

SBI PO Preliminary Grand Test –SPP-170206

HINTS & SOLUTIONS

1. (5) Run a separate medical course for three and a half years which can be taken up only by rural candidates who would ultimately serve in the rural areas.
2. (4) As these have failed to meet the norms set by the central government for running the college.
3. (4) Only (B) and (C)
4. (5) All (A), (B) and (C)
5. (3) The meaning of the word Shocking (Adjective) as used in the passage is : very bad; that offends or upsets people; that is morally wrong.
The word Appalling (Adjective) means: shocking; extremely bad.
Look at the sentences :
The prisoners were living in appalling conditions.
The bus service is shocking now.
6. (3) Dearth of teaching faculty.
7. (2) All (A), (B) and (C)
8. (2) To bring to light the problems faced by the health care sector in India despite changes suggested and goad the government into attaching priority to the sector.
9. (5) The word Confiscate (Verb) means : to officially take something away from somebody; seize; grab.
10. (3) The word Possess (Verb) means: to have or own something; hold.
11. (2) E
12. (2) B
13. (5) F
14. (3) D
15. (3) A
16. (5) distribution
17. (1) whereas
18. (2) second
19. (3) influence
20. (5) put
21. (1) endeavours, touch
22. (5) leads, unhealthy
23. (3) observed, only
24. (2) gearing, scheduled
25. (4) efforts, carried
26. (3) Neither nor is correct form of correlative.
27. (2) contribute towards its growth
28. (4) Since many companies are
29. (1) Here, comparative degree should be used.
30. (5) No correction required
31. (5) The pattern is :
 $2 \times 3 + 2 = 6 + 2 = 8$
 $8 \times 3 + 2 = 24 + 2 = 26$
 $26 \times 3 + 2 = 78 + 2 = \boxed{80}$
 $80 \times 3 + 2 = 240 + 2 = 242$
32. (1) The pattern is :
 $3 \times 1 + 1^2 = 3 + 1 = 4$
 $4 \times 2 + 2^2 = 8 + 4 = 12$
 $12 \times 3 + 3^2 = 36 + 9 = \boxed{45}$
 $45 \times 4 + 4^2 = 180 + 16 = 196$
33. (4) The pattern is:
 $9 \times 2 - 1 = 18 - 1 = 17$
 $17 \times 2 - 1 = 34 - 1 = \boxed{33}$
 $33 \times 2 - 1 = 66 - 1 = 65$
 $65 \times 2 - 1 = 130 - 1 = 129$
34. (2) The pattern is :
 $7 \times 2 - 1 = 14 - 1 = 13$
 $13 \times 2 - 1 = 26 - 1 = \boxed{25}$
 $25 \times 2 - 1 = 50 - 1 = 49$
 $49 \times 2 - 1 = 98 - 1 = 97$
35. (3) The pattern is :
 $5 \times 0.5 + 0.5 = 2.5 + 0.5 = 3$
 $3 \times 1.5 + 1.5 = 4.5 + 1.5 = 6$
 $6 \times 2.5 + 2.5 = 15 + 2.5 = \boxed{17.5}$
 $17.5 \times 3.5 + 3.5 = 61.25 + 3.5 = 64.75$
36. (3) C.P. of one pencil box = $7 + 22 + 14 = \text{Rs. } 43$
 \therefore Total amount paid by Harshita
= Rs. $(20 \times 7 + 8 \times 22 + 6 \times 175 + 7 \times 43)$
= Rs. $(140 + 176 + 1050 + 301) = \text{Rs. } 1667$
Difference = $48 + 59 + 67 - 44 - 45 - 61 = 24$
37. (5) \therefore Correct average = $56 + \frac{24}{24} = 57$.
38. (1) If the maximum marks of examination be x, then
 $\frac{x \times 45}{100} = 280 + 80 = 360$
 $\Rightarrow x = \frac{360 \times 100}{45} = 800$
 $\therefore 30\% \text{ of } 800 = \frac{800 \times 30}{100} = 240$
= Minimum marks to pass for girls
 \therefore Required difference = $240 - 108 = 132$
39. (5) Second number = $2400 \times \frac{1}{4} = 600$
If the first number be x, then
 $x \times \frac{6}{11} = 600 \times \frac{22}{100} = 132$
 $\Rightarrow x = \frac{132 \times 11}{6} = 242$
 $\therefore 45\% \text{ of } 242 = 242 \times \frac{45}{100} = 108.9$
40. (4) Total marks obtained by Seema = $\frac{875 \times 56}{100} = 490$
Total marks obtained by Nitya = $\frac{875 \times 92}{100} = 805$
Required average marks
 $= \frac{490 + 805 + 634}{3} = \frac{1929}{3} = 643$

