10POINTER
Your Study Companion

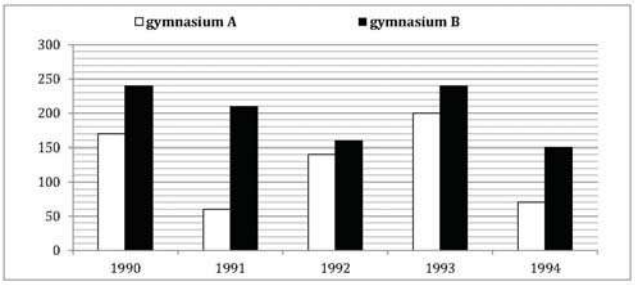
SBI PO Prelims

Memory Based Paper of SBI PO Prelims 2016

Quantitative Aptitude

Memory Based Quantitative Aptitude Paper of SBI PO Prelims 2016

Directions (1-5): In the Bar-chart, total members enrolled in different years from 1990 to 1994 in two gymnasium A and B. Based on this Bar chart solve the following questions-



1. If in the year 1995 there is 30% increase in total number of members enrolled then in 1994 by both gymnasium, then find the total no. of members enrolled in 1995?

(a) 282
(b) 296
(c) 292
(d) 286
(e) none of these

2. The ratio between total members of both gymnasium in 1991 to total members in 1994 of both gymnasium is-

(a) 22:27
(b) 21:11
(c) 11:21
(d) 25:13
(e) 27:22

3. The number of members of gymnasium A in 1991 is what % of the no. of members of gymnasium B in 1994.

(a) 60%
(b) 55%
(c) 58%
(d) 62%
(e) none of these

4. The total number of members enrolled in gymnasium A from 1991 to 1994 together is what percent more than the total number of members enrolled in gymnasium B in 1993 and 1994 together?(Rounded off to 2 decimal places)

(a) 10.51%
(b) 20.51%
(c) 15.51%
(d) 17.51%
(e) none of these

5. Total member enrolled in gymnasium B in 1993 and 1994 together is what % more than members enrolled in gymnasium A in 1990 and 1994 together?

(a) (a) 60%
(b) (b) 65%
(c) (c) 62.5%
(d) (d) 61.5%
(e) (e) none of these

Directions (6-10): What should come in place of question mark (?) in the following number series?

6. 4,3,4,7,15, ?

(a) 38.5
(b) 40
(c) 45
(d) 37.5
(e) none of these

7. 7,5,7,17,63, ?

(a) 321
(b) 309
(c) 305
(d) 301
(e) none of these

8. 11,14,19,28,43, ?

(a) 60
(b) 63
(c) 66
(d) 70
(e) none of these

9. 2 60 10 120 30 ?

(a) 222
(b) 216
(c) 208
(d) 230
(e) None of these

10. 23 50 108 232 492 ?

(a) 1028
(b) 1024
(c) 1020
(d) 1032
(e) None of these

11. A mixture contains wine and water in the ratio 3 : 2 and another mixture contains them in the ratio 4 : 5. How many litres of the latter must be mixed with 3 litres of the former so that the resultant mixture may contain equal quantities of wine and water?

(a) $1\frac{2}{3}$ litre
(b) $5\frac{2}{5}$ littre
(c) $4\frac{1}{2}$ litre
(d) $3\frac{3}{4}$ litre
(e) None of these

12. A trader sells two bullocks for Rs. 8,400 each, neither losing nor gaining in total. If he sold one of the bullocks at a gain of 20%, the other is sold at a loss of

(a) 20%
(b) $18\frac{2}{9}$%
(c) $14\frac{2}{7}$%
(d) 21%
(e) None of these

13. Two trains, A and B, start from stations X and Y towards each other, they take 4 hours 48 minutes and 3 hours 20 minutes to reach Y and X respectively after they meet. If train A is moving at 45 km/hr., then the speed of the train B is

(a) 60 km/hr
(b) 64.8 km/hr
(c) 54 km/hr
(d) 37.5 km/hr
(e) None of these

14. Out of his total income, Mr. Kapoor spends 20% on house rent and 70% of the remaining on house hold expenses. If he saves Rs 1,800 what is his total income (in rupees)?

(a) Rs 7,800
(b) Rs 7,000
(c) Rs 8,000
(d) Rs 7,500
(e) None of these

15. A can do a piece of work in 8 days which B can destroy in 3 days. A has worked for 6 days, during the last 2 days of which B has been destroying. How many days must A now work alone to complete the work?

(a) 7 days
(b) $7\frac{1}{3}$ days
(c) $7\frac{2}{3}$ days
(d) 8 days
(e) None of these

16. There are 3 red balls, 4 blue balls and 5 white balls. 2 balls are chosen randomly. Find probability that 1 is red and the other is white.

