

SOLUTIONs for SBI PO Memory Based Prelims Exam 2015

1. E.

Number of Failed candidates from school-C in the year 2008 = 96

Number of appeared candidates from school-D in the year 2006 = 235

Required number

$$= 96 + 235$$

$$= 331$$

2. B.

Year 2005 is the second lowest.

3. A.

Number of appeared candidates from school-C in the year 2006 = 693

Number of passed candidates from school-D in the year 2009 = 252

Required Ratio

$$= 693 : 252$$

$$= 11 : 4$$

4. E.

Number of passed candidates from school B in the year 2005 = 435

Number of appeared candidates from school-A in the year 2008 = 546

Required percentage

$$= \frac{435}{546} \times 100$$

$$= 80 \text{ (approx)}$$

5. C.

Number of passed candidates from school A in the year 2008 = 346

Number of passed candidates from school A in the year 2009 = 435

$$\text{Percentage Increase} = \frac{89}{346} \times 100$$

$$= 26 \text{ (approx)}$$

6. A.

Percentage increase in export of Company C from 2004 to 2008

$$\frac{(750 - 500) \times 100}{500} = 50\%$$

7. E.

Total export of company A

$$= 350 + 500 + 400 + 600 + 550 + 400 + 500 = 3300$$

Total export of company B

$$= 500 + 400 + 600 + 800 + 900 + 700 + 700 = 4600$$

Required percentage

$$= \frac{3300 \times 100}{4600} = 71.73 \approx 72$$

8. B.

Export in the year 2003 = 400 thousand tonne

Export in the year 2004 = 600 thousand tonne

Required percentage

$$= \frac{(600 - 400) \times 100}{400} = \frac{200 \times 100}{400} = 50\%$$

Percent rise in export from the previous year was the maximum in 2004

9. C.

Average export of company B

$$= \frac{500 + 400 + 600 + 800 + 900 + 700 + 700}{7} = \frac{4600}{7}$$

$$= 657.14$$

10. E.

Total export of the three companies in the year 2003

$$= 500 + 400 + 600 = 1500$$

Total export of the three companies in the year 2006

$$= 550 + 900 + 600 = 2050$$

$$\text{Required ratio} = 1500 : 2050 = 30 : 41$$

11. B.

Since, milkman sold 80 litre of mixture

So, remaining mixture = 330 - 80 = 250 litre

Quantity of water = 250 × 24/100 = 60 litre

Quantity of milk = 250 - 60 = 190 litre.

Now, milkman made new mixture in which

water = 60 + 26 = 86 litre

milk = 190 + 60 = 250 litre

Percentage of water in the new mixture

$$= \frac{86}{(86 + 250)} \times 100$$

$$= \frac{86}{336} \times 100 = 25.59\%$$

12. C.

Use:

$$B = \frac{[tu + td]}{[tu - td]} * R$$

15 km downstream in 18 min so 10 km in

$$(18/15) * 10 = 12 \text{ min}$$

$$B = 4x, R = x$$

Now

$$4x = \frac{[tu + 12]}{[tu - 12]} * x$$

$$\text{Solve, } tu = 20 \text{ min}$$

13. D.

(A + B) can do a work in 12 days

$$\therefore (A + B)\text{'s 1 day work} = \frac{1}{12} \dots(1)$$

(B + C) can do a work in 15 days

$$\therefore (B + C)\text{'s 1 day work} = \frac{1}{15} \dots(2)$$

If A's efficiency is twice that of C.

$$\therefore (2C + B)\text{'s 1 day work} = \frac{1}{12} \dots(3)$$

From (2) and (3), we get

(2C + B - B - C)'s 1 day work

$$= \frac{1}{12} - \frac{1}{15} = \frac{1}{60}$$

$$C\text{'s 1 day work} = \frac{1}{60}$$

$$B\text{'s 1 day work} = \frac{1}{15} - \frac{1}{60} = \frac{3}{60} = \frac{1}{20}$$

Thus, B can do a work alone in 20 days.

Hence, option C is correct

14. A.

Present age of Rohan = 75 - 7 = 68 years

Present age of Wasim = 68 - 12 = 56 years

Present age of Manoj = $\frac{3}{8} \times 56 = 21$ years

Present age of Manoj's father = 21 + 25 = 46 years

15. B.

Let initial investment be x, 3x, 5x. Then,

$$A : B : C = ((x \times 4) + (2x \times 8)) : ((3x \times 4) + (3x \times 2 \times 8)) : ((5x \times 4) + (5x \times 2 \times 8)) = 20x : 24x : 40x$$

$$= 5 : 6 : 10$$

16. A.

Required Probability

$$= 1 - \frac{{}^{12}C_3}{{}^{15}C_3} = 1 - \frac{44}{91} = \frac{47}{91}$$

17. B

Required Rate

$$= \frac{8000 \times 3 \times r_1}{100} = \frac{8000 \times 3 \times r_2}{100} = 576$$

