satisfy the _____ property for rational numbers
(a) Commutative (b) closure (c) distributive (d) associative.

13. Which of the following illustrates the inverse property for addition
(a) $\frac{1}{8}-\frac{1}{8}=0$ (b) $\frac{1}{8}+\frac{1}{8}=\frac{1}{4}$ (c) $\frac{1}{8}+0=\frac{1}{8}$ (d) $\frac{1}{8}-0=\frac{1}{8}$

14. $\frac{3}{4}\times\left(\frac{1}{2}-\frac{1}{4}\right)=\frac{3}{4}\times\frac{1}{2}-\frac{3}{4}\times\frac{1}{4}$ illustrates that multiplication is distributive over
(a) addition (b) subtraction (c) multiplication (d) division.

15. The square of 43 ends with the digit _____.
(a) 9 (b) 6 (c) 4 (d) 3.

16. _____ is added to 24^2 to get 25^2.
(a) 4^2 (b) 5^2 (c) 6^2 (d) 7^2

17. $\sqrt{48}$ is approximately equal to _____.
(a) 5 (b) 6 (c) 7 (d) 8

18. $\sqrt{128}-\sqrt{98}+\sqrt{18}$ = _____.
(a) $\sqrt{2}$ (b) $\sqrt{8}$ (c) $\sqrt{48}$ (d) $\sqrt{32}$

19. The number of digits in the square root of 12345432 1 is _____
(a) 4 (b) 5 (c) 6 (d) 7

20. By what number should $(-4)^{-1}$ be multiplied so that the product becomes 10^{-1} ?
(a) $\frac{2}{3}$ (b) $\frac{-2}{5}$ (c) $\frac{5}{2}$ (d) $\frac{-5}{2}$

21. $(-2)^{-3}\times(-2)^{-2}$ = _____.
(a) $\frac{-1}{32}$ (b) $\frac{1}{32}$ (c) 32 (d) -32

22. Which is not Correct ?
(a) $\left(\frac{-1}{4}\right)^2 = 4^{-2}$ (b) $\left(\frac{-1}{4}\right)^2 = \left(\frac{1}{2}\right)^4$ (c) $\left(\frac{-1}{4}\right)^2 = 16^{-1}$ (d) $-\left(\frac{1}{4}\right)^2 = 16^{-1}$

23. If $\frac{10^x}{10^{-3}} = 10^9$, then x is _____.
(a) 4 (b) 5 (c) 6 (d) 7

24. 0.000000002020 in scientific form is _____.
(a) 2.02×10^9 (b) 2.02×10^{-9} (c) 2.02×10^{-8} (d) 2.02×10^{-10}

25. The product of $7p^3$ and $(2p^2)^2$ is
(a) $14p^{12}$ (b) $28p^7$ (c) $9p^7$ (d) $11p^{12}$

26. The missing terms in the product $-3m^3n \times 9(\_) =$ _____ m^4n^3 are
(a) $mn^2, 27$ (b) $m^2n, 27$ (c) $m^2n^2, -27$ (d) $mn^2, -27$

27. If the area of a square is $36x^4y^2$ then, its side is _____.
(a) $6x^4y^2$ (b) $8x^2y^2$ (c) $6x^2y$ (d) $-6x^2y$.

28. If the area of a rectangle is $48m^2n^3$ and whose length is $8mn^2$ then, its breadth is _____.
(a) $6mn$ (b) $8m^2n$ (c) $7m^2n^2$ (d) $6m^2n^2$

29. If the area of a rectangular land is (a^2-b^2) Sq.units whose breadth is $(a-b)$ then, its length is _____.
(a) $a-b$ (b) $a+b$ (c) a^2-b (d) $(a+b)^2$

30. If $x^2-y^2=16$ and $(x+y)=8$ then $(x-y)$ is _____.
(a) 8 (b) 3 (c) 2 (d) 1

31. $\frac{(a+b)(a^3-b^3)}{(a^2-b^2)} =$ _____ (a) a^2-ab+b^2 (b) a^2+ab+b^2 (c) $a^2+2ab+b^2$ (d) $a^2-2ab+b^2$

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32. $(p+q)(p^2-pq+q^2)$ is equal to _____.
(a) p^3+q^3 (b) $(p+q)^3$ (c) p^3-q^3 (d) $(p-q)^3$

33. $(a-b)=3$ and $ab=5$ then $a^3-b^3=$ _____.
(a) 15 (b) 18 (c) 62 (d) 72

34. $a^3+b^3 = (a+b)^3 -$ _____ (a) $3a(a+b)$ (b) $3ab(a-b)$ (c) $-3ab(a+b)$ (d) $3ab(a+b)$

