

Calculate the exact value in the following question-

1. $16\frac{2}{3}\%$ of 132 + $\frac{2}{5} \times 225 - ? = 3^3$
a) 105 b) 76 c) 85 d) 95 e) 82
2. $8888 - 88 - 888 + 8 + 88888 = ?$
a) 82608 b) 96808 c) 110568 d) 988888 e) 97088
3. 32% of 250 + 18% of 350 + $(8 \times 9) = ?$
a) 310 b) 242 c) 215 d) 205 e) 338
4. $11\frac{5}{8} + 4\frac{7}{16} - 9\frac{3}{8} + 12\frac{3}{16} = ? - 3\frac{7}{8}$
a) $22\frac{3}{4}$ b) $19\frac{5}{8}$ c) $21\frac{1}{4}$ d) $18\frac{1}{2}$ e) NOT
5. $(8 \times 8)^5 \div (512 \div 8) \times (8 \times 64)^5 = (8)^{?+5}$
a) 12 b) 8 c) 6 d) 10 e) NOT
6. $\sqrt{841} \times 3 + 120\%$ of 450 - 180% of 780 + 60% of 1800 = ?
a) 303 b) 310 c) 308 d) 290 e) NOT
7. $6\frac{7}{9} + 8\frac{2}{3} - 9\frac{5}{18} = ? - 3\frac{1}{3}$
a) $8\frac{1}{2}$ b) $7\frac{1}{2}$ c) $6\frac{1}{2}$ d) $9\frac{1}{2}$ e) $5\frac{1}{2}$
8. 25% of 780 + $\sqrt{3249} \times 12 + 865 = ?$
a) 1844 b) 1644 c) 1744 d) 1455 e) NOT
9. $80 + 426 \div 6 - 144 = \sqrt[3]{?}$
a) 729 b) 216 c) 343 d) 512 e) NOT
10. $5\frac{7}{13}$ of 767 - $17^2 = ? + 561$
a) 3398 b) 3526 c) 3672 d) 3124 e) NOT

In each question two equations number I and II are given, student should solve both the questions and mark appropriate answer.

- a) $x > y$ b) $x < y$ c) $x \geq y$ d) $x \leq y$ e) $x = y / \text{CND}$
11. I. $30x^2 + 11x + 1 = 0$
II. $42y^2 + 13y + 1 = 0$
 12. I. $44x^2 - 19x + 2 = 0$
II. $12y^2 - 23y + 11 = 0$
 13. I. $9x^2 - 114x + 361 = 0$
II. $Y^2 = 36$
 14. I. $6x - 5y = -1$
II. $2x - 15y = 5$
 15. I. $X^2 + x - 56 = 0$
II. $20y^2 - y - 12 = 0$

What will come in place of question (?) mark in the following number series-

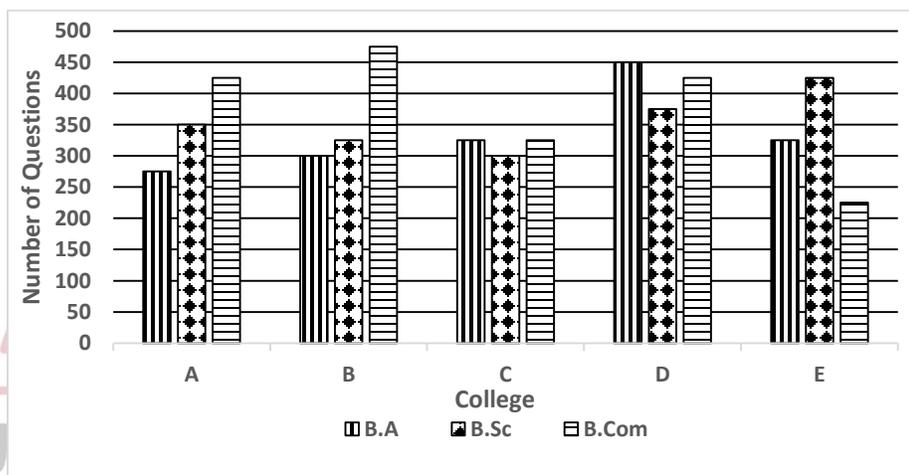
16. 1.5 2.5 7 24 100 ?
a) 345 b) 460 c) 525 d) 380 e) 505
17. 71 78 92 120 ? 288
a) 160 b) 164 c) 199 d) 208 e) 176
18. 17 9 10 16.5 35 ?
a) 192 b) 80 c) 114 d) 76 e) 90
19. 3 4 9 28 113 ?
a) 782 b) 424 c) 646 d) 566 e) 384
20. 123 140 106 157 89 ?
a) 214 b) 139 c) 198 d) 169 e) 174

