SBI PO Preliminary Grand Test –SPP-170331

HINTS & SOLUTIONS

1. (1) Only A
2. (4) All A, B and C
3. (3) The report mentioning that only a small percentage of graduates were employable in software Industry
4. (2) The commercialisation of education has already started in India
5. (2) Creation of autonomous institutes for management and technology which were not under university control
6. (5) All are true
7. (1) The meaning of the word Devious (Adjective) as used in the passage is : behaving in a dishonest or indirect way, or tricking people in order to get something; deceitful; underhand.
   Look at the sentence :
   He got rich by devious means. Hence, the words devious and dishonest are synonymous.
8. (3) The meaning of the word Measure (Noun) as used in the passage is : an official action that is done in order to achieve a particular aim; step.
   Look at the sentence :
   The government must take tough measures to combat crime.
   Hence, the words measures and steps are synonymous.
9. (5) The meaning of the word Promote (Verb) as used in the passage is : to help some-thing to happen or develop; encourage.
   The word Hamper (Verb) means : to prevent somebody from easily doing or achieving something; hinder.
   Hence, the words promoting and hampering are antonymous.
10. (2) The meaning of the word Noteworthy (Adjective) as used in the passage is : deserving to be noticed or to receive attention because it is important; significant.
    Hence, the words noteworthy and insignificant are antonymous.
11. (5)
12. (1)
13. (2)
14. (4)
15. (2)
16. (1) Here, which has been used for strategies (Plural). More over, important (Adjective) should be used. Hence, which are very important, is being ignored .....should be used.
17. (2) Adverb is used to modify a verb. Incorrect is an adjective.
18. (3) Here, there are subject-verb agreement and preposition related errors.
    Hence, The naming and numbering rules at the NHC are required for ..... should be used. Here system is Noun.
19. (5)
20. (2) To show purpose, infinitive should be used. To express generality, Present Simple should be used.
21. (3) There are two possibilities in future. Hence, the first possible event should be expressed in Simple Present. Hence, re-place 'if I have recovered' by if I recover.
22. (2) In Indirect statement, if Reporting Verb Past Tense then the verb is in of Reported Speech will also be in Past Tense. Hence, that the taxes would be ....a correct usage.
23. (4) When we use Neither.....nor, the verb agrees with the number/person of the noun/pronoun used after 'nor.
    Hence, knowledge was required .....will be correct usage.
24. (1) Replace 'instead of by 'in spite of.
    Look at the sentence :
    They went swimming in spite of all the danger signs.
    Now I can walk to work instead of going by car.
25. (4) Replace group of words 'to five year's imprisonment' by 'to five-year imprisonment'.
    Remember : Numeral Adjective + hyphen + Noun (Singular).
26. (2) rises
27. (1) prevents
28. (3) associated
29. (2) impacts
30. (4) working
31. (4) The pattern is :
    1500 - 100 = 1400
    1400 - 116 (= 100 + 16) = 1284
    1284 - 164 (= 116 + 3 x 16) = 1120
    1120 - 308 (= 164 + 48 x 3) = 812
    812 - 740 (= 308 + 3 x 144)= 72
32. (1) The pattern is :
    4 x 2 +1 = 8 + 1= 9
    9 x 3 +2 =27 +2 =29
    29 x 4+3=116+3=119
    119 x 5 + 4= 595+4=599
    599 x 6+ 5= 3594 +5 = 3599
33. (4) The pattern is :
    10 x 1.5 = 15
    15 x 2 = 30
    30 x 2.5 = 75
    75 x 3 = 225
    225 x 3.5 = 787.5
34. (2) The pattern is :
    2 x 1 + 7 = 2 + 7 = 9
    9 x 2 + 7=18 + 7=25
    25 x 3 + 7= 75 + 7=82
    82 x 4 +7=328 + 7=335
    335x 5+7=1675+7= 1682
35. (1) The pattern is :
    121 - 3 = 118
    118 - 8 (= 3 + 5) = 110 _
    110 - 15 (= 8 + 7) = 95
    95 - 24 (= 15 + 9) = 71
    71 - 35 (= 24 + 11) = 36

36 – 40. Students in college E $\Rightarrow$ 450
College C $\Rightarrow$ 450 $\times$ 2 = 900