35. factors of $9x^2+6xy$ are (a) $3y, (x+2)$ (b) $3x, (3x+3y)$ (c) $6x, (3x+2y)$ (d) $3x, (3x+2y)$

36. Factors of $4-m^2$ are (a) $(2+m)(2+m)$ (b) $(2-m)(2-m)$ (c) $(2+m)(2-m)$ (d) $(4+m)(4-m)$

37. $(x+4)$ and $(x-5)$ are the factors of _____.
(a) x^2-x+20 (b) $x^2-9x-20$ (c) x^2+x-20 (d) x^2-x-20

38. The factors of x^2-5x+6 are $(x-2)(x-p)$ then the value of p is _____.
(a) -3 (b) 3 (c) 2 (d) -2

39. The factors of $1-m^3$ (a) $(1+m),(1+m+m^2)$ (b) $(1-m),(1-m-m^2)$ (c) $(1-m),(1+m+m^2)$ (d) $(1+m),(1-m+m^2)$

40. One factor of x^3+y^3 is (a) $(x-y)$ (b) $(x+y)$ (c) $(x+y)^3$ (d) $(x-y)^3$

41. Sum of a number and its half is 30 then the number is _____.
(a) 15 (b) 20 (c) 25 (d) 40

42. The exterior angle of a triangle is 120° and one of its interior opposite angle 58°, then the other opposite interior angle is _____.
(a) 62° (b) 72° (c) 78° (d) 68°

43. What sum of money will earn ₹500 as simple interest in 1 year at 5% per annum?
(a) 50000 (b) 30000 (c) 10000 (d) 5000

44. The product of LCM and HCF of two numbers is 24. If one of the number is 6, then the other number is _____.
(a) 6 (b) 2 (c) 4 (d) 8

45. The largest number of the three consecutive numbers is $x+1$, then the smallest number is
(a) x (b) $x+1$ (c) $x+2$ (d) $x-1$

46. 12% of 250 litre is the same as _____ of 150 litre.
(a) 10% (b) 15% (c) 20% (d) 30%

47. If three candidates A, B and C in a school election got 153, 245 and 102 votes respectively, then the percentage of votes got by the winner is _____.
(a) 48% (b) 49% (c) 50% (d) 45%

48. 15% of 25% of 10000 = _____ (a) 375 (b) 400 (c) 425 (d) 475

49. When 60 is subtracted from 60% of a number to give 60, the number is (a) 60 (b) 100 (c) 150 (d) 200

50. If 48% of 48 = 64% of x, then x = (a) 64 (b) 56 (c) 42 (d) 36

51. A fruit vendor sells fruits for ₹200 gaining ₹40. His gain percentage is
(a) 20% (b) 22% (c) 25% (d) $16\frac{2}{3}$%

52. By selling a flower pot for ₹528, a woman gains 20%. At what price should she sell it to gain 25%?
(a) ₹500 (b) ₹550 (c) ₹553 (d) ₹573

53. A man buys an article for ₹150 and makes overhead expenses which are 12% of the cost price. At what price must he sell it to gain 5%?
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(a) ₹180 (b) ₹168 (c) ₹176.40 (d) ₹88.20

54. What is the market price of a hat which is bought for ₹210 at 16% discount?
(a) ₹243 (b) ₹176 (c) ₹230 (d) ₹250

55. The single discount in % which is equivalent to two successive discounts of 20% and 25% is
(a) 40% (b) 45% (c) 5% (d) 22.5%

56. The number of conversion periods in a year, if the interest on a principal is compounded every two months is _____.
(a) 2 (b) 4 (c) 6 (d) 12

57. The time taken for ₹4400 to become ₹4851 at 10%, compounded half yearly is _____ (a) 6 months (b) 1 year (c) 12 years (d) 2 years

58. The cost of a machine is ₹18000 and it depreciates at $16\frac{2}{3}$% annually. Its value after 2 years will be _____.
(a) ₹12000 (b) ₹12500 (c) ₹15000 (d) ₹16500

59. The sum which amounts to ₹2662 at 10% p.a in 3 years, Compounded yearly is _____ (a) ₹2000 (b) ₹1800 (c) ₹1500 (d) ₹2500

60. The difference between compound and simple interest on a certain sum of money for 2 years at 2% p.a is ₹1. The sum of money is _____ (a) ₹2000 (b) ₹1500 (c) ₹3000 (d) ₹2500

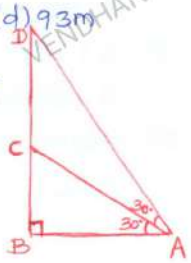
61. Two similar triangles will always have _____ angles.
(a) acute (b) obtuse (c) right (d) matching