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41. (5) Required monthly expenses
 = Rs. (9.65 + 2.75 + 5.42) thousand
 = Rs. (17.82 × 1000) = Rs. 17820
42. (2) Monthly expenditure on food =
 = Rs. $\left(\frac{7.50 + 8.55 + 11.40 + 17.80 + 9}{5}\right)$ thousand
 = Rs. 10.85 thousand = Rs. 10850
43. (1) It is obvious from the table.
44. (1) Required annual expenditure of C on education
 = Rs. $\left(12 \times 12.60 \times \frac{105}{100}\right)$ thousand
 = Rs. 158.76 thousand = Rs. 158760
45. (4) Required ratio = 4.72 : 8.40 = 472 : 840 = 59 : 105
46. (3) Difference of corresponding angles
 = (122.4 + 21.6 - 79.2 - 14.4)⁰ = 50.4⁰
 $\therefore 360^0 = 6800$
 $\therefore 50.4^0 = \frac{6800}{360} \times 50.4 = 952$
47. (1) Required ratio = 21.6 : 79.2 = 3 : 11
48. (4) Required percentage = $\left(\frac{64.8 + 21.6}{360}\right) \times 100 = 24\%$
49. (2) Required percentage = $\frac{14.4}{122.4} \times 100 = 11.76 = 12$
50. (1) Number of students who prefer beverages B and E together
 = $\left(\frac{57.6 + 64.8}{360}\right) \times 6800 = \frac{122.4 \times 6800}{360} = 2312$
51. (5) I. $x^2 - x - 12 = 0$
 $\Rightarrow x^2 - 4x + 3x - 12 = 0$
 $\Rightarrow x(x - 4) + 3(x - 4) = 0$
 $\Rightarrow (x - 4)(x + 3) = 0$
 $\therefore x = 4$ or -3
 II. $y^2 + 5y + 6 = 0$
 $\Rightarrow y^2 + 3y + 2y + 6 = 0$
 $\Rightarrow y(y + 3) + 2(y + 3) = 0$
 $\Rightarrow (y + 3)(y + 2) = 0$
 $\therefore y = -3$ or -2
 Clearly, relation cannot be established.
52. (1) I. $x^2 - 8x + 15 = 0$
 $\Rightarrow x^2 - 5x - 3x + 15 = 0$
 $\Rightarrow x(x - 5) - 3(x - 5) = 0$
 $\Rightarrow (x - 3)(x - 5) = 0$
 $\therefore x = 3$ or 5
 II. $y^2 - 3y + 2 = 0$
 $\Rightarrow y^2 - 2y - y + 2 = 0$
 $\Rightarrow y(y - 2) - 1(y - 2) = 0$
 $\Rightarrow (y - 1)(y - 2) = 0$
 $\therefore y = 1$ or 2
 Clearly, $x > y$
53. (3) I. $x^2 = 32 + 112 = 144$
 $\therefore x = \sqrt{144} = \pm 12$
 II. $y = \sqrt{169} \pm 13$
54. (5) I. $x = \sqrt{121} = \pm 11$
 II. $y^2 = 121$
 $\therefore y = \sqrt{121} = \pm 11$
55. (4) I. $x^2 = 16$
 $\Rightarrow x = \pm 4$
 II. $y^2 - 9y + 20 = 0$
 $\Rightarrow y^2 - 4y - 5y + 20 = 0$
 $\Rightarrow y(y - 4) - 5(y - 4) = 0$
 $\Rightarrow (y - 5)(y - 4) = 0$
 $\therefore Y = 5$ or 4
 Clearly, $x \leq y$
56. (4) Average number of players who play Football and Rugby
 = $\frac{1}{2}[(17 + 13)\% \text{ of } 4200]$
 = $\frac{1}{2} \times 4200 \times \frac{30}{100} = 630$
57. (1) Number of players who play Rugby
 = $4200 \times \frac{13}{100} = 546$
 Number of female players who play Rugby
 = $2000 \times \frac{10}{100} = 200$
 \therefore Number of male players who play Rugby
 = $546 - 200 = 346$
 Number of female players who play Lawn Tennis
 = $2000 \times \frac{22}{400} = 440$
 \therefore Required difference = $440 - 346 = 94$
58. (3) Number of female cricketers
 = $2000 \times \frac{40}{100} = 800$
 Number of male Hockey players
 = $\frac{4200 \times 10}{100} - \frac{2000 \times 15}{100} = 420 - 300 = 120$
 \therefore Required ratio = $800 : 120 = 20 : 3$
59. (2) Number of male players who play Football, Cricket and Lawn Tennis
 = $(17 + 35 + 25)\% \text{ of } 4200 - (13 + 40 + 22)\% \text{ of } 2000$
 = $4200 \times \frac{77}{100} - 2000 \times \frac{75}{100} = 3234 - 1500 = 1734$
60. (1) Number of male players who play Rugby
 = $4200 \times \frac{13}{100} - 200 = 346$
 Number of players who play Lawn Tennis
 = $4200 \times \frac{25}{100} = 1050$
 \therefore Required percentage = $\frac{346}{1050} \times 100 = 33$
61. (1) The committee will be formed as follows:
 (i) 1 woman and 2 men
 (ii) 2 women and 1 man
 (iii) 3 women