College D $\Rightarrow \frac{3}{4}\times 900 = 675$

College A $\Rightarrow \frac{900\times 100}{60} = 1500$

University XYZ $\Rightarrow$ 1500 × 4 = 6000

College B $\Rightarrow$ (6000 - 450 - 900 -675 - 1500) = 2475

36. (4) Students in colleges B and C = 2475 + 900 = 3375

Students in colleges A and D = 1500 + 675 = 2175

Required percent $= \left(\frac{3375-2175}{2175}\right)\times 100$

$= \frac{120000}{2175} = 55$

37. (5) In college D,

Boys $\Rightarrow \frac{13}{25}\times 675 = 351$

Girls $\Rightarrow \frac{12}{25}\times 675 = 324$

Girls in college E $= 324\times\frac{3}{4} = 243$

= 450 - 243 = 207

∴ Required ratio = 207 : 243 = 23 : 27

38. (5) Students in the university PQR = $\frac{6000\times 28}{100} = 1680$

Students in science or commerce streams

$= \frac{1680\times 60}{100} = 1008$

Students in science stream $= 1008\times\frac{7}{12} = 588$

39. (5) Average number of students in colleges B, C and E

$= \frac{2475+900+450}{3} = \frac{3825}{3} = 1275$

40. (5) Teacher in college A $= \frac{1}{20}\times 1500 = 75$

Teachers in college C = 75 - 15 = 60

41. (2) In January 2013,

Male visitors = $\frac{120\times 5}{12}$ = 50 thousands,

Female visitors = 70 thousands Of 20 years or below age group, Female visitors

$= 120\times\frac{65}{100}\times\frac{60}{100}$ = 46.8 thousands

Male visitors $= 120\times\frac{65}{100}\times\frac{40}{100}$ = 31.2 thousands

Of above 20 years age group. Male visitors = 50 - 31.2

= 18.8 thousands

Female visitors = 70 - 46.8 = 23.2 thousands

Difference = 23.2 - 18.8

= 4.4 thousands = 4400

42. (5) Total number of visitors taking all months together

= 55 + 75 + 65 + 126 + 120 = 441 thousands

∴ Required percent = $\frac{65}{441}\times 100 = 14.74$

43. (1) Required ratio = $75\times\frac{2}{5} : 126\times\frac{4}{7}$

= 30 : 72 = 5 : 12

44. (1) Male visitors in September and October

$= \left(55\times\frac{4}{11} + 75\times\frac{3}{5}\right)$ thousands

= (20 + 45) thousands

= 65 thousands

Male visitors in November and December

$= \left(\frac{65\times 5}{8} + 126\times\frac{3}{7}\right)$ thousands

= 40625 + 54000 = 94625

Difference = 94625 - 65000 = 29625

45. (5) Visitors of 20 years or less than 20 years age group :

September $\Rightarrow \frac{55\times 40}{100}$ = 22 thousands

October $\Rightarrow \frac{75\times 52}{100}$ = 39 thousands

November $\Rightarrow \frac{65\times 55}{100}$ = 35.75 thousands

December $\Rightarrow \frac{126\times 60}{100}$ = 75.6 thousands

January $\Rightarrow \frac{126\times 65}{100}$ = 78 thousands

Average = $\left(\frac{22+39+35.75+75.6+78}{5}\right)$ thousands

$= \frac{250.35}{5}$ thousands

= 50.07 thousands

= 50070

46. (2) Required percentage=(70-50)/50×100=40%

47. (4) Required % $= \frac{(80-50)}{50}\times 100\% = 60\%$

48. (2) Required % $= \frac{(50+70)-(40+70)}{(40+70)}\times 100\%$

$= \frac{10\times 100}{110}\% = 9.09\%$

49. (1) Required ratio = $= \frac{(60+40+50)}{(50+70+60)} = \frac{150}{180}$

i.e. 5 : 6

50. (5) Required percentage 60/420×100=14 (approx)

51. (2) Let the population of village be x.