Read the given following passage carefully and answer the given questions.

In the cultural function 450 students participated. The ratio of the number of boys to the number of girls is 5:4 respectively. Out of total girls 20% participate in singing and the remaining girls

- participated in dance, drama and speech in the ratio of 2 : 3 : 3. Two – five of the total boys participated in drama and the remaining boys participated in dance and singing in the ratio of 3 : 2.
21. What is the total number of girls who have participated in Drama and Speech together?
a) 120 b) 100 c) 140 d) 160 e) None
 22. What is the ratio of number of boys to the number of girls who have participated in Dance?
a) 3:2 b) 9: 4 c) 5:9 d) 4 : 3 e) None
 23. The average number of students participated in Singing is what percent less than that of the average number of students participated in drama?
a) 36.75% b) 37.50% c) 35.45% d) 40.50% e) None
 24. The total number of students participated in speech is what percent of the total number of boys participated in the function?
a) 24 b) 25 c) 23 d) 27 e) None
 25. What is the difference between the total number of students participated in Dance and Drama and the total number of students participated in Singing and Speech?
a) 140 b) 120 c) 150 d) 130 e) None

Study the following graph carefully to answer the questions that follow:



26. What is the total number of students studying B.Sc. in all Colleges together?
a) 1825 b) 1975 c) 1650 d) 1775 e) None
27. What is the respective ratio of total number of students studying B.Sc. in the colleges C and E together to those studying B.A. in the Colleges A and B?
a) 24 : 23 b) 25 : 27 c) 29 : 23 d) 29 : 27 e) None
28. What is the respective ratio of total number of students studying B.Sc., B.A. and B.Com. in all the Colleges together?
a) 71:67: 75 b) 67:71:75 c) 71: 68: 75 d) 75:71: 68 e) None
29. Number of students studying B.Com. in College C forms approximately what percent of the total number of students studying B.Com. in all Colleges together?
a) 39 b) 21 c) 44 d) 33 e) 17
30. Number of students studying B.A. in College B forms what percent of total number of students studying all the disciplines together in that College? (rounded off two digits after decimal)
a) 26.86 b) 27.27 c) 29.84 d) 32.51 e) None
31. James's present age is $\frac{2}{7}$ th of his father's present age. Jame's brother is three year older to James. The respective ratio between present ages of Jame's father and Jmae's brother is 14:5. What is the present age of James?
a) 12 years b) 23 years c) 19 years d) 27 years e) 13 years.
32. Two persons A and B invested in a business with 115000 and 75000 rupees respectively. They agree that 405 of the profit should be divided equally among them and rest is divided between according to their investment. If A got 500 rupee more than B, then the total profit is.

- a) 3599.34 b) 699.34 c) 3958.34 d) 999.34 e) None
33. Vikram invests some money in three different schemes for \$ years, 8 years and 12 years at 10%, 15% and 20% Simple Interest respectively. At the completion of each scheme, he gets the same interest. The ratio of his investments is
a) 6:2:1 b) 5:2:1 c) 5:2:3 d) 5:2:7 e) None
34. The time taken for covering 'X' km by downstream is equal to "(X-18)" by covering upstream. Upstream speed is 6 km/h less than that of downstream. If the boat in still water is 15 km/h. what is the value of "X".
a) 56 b) 52 c) 54 d) 60 e) None
35. A man decides to travel 80 km in 8 h partly by foot and partly on a bicycle. If his speed on foot is 8 km/h and on bicycle 16 km/h. what distance would be travel on foot?
a) 20 km b) 30 km c) 48 km d) 60 km e) None