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∴ Required number of committees
 $= {}^5C_1 \times {}^4C_2 + {}^5C_2 \times {}^4C_1 + {}^5C_3$
 $= 5 \times \frac{4 \times 3}{1 \times 2} + \frac{5 \times 4}{1 \times 2} \times 4 + \frac{5 \times 4 \times 3}{1 \times 2 \times 3}$
 $= 30 + 40 + 10 = 80$

62. (2) The word TOTAL has 5 letters in which T comes twice.
 ∴ Total number of arrangements
 $= \frac{5!}{2!} = \frac{5 \times 4 \times 3 \times 2 \times 1}{2 \times 1} = 60$

63. (2) (B+C)'s 1 day's work = $\frac{1}{8}$ (i)

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

(A+C)'s 1 day's work = $\frac{1}{16}$ (iii)

On adding all these three equations,
 2 (A + B + C)'s 1 day's work

$= \frac{1}{8} + \frac{1}{12} + \frac{1}{16} = \frac{6+4+3}{48} = \frac{13}{48}$

⇒ (A + B + C)'s 1 day's work = $\frac{13}{96}$

∴ A, B and C together can complete the work in

$= \frac{96}{13} = 7 \frac{5}{13}$ days

64. (3) Interest is compounded half yearly.

∴ R = 20% p.a. = 10%/half year

T = 2 years = 4 half years

∴ C.I. = $P \left[\left(1 + \frac{R}{100} \right)^T - 1 \right]$

$= 10000 \left[\left(1 + \frac{10}{100} \right)^4 - 1 \right]$

$= 10000 \left[\left(\frac{11}{10} \right)^4 - 1 \right]$

$= 10000 \left[\left(\frac{121}{100} + 1 \right) \left(\frac{121}{100} - 1 \right) \right]$

$= 10000 \times \frac{221}{100} \times \frac{21}{100} = \text{Rs. } 4641$

65. (4) Let B's income = Rs. x.

∴ A's income = $\frac{150}{100} \times x = \text{Rs. } \frac{3x}{2}$

C's income = $\frac{120}{100} \times \frac{3x}{2} = \text{Rs. } \frac{9x}{5}$

∴ $x + \frac{3x}{2} + \frac{9x}{5} = 86000$

⇒ $\frac{10x + 15x + 18x}{10} = 86000$

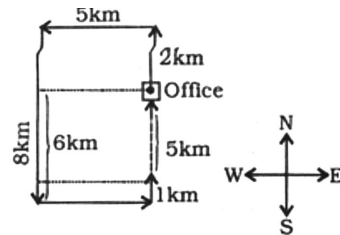
⇒ $43x = 860000$

⇒ $x = \frac{860000}{43} = 20000$

∴ C's income

$= \text{Rs. } \left(\frac{9}{5} \times 20000 \right) = \text{Rs. } 36000$

66. (5)



(67 - 68)

No.	Floor	Person
6	Fifth floor	B
5	Fourth floor	C
4	Third floor	F
3	Second floor	E
2	First floor	A
1	Ground floor	D

67. (4) A and E live on the floors exactly between D and F.

68. (1) B lives on Fifth Floor numbered sixth.

(69 - 70)

- L □ □ P
- L □ □ P S
- L □ A P S
- L E A P S

69. (4) P is placed second to the right of E.

70. (3) The word is LEAPS.

(71 - 75):

P	Green	II
Q	Black	III
R	Red	IV
S	Pink	I
T	Yellow	VI
M	Blue	VI

71. (3) R does study in Class IV.

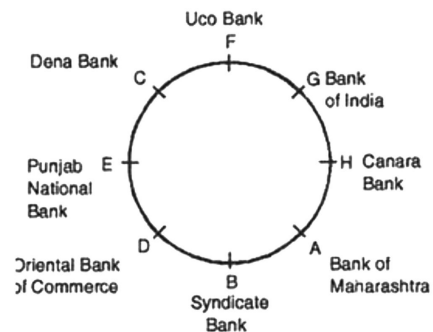
72. (5) R likes red colour.