$$\frac{8000 \times 3 \times (r_1 - r_2)}{100} = 576$$

$$r_1 - r_2 = 2.4$$

18. A.

Area of rectangle = length \times breadth

length - breadth of rectangle = 48cm

Breadth = $\frac{1}{4}$ length

Hence length - $\frac{1}{4}$ length = 48 $\Rightarrow \frac{3}{4}$ length = 48

\Rightarrow length = $16 \times 4 = 64$ cm

Breadth of rectangle = 64 - 48 = 16cm

Area of rectangle = 16 \times 64 cm²

Given area of square = area of rectangle = 16 \times 64 cm²

Area of square = side²

Hence side = $(16 \times 64)^{1/2} = 4 \times 8$ cm = 32 cm

19. B.

Let C.P. be x. Discount = 20% of 6080 = 1216

S.P = 6080 - 1216 = 4864

18 = $(4864 - x) / x \times 100$ Hence, x = 4122

When discount not given, Profit % = $(6080 - 4122) / 4122 \times 100 = 47.5\%$

20. A.

x = 8, 6

and, y = 3, 2

hence, x > y

21. D

x = -5, -4

and, y = -4, -3 hence, x \leq y

22. D.

x = ± 23

and, y = 23 hence, x \leq y

23. B.

x = -7, -6

and, y = -9, -7 hence, x \geq y

24. C.

x = 2.5

and, y = 3 hence, x < y

25. C

$$\left(\frac{47}{100} \times 1442 - \frac{36}{100} \times 1412 \right) \div 63$$

$$= (677.74 - 508.32) \div 63 = 169.42/63 = 2.689$$

$$= 3 \text{ (Approx)}$$

Hence option C is correct

26. D.

$$? = 2418.065 + 88 \div 14.2 \times 6$$

$$? = 2418.065 + 88 \times \frac{1}{14.2} \times 6$$

$$? = 2418.065 + 6.197 \times 6$$

$$? = 2418.065 + 37.18$$

$$? = 2455.25$$

$$? = 2455 \text{ (Approx.)}$$

27. A.

?

$$\approx 5000 - \sqrt{900} \times 12^2 = 5000 - 30 \times 144$$

$$? \approx 5000 - 4320 = 680$$

28. A.

$$= 47 \times 27 + 15 \times 35$$

$$= 1269 + 525 = 1794$$

$$= 1795 \text{ (Approximate)}$$

29. C.
 $(11 + 49 \div 7) * 125 \div 5$
 $(11 + 7) * 25$
 $18 * 25$
 450

30. B.
 The pattern is
 $(3 * 1) + (1 * 1) = 4$
 $(4 * 2) + (2 * 2) = 12$
 $(12 * 3) + (3 * 3) = 45$
 $(45 * 4) + (4 * 4) = 196$
 $(196 * 5) + (5 * 5) = 1005$

31. C.
 26, 38, ?, 68, 86
 $5^2 + 1 = 25 + 1 = 26$
 $6^2 + 2 = 36 + 2 = 38$
 $7^2 + 3 = 49 + 3 = 52$
 $8^2 + 4 = 64 + 4 = 68$
 $9^2 + 5 = 81 + 5 = 86$

32. A.
 The pattern is -
 $(45030 / 5) - 6 = 9000$
 $(9000 / 5) - 5 = 1795$
 $(1795 / 5) - 4 = 355$
 $(355 / 5) - 3 = 68$
 $(68 / 5) - 2 = 11.6$

33. D.
 Pattern followed is -
 $949 * 0.2 = 189.8$
 $189.8 * 0.3 = 56.94$
 $56.94 * 0.4 = 22.776$
 $22.776 * 0.5 = 11.388$
 $11.388 * 0.6 = 6.8328$

34. D.
 $248 - 217 = 31$
 $217 - 188 = 29$
 $188 - 165 = 23$
 [Consecutive prime number]
 $\therefore ? = 165 - 19 = 146$

35. B.
 As the ratio of their new shares is 9:8:6, their respective shares are:
 A's share = $(9/23) \times 2300 = \text{Rs.}900$
 B's share = $(8/23) \times 2300 = \text{Rs.}800$
 C's share = $(6/23) \times 2300 = \text{Rs.}600$
 So, A's original share = $900 - 120 = \text{Rs.}780$
 B's original share = $800 - 150 = \text{Rs.}650$
 C's original share = $600 - 90 = \text{Rs.}510$
 So, ratio of their original shares = $780:650:510 = 78:65:51$

36. B.

Sushil	Sneha	Teena	Mohan	Varun	Aman	Vikas	Nilesh
North	North	South	South	North	South	North	North

37. C.

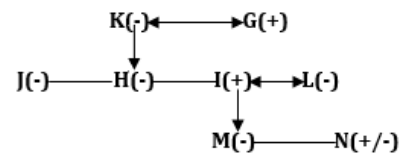
38. B.