(a) 5/22
(b) 5/23
(c) 7/22
(d) 4/9
(e) None of these

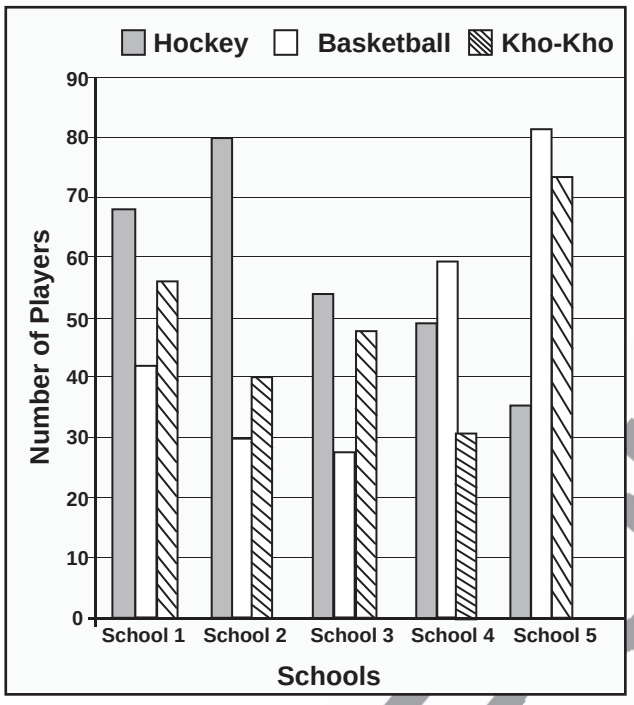
17. Three Science classes A, B and C take a Life Science test. The average score of students of class A is 83. The average score of students class B is 76. The average score of class C is 85. The average score of class A and B is 79 and average score of class B and C is 81. Then the average score, of classes A, B and C is

(a) 80
(b) 80.5
(c) 81
(d) 81.5
(e) None of these

18. A hemispherical bowl of internal diameter 54 cm contains a liquid. The liquid is to be filled in cylindrical bottles of radius 3 cm and height 9 cm. How many bottles are required to empty the bowl?

(a) 221
(b) 343
(c) 81
(d) 243
(e) 162

Directions (19-23): Number of players participating in three different games in five different schools



19. What is the total number of players participating in hockey from all the five schools together?

(a) 324
(b) 288
(c) 342
(d) 284
(e) 248

20. What is the respective ratio between number of players participating in basketball from school 1 and the number of players participating in Kho Kho from school 3?

(a) 5:7
(b) 7:9
(c) 7:8
(d) 9:7
(e) 5:8

21. In which school is the number of player participating in hockey and basketball together second highest?

(a) School 1
(b) School 2
(c) School 3
(d) School 4
(e) School 5

22. Number of players participating in Kho-Kho from school 4 is what percent of number of players participating in hockey from school 2?

(a) 42
(b) 48
(c) 36
(d) 40
(e) 60

23. 25% of the numbers of the players participating in hockey from school 5 are females. What is the number of the hockey players who are males in school 5?

(a) 15
(b) 18
(c) 30
(d) 21
(e) 27

Directions (24-28): *In each of these questions, two equations (I) and (II) are given.*

24. **I. $16x^2 - 40x - 39 = 0$**
II. $12y^2 - 113y + 255 = 0$

(a) $x > y$
(b) $x < y$
(c) $x \geq y$
(d) $x \leq y$
(e) x = y or no relation can be established between 'x' and 'y'.

25. **I. $x^2 - 7\sqrt{7}x + 84 = 0$**
II. $y^2 - 5\sqrt{5}y + 30 = 0$

(a) $x > y$
(b) $x < y$
(c) $x \geq y$
(d) $x \leq y$
(e) x = y or no relation can be established between 'x' and 'y'.

26. **I. $x^{1/3} = 6859$**
II. $y^2 = 361$
(a) x > y
(b) x < y
(c) x ≥ y
(d) x ≤ y
(e) x = y or no relation can be established between 'x' and 'y'.

27. **I. $2x^2 + 19x + 42 = 0$**
II. $4y^2 + 43y + 30 = 0$
(a) x > y
(b) x < y
(c) x ≥ y
(d) x ≤ y
(e) x = y or no relation can be established between 'x' and 'y'.

28. **I. $72 - 30x = -2x^2$**
II. $y^2 - 40/6 = 7/3$
(a) x > y
(b) x < y
(c) x ≥ y
(d) x ≤ y
(e) x = y or no relation can be established between 'x' and 'y'.

Directions (29-33): *What approximate value should come in place of question mark (?) in the following questions (you are not expected to calculate the exact value.*

29. **564.666 + 82.5091 × 44.581 – 34.111= ?**
(a) 28450
(b) 4000
(c) 1600
(d) 14225
(e) 4210

30. **$3\frac{2}{9}$ of 298.87 = ? % of 6788.89 – 2135.91**
(a) 46
(b) 90
(c) 26
(d) 56
(e) 11.35

31. **23. (28/9) x (264/12) ÷ (17/5) + (13/17) = ?**
(a) 16
(b) 19
(c) 12
(d) 25
(e) None of these

32. **359.99% of 899.97 + 164.95% of 8984.01 - 1186.002=?**
(a) 19469
(b) 15896
(c) 17956
(d) 16878
(e) 21659

33. $754 \div \sqrt{4136} \times 24 = ?$
(a) A. 294
(b) B. 276
(c) C. 265
(d) D. 300
(e) E. 288

34. **The income of A is 150% of the income of B and the income of C is 120% of the income of A. If the total income of A, B and C together is Rs. 86000, what is C's income?**
(a) Rs. 30000
(b) Rs. 32000
(c) Rs. 20000
(d) Rs. 36000
(e) None of these

35. **A can do a piece of work in 8 days which B can destroy in 3 days. A has worked for 6 days, during the last 2 days of which B has been destroying. How many days must A now work alone to complete the work?**
(a) 7 days
(b) 7(1/3) days
(c) 7(2/3) days
(d) 8 days
(e) None of these