73. (1) P likes green colour.

74. (5) None is correct

75. (4) M does study in Class V.

(76 - 80):

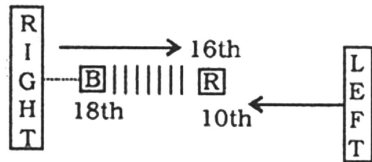


76. (2) Except in A-Canara Bank pair, in all others the first person is second to the left of the second person.

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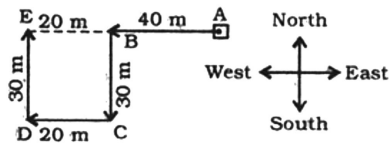


77. (5) B is the representative from Syndicate Bank.
C sits third to the right of H. The representative from the Dena Bank, C is to the immediate right of the representative from the UCO Bank, F. A is second to the left of C, the representative from Bank of India.
A, the representative from Bank of Maharashtra and B, the representative from Syndicate Bank are immediate neighbours of each other
78. (3) H, the representative from Canara Bank and A, the representative from Bank of Maharashtra, sit between B, the representative from Syndicate Bank and G, the representative from Bank of India.
79. (5) D is the representative from Oriental Bank from Commerce.
80. (4) E, the representative from Punjab National Bank sits second to the left from B, the representative from Syndicate Bank.
81. (3) Mihir's grandfather's only child means mother or father of Mihir. The girl is only daughter of Mihir's mother or father. Therefore, the girl is sister of Mihir.
82. (5)



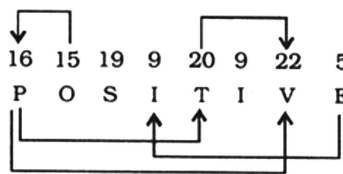
R's position from the left = $25 - 16 + 1 = 10^{\text{th}}$
Thus, there are 7 children between R and B.

83. (2)



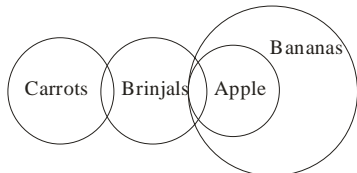
Required distance = $AB + BE \Rightarrow 40 + 20 = 60 \text{ m}$

84. (5)



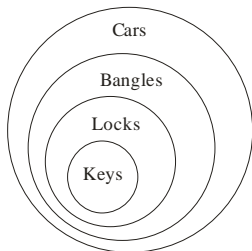
(85 – 87):

85. (2)



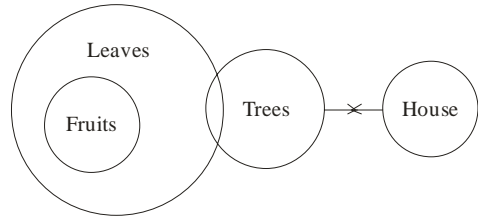
I. ✗ II. ✓ III. ✗
Only II follows.

86. (5)



- I. ✓ II. ✓ III. ✓
All follows.

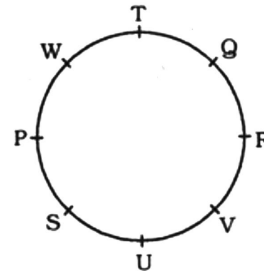
87. (4)



- I. } ✓ either I or III II. ✗
III. }

Either I or III follow.

(88 – 90): Sitting arrangement



88. (5) In none of pairs the third person is sitting between the first and the second persons.

89. (1) Q is to the immediate left of T.

90. (3) U is second to the right of P.

91. (4) Both the statements (A) and (B) are effects of independent causes.

92. (2) Clearly statement (B) is the cause and statement (A) is its effects.

93. (5) Both the statements (A) and (B) are effects of some common cause.

94. (1) Clearly statement (A) is the cause and statement (B) is its effect.

95. (1) Clearly statement (A) is the cause and statement (B) is its effect.

(96 – 100):

- robots (can) become lawyers \rightarrow ju ac th eg
all (doctors) (can) (check) \rightarrow bd np ju mo
many (doctors) and (lawyers) \rightarrow np rt qs ac
machine (check) of (robots) \rightarrow eg ik ux bd

96. (3) ac \Rightarrow lawyers

97. (4) and many \Rightarrow rt qs

how \Rightarrow ws

how can \Rightarrow wsju

98. (5) machine \Rightarrow ik/ux

99. (2) robots \Rightarrow eg

100. (1) become \Rightarrow th

doctors \Rightarrow np

The code for 'will' may be 'zi'.