39. A.

40. C.

41. D.

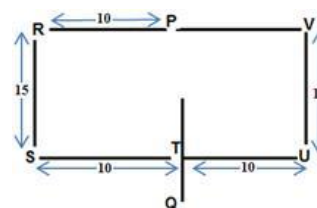
+ is used for male and - for female.



42. B

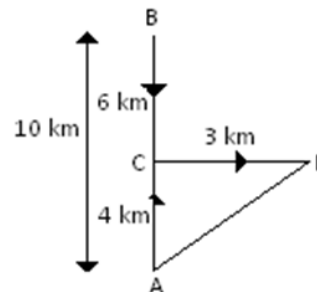
43. B

44. D

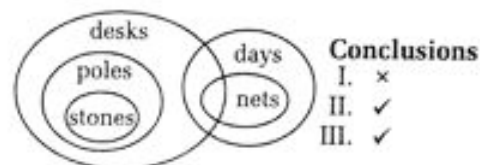


45. B.

The movement is as shown in figure.
 $AC = (AB - BC) = (10 - 6) \text{ km} = 4 \text{ km}$. Clearly, D is to the North-east of A.
 So, Kunal's distance from starting point $A = AD = \sqrt{AC^2 + CD^2} = \sqrt{4^2 + 3^2} = \sqrt{25} = 5 \text{ km}$. So, it is 5 km to the North-east of his starting point.

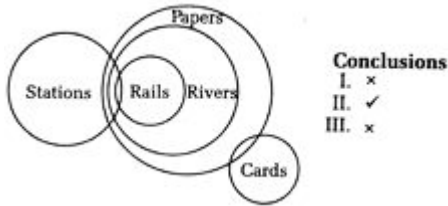


46. C.



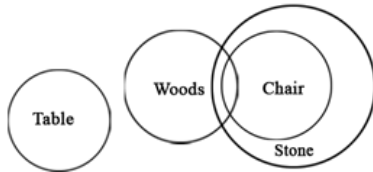
Only II and III follow

47. C.

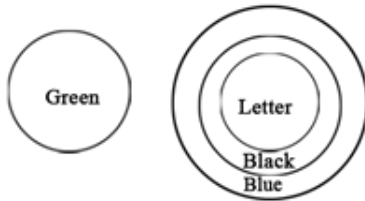


Only II follows

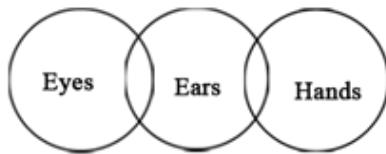
48. B.



49. E.



50. C.



51. D.

52. C.

$A > B > R < S > T > P$

I. $T > R$, false

II. $B < P$, false

III. $S < P$, false

53. E.

From the given statement,

$M \geq N = O > P < Q$

No information is obtained about the relationship between Q and O or between N and Q.

Also, $O > M$ is definitely false.

O can be greater than, lesser than or equal to Q.

II and III cover only 2 conditions.

Hence none of the conclusions is true.

54. C.

After combining, we get

$R < P = Q < G = A > M = B \geq D$

I. $G > B$, TRUE

II. $Q \geq D$ NOT TRUE

III. $A > P$ TRUE

55. C.

After combining, we get

$B \geq G \geq A > C \geq V = P > K = D$

I. $G \geq C$, NOT TRUE

II. $V > K$, TRUE

III. $D < G$, TRUE

56. B.

enjoy	the	places	of	India	neat	and	clean	is	country	enviourment
Pi/ba	Pi/ba	da	ni	ea	ma	ri	la	Ki/sa	Ki/sa	zi

57. C

58. A

59. D

60. B

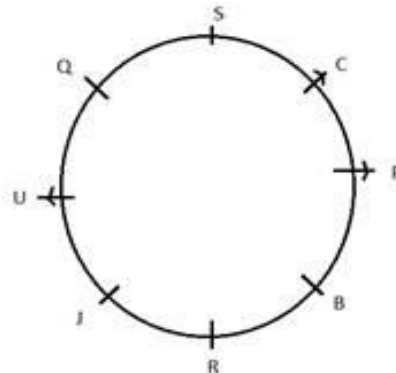
61. C

62. C

63. B

64. B

65. B



U, P, and C faces outside the centre and rest facing the centre.

66. A.

8	E	USA
7	A	China
6	H	Russia
5	D	Japan
4	B	UK
3	G	India
2	C	Canada
1	F	France

67. B.

68. D.

69. E.

70. C.

71. D.

Water-borne diseases are the most recurrent causes of infants all over the world

72. E.

In this case energy of sound waves travel gradually but their intensity deflates as they travel further from their source.

73. B.

It is based on analytical data

74. D.

75. B.

76. E.

77. D.

78. A.

79. E.

80. C.

81. D.

82. E.

83. A.

84. C.

85. C.

86. B.

87. E.

88. C.

89. A.

90. C.

91. E.

92. D.

93. A.

94. D.

95. B.

96. B.

97. C.

98. D.

99. E.

100. A.