62. If in triangles PQR and XYZ, $\frac{PQ}{XY} = \frac{QR}{YZ}$ then they will be similar if
(a) $\angle Q = \angle Y$ (b) $\angle P = \angle Y$ (c) $\angle Q = \angle X$ (d) $\angle P = \angle Z$

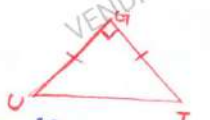
63. A flag pole 15m high casts a shadow of 3m at 10 a.m. The shadow cast by a building at the same time is 18.6m. The height of the building is
(a) 90m (b) 91m (c) 92m (d) 93m

64. If $\Delta ABC \sim \Delta PQR$ in which $\angle A = 53^\circ$ and $\angle Q = 77^\circ$, then $\angle R$ is
(a) 50° (b) 60° (c) 70° (d) 80°

65. In the figure, which of the following statements is true?
(a) AB = BD (b) BD < CD (c) AC = CD (d) BC = CD



66. If ΔGUT is isosceles and right angled, then $\angle TUG$ is _____



(a) 30° (b) 40° (c) 45° (d) 55°

67. The hypotenuse of a right angled triangle of sides 12cm and 16cm is _____
(a) 28cm (b) 20cm (c) 24cm (d) 21cm

68. The area of a rectangle of length 21cm and diagonal 29cm is _____.
(a) $609\ cm^2$ (b) $580\ cm^2$ (c) $420\ cm^2$ (d) $210\ cm^2$.

69. The sides of a right angled triangle are in the ratio 5:12:13 and its perimeter is 120 units then the sides are _____.
(a) 25, 36, 59 (b) 10, 24, 26 (c) 36, 39, 45 (d) 20, 48, 52

70. Data is a collection of _____. S.PURATCHIVENDHAN M.Sc., M.Ed., M.Phil
(a) numbers (b) words (c) measurements (d) all the three.

71. The number of times an observation occurs in the given data is called ____
(a) tally marks (b) data (c) frequency (d) none of these.

72. The difference between the largest value and the smallest value of the given data is _____.
(a) range (b) frequency (c) variable (d) none of these.

73. The data that can take values between a certain range is called _____
(a) ungrouped (b) grouped (c) frequency (d) none of these

74. Inclusive series is a _____ series.
(a) Continuous (b) discontinuous (c) both (d) none of these

75. In a class interval the upper limit of one class is the lower limit of the other class. This is _____ series.
(a) Inclusive (b) exclusive (c) ungrouped (d) none of these

76. The graphical representation of ungrouped data is _____.
(a) histogram (b) frequency polygon (c) pie chart (d) all the three.

77. Histogram is a graph of a _____ frequency distribution.
(a) Continuous (b) discontinuous (c) discrete (d) none of these.

78. A _____ is a line graph for the graphical representation of the continuous frequency distribution.
(a) frequency polygon (b) histogram (c) pie chart (d) bar graph

79. The graphical representation of grouped data is _____.
(a) bar graph (b) pictograph (c) pie chart (d) histogram.

80. In a class there are 26 boys and 15 girls. The teacher wants to select a boy or a girl to represent a quiz competition. In how many ways can the teacher make this selection?
(a) 41 (b) 26 (c) 15 (d) 390

81. How many outcomes can you get when you toss three coins once?
(a) 6 (b) 8 (c) 3 (d) 2

82. In how many ways can you answer 3 multiple choice questions, with the choices A, B, C and D?
(a) 4 (b) 3 (c) 12 (d) 64

83. How many 2 digit numbers contain the number 7?
(a) 10 (b) 18 (c) 19 (d) 20

84. What is the eleventh Fibonacci number?
(a) 55 (b) 77 (c) 89 (d) 144

85. If F(n) is a Fibonacci number and n = 8, which of the following is true?
(a) F(8) = F(9) + F(10) (b) F(8) = F(7) + F(6) (c) F(8) = F(10) × F(9) (d) F(8) = F(7) − F(6)

86. Every 3rd number of the Fibonacci sequence is a multiple of _____.
(a) 2 (b) 3 (c) 5 (d) 8

87. Every _____ number of the Fibonacci sequence is a multiple of 8.
(a) 2^{nd} (b) 4^{th} (c) 6^{th} (d) 8^{th}

88. The difference between the 18^{th} and 17^{th} Fibonacci number is
(a) 233 (b) 377 (c) 610 (d) 987

89. Common prime factors of 30 and 250 are
(a) 2×5 (b) 3×5 (c) $2 \times 3 \times 5$ (d) 5×5

90. Common prime factors of 36, 60 and 72 are
(a) 2×2 (b) 2×3 (c) 3×3 (d) $3 \times 2 \times 2$

91. Two numbers are said to be co-prime numbers if their HCF is
(a) 2 (b) 3 (c) 0 (d) 1

92. In questions (i) and (ii), there are four groups of letters in each set. Three of these sets are alike in some way while one is different. Find the one which is different.
(i) (a) CRDT (b) APBQ (c) EUFV (d) GWHX
(ii) (a) HKNQ (b) ILOR (c) JMPS (d) ADGJ