Population of higher economic class

$= \frac{30x}{100} = \frac{3x}{10}$

Population of lower economic class = 6860

∴ Population of middle economic class

$= \frac{3}{2}\times 6860 = 10290$

∴ Population of middle and lower economic class = 6860 + 10290 = 17150

$$\therefore \left(x - \frac{3x}{10}\right) = \frac{7x}{10} = 17150$$

$$\Rightarrow x = \frac{17150 \times 10}{7} = 24500$$

52. (4) Part of tank filled by A and B in 1 hour = $\frac{1}{5} - \frac{1}{8}$

$$= \frac{8-5}{40} = \frac{3}{40}$$

∴ Time taken in filling the tank completely = $\frac{40}{3}$ hours

∴ Time taken in filling the $\frac{2}{5}$ th part of tank

$$= \frac{40}{3} \times \frac{2}{5} = \frac{16}{3} = 5\frac{1}{3} \text{ hours}$$

53. (2) Breadth of rectangle = x metre (let)
∴ Length = (x + 5) metre
∴ 2(x + 5 + x) = 86
⇒ 2x + 5 = 43
⇒ 2x = 43 - 5 = 38
⇒ x = 19 metre = breadth = base
∴ Length = 19 + 5 = 24 metre = height

∴ Area of triangle = $\frac{1}{2}$ × base × height

$$= \frac{1}{2} \times 24 \times 19 = 228 \text{ sq.metre}$$

54. (5) Let $\angle A = x^2$

$$\therefore \angle B = x + 26$$

$$\angle C = \frac{x+26}{2} = \frac{x}{2} + 13$$

$$\angle D = \frac{x}{2} + 3$$

$$\therefore x + x + 26 + \frac{x}{2} + 13 + \frac{x}{2} + 3$$

x + x + 26 + 2 – x + 13 + 3 = 360°
⇒ 3x = 360 - 42 =318°

⇒ x = $\frac{318}{3}$ = 106°

55. (5) Required ratio = 6 : 4 = 3 : 2

56. (2) Let B's investment = Rs. x

∴ A's investment = Rs. $\frac{x}{3}$

and C's investment = Rs. $\frac{2x}{3}$

∴ Ratio of profit sharing = $\frac{x}{3} : x : \frac{2x}{3}$

= 1 : 3 : 2
Sum of the ratios = 1 + 3 + 2 = 6

B's share in profit = $\frac{3}{6} \times 45000 = \text{Rs.}22500$

57. (2) Let principal be Rs. x.

∴ Principal = $\frac{\text{S.I} \times 100}{\text{Time} \times \text{Rate}}$

$$= \frac{12000 \times 100}{2 \times 8} = \text{Rs. } 75000$$

Case II

Amount = $P\left(1 + \frac{R}{100}\right)^T$

$$= 75000\left(1 + \frac{10}{100}\right)^2$$

$$= 75000\left(1 + \frac{1}{10}\right)^2$$

$$= 75000 \times \frac{11}{10} \times \frac{11}{10}$$

= Rs. 90750

58. (1) Side of square = $\frac{\text{diagonal}}{\sqrt{2}}$

$$= \frac{8\sqrt{2}}{\sqrt{2}} = 8\text{cm}$$

∴ Length of rectangle = 8 cm
∴ Breadth = 8 - 5 = 3 cm
∴ Area of rectangle = 8 × 3 = 24 sq.cm.

59. (1) Volume of earth taken out = (30 × 20 × 12) cu. metre = 7200 cu. metre
The region where earth is to be spread out = (500 × 30 - 30 × 20) sq. metre
= 15000 - 600 = 14400 sq. metre

∴ Rise in level = $\frac{7200}{14400}$

= $\frac{1}{2}$ metre
= 50 cm.

60. (1) Total number of balls in the bag = 4 + 6 + 5 = 15
Total possible outcomes = selection of 3 balls out of 15 balls

$$= 15_{C_3} = \frac{15 \times 14 \times 13}{1 \times 2 \times 3} = 455$$

Favourable outcomes = selection of 3 balls out of 9 balls (except orange balls)

$$= 9_{C_3} = \frac{9 \times 8 \times 7}{1 \times 2 \times 3} = 84$$

61. (4) $16^2 + 144 + 24 + ? = 784$
⇒ 256 + 144 + 24 + ? = 784
⇒ 424 + ? = 784
⇒ ? = 784 – 424 = 360

62. (2) $\frac{2430}{16} - 16.97 + \sqrt{?} = 164$

⇒ 152 - 17 + $\sqrt{?}$ = 164

⇒ $\sqrt{?}$ =164 – 135 = 29

$\therefore$? = 29 x 29 = 841

63. (3) $? \Rightarrow \frac{9600}{12} \times \sqrt{529} + 96$

$\approx$ 800 x 23 + 96

$\approx$ 18400 + 96 = 18496

64. (1) $16 \times 10 - \sqrt{625} - 17 \times 2 = ?^2$

$\Rightarrow 160 - 25 - 34 = ?^2$

$\Rightarrow ?^2 \approx 101 = ? \approx \sqrt{101} = 10$

65. (5) $\frac{?}{100} \times \frac{5225}{5} \times \frac{3}{11} = 375$

$\Rightarrow \frac{?}{100} \times 285 = 375$

$\Rightarrow ? = \frac{375 \times 100}{285} = 132$

(66 – 70):

(1) All cups are books $\rightarrow$ Universal Affirmative (A-type).