93. A group of letters are given. A numerical code has been given to each letter. These letters have to be unscrambled into a meaningful word. Find out the code for the word so formed from the 4 answers given.
(a) 234156 (b) 563421 (c) 613524 (d) 421356

L	I	N	C	P	E
1	2	3	4	5	6

94. Questions (iii) and (iv) are based on code language. Find the correct answer from the four alternatives given.
(iii) In a certain code, 'MEDICINE' is coded as 'EOJDJEFM', then how is 'COMPUTER' written in the same code?
(a) CNPRVUFQ (b) CMNQTUDR (c) RFUVQNPC (d) RNVFTUDQ
(iv) If the word 'PHONE' is coded as 'SKRQH', how will 'RADIO' be coded?
(a) SCGNH (b) VRGNG (c) UDGLR (d) SDHKQ

95. Online or television advertisements influence people on spending decisions by
(a) using special music (b) making them think that they need the item.
(c) using attractive pictures (d) all the above.

96. When I go shopping, I will buy
(a) Something that looks attractive (b) Something my friend has
(c) Something that I need to purchase (d) the first thing I see in the store.

97. The best shopping choice is to
(a) Shop at brand name stores always buy (b) Compare the choices before buying
(c) the same thing my friends bought (d) buy at a regular shop always.

ANSWERS:

1 (b) $\frac{-142}{99}$
2 (b) $\frac{16}{-30}, \frac{-8}{15}$
3 (c) -1 and -2
4 (a) $\frac{-17}{24}$
5 (c) 6
6 (a) 1
7 (c) $\frac{5}{8}$
8 (b) $\frac{2}{3}$
9 (d) $\frac{15}{16}$
10 (d) all of these
11 (c) 0
12 (d) associative
13 (a) $\frac{1}{8} - \frac{1}{8} = 0$
14 (b) Subtraction
15 (a) 9
16 (d) 7^2
17 (c) 7
18 (d) $\sqrt{32}$
19 (b) 5
20 (b) $\frac{-2}{5}$
21 (a) $\frac{-1}{32}$
22 (d) $-\left(\frac{1}{4}\right)^2 = 16^{-1}$
23 (c) 6
24 (d) 2.02×10^{-10}
25 (b) $28p^7$
26 (d) $mn^2, -27$
27 (c) $6x^2y$
28 (a) 6mn
29 (b) (a+b)
30 (c) 2
31 (b) a^2+ab+b^2
32 (a) p^3+q^3
33 (d) 72
34 (d) 3ab(a+b)
35 (d) 3x, (3x+2y)
36 (c) (2+m)(2-m)
37 (d) x^2-x-20
38 (b) 3
39 (c) $(1-m)(1+m+m^2)$
40 (b) (x+y)
41 (b) 20
42 (a) 62°
43 (c) 10000
44 (c) 4
45 (d) x-1
46 (c) 20%
47 (b) 49%
48 (a) 375
49 (d) 200
50 (d) 36
51 (c) 25%
52 (b) 550
53 (b) ₹168
54 (d) ₹250
55 (a) 40%
56 (c) 6
57 (b) 1 year
58 (b) ₹12500
59 (a) ₹2000
60 (d) ₹2500
61 (d) matching
62 (a) $\angle Q = \angle Y$
63 (d) 93m
64 (a) 50°
65 (c) AC = CD
66 (c) 45°
67 (b) 20cm
68 (c) $420cm^2$
69 (d) 20, 48, 52
70 (d) all the three
71 (c) frequency
72 (a) range
73 (b) grouped
74 (b) discontinuous
75 (b) exclusive
76 (c) pie chart
77 (a) Continuous
78 (a) frequency polygon
79 (d) histogram.
80 (a) 41
81 (b) 8
82 (d) 64
83 (c) 19
84 (c) 89
85 (b) F(8) = F(7) + F(6)
86 (a) 2
87 (c) 6th
88 (d) 987
89 (a) 2×5
90 (b) 2×3
91 (d) 1
92 i (a) CRDT
ii (d) ADGJ
93 (b) 563421
94 (iii) (c) RFUQNPC
(iv) (c) UDGLR
95 (d) all the above
96 (c) Something that I need to purchase
97 (b) Compare the choices before buying.

S. PURATCHIVENDHAN M.Sc., M.Ed., M.Phil.