(ii) Some mountains are rivers $\rightarrow$ Particular Affirmative (I-type).

(iii) No cot is lamp $\rightarrow$ Universal Negative (E-type).

(iv) Some cots are not lamps $\rightarrow$ Particular Negative (O-type).

66. (5) All harmoniums are instruments.

All instruments are flutes.

A + A $\Rightarrow$ A-type of Conclusion

"All harmoniums are flutes."

This is Conclusion II.

67. (5) All cups are books.

All books are shirts.

A + A $\Rightarrow$ A-type of Conclusion

"All cups are shirts."

Conclusion II is Converse of it.

68. (2) All the three Premises are Particular Affirmative. (I-type).

No Conclusion follows from the two Particular Premises.

69. (4) Some discs are cassettes.

All cassettes are songs.

I + A $\Rightarrow$ I- type of Conclusion

"Some discs are songs."

Conclusion I is Converse of it.

70. (3) All benches are cots.

No cot is lamp.

A + E $\Rightarrow$ E- type of Conclusion

"No bench is lamp."

Conclusion II is Converse of it.

Conclusion I is Converse of the first Premise.

71. (4) A > L = T < R $\leq$ H > K

Conclusions

I. H > L : True

II. K > T : Not True

72. (4) F $\leq$ C $\leq$ V = Z < X = U

Conclusions

I. V < U : True

II. Z < F : Not True

73. (2) R = S $\geq$ Y $\geq$ M < W > O

Conclusions

I. Y < M : Not True

II. O > S : Not True

74. (5) P > Q

P < R

R $\geq$ O

O $\leq$ R > P > Q

Conclusions

I. Q > R : Not True

II. Q < R : True

75. (5) P $\leq$ Q

T = R > P

T = R > P $\leq$ Q

Conclusions

I. T $\leq$ Q : Not True

II. T > P : True

76. (3) From statement I

Rank of Rani from the top = 40 - 31 + 1 = 10

Therefore, rank of Sunita = 10 - 4 = 6th

From Statement II

Rank of Amit from the top = 40 - 37 + 1 = 4th

Therefore, rank of Sunita = 4 + 2 = 6th

77. (4) From statement II

Nisha is cousin of Nidhi.

From statement II

Nisha is cousin or brother/sister of Nidhi.

78. (2) From statement I

Nikhil after turning to his left would face towards west.

Therefore, Kumud is facing towards east.

From statement II

It is not possible to determine Kumud is facing which direction.

79. (5) From statement II

The colour of fresh grass is green.

Here green is called brown.

80. (1) From statement I

Samar > Rakesh > Karan, Ramesh

There is no information about Vishwas.

From statement II

Except Samar anyone could be the tallest.

From both the statements

Vishwas is the tallest.

81-85. Summarising all the information we get :

H	Chennai	Marathi
I	Hyderabad	Telugu
J	Bangalore	Kannada
K	Ahmedabad	Punjabi
L	Delhi	Bangla
M	Kolkata	Tamil
N	Mumbai	Hindi

81. (5)

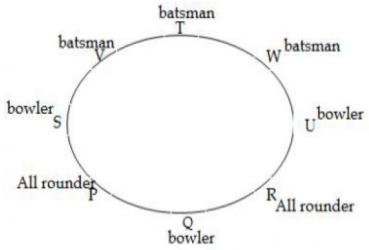
82. (3)

83. (1)

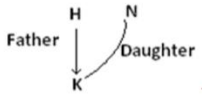
84. (4)

85. (2)

86 – 90.

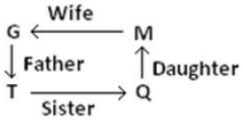


86. (2) Q
87. (4) Q
88. (3) an all rounder
89. (5) Both P and R
90. (1) VS
91. (2) Indian economy is in a poor shape basically due to improper mobilization of man-power.
92. (1) A country's economic standard can be best adjusted by per capital income.
93. (3) H x K →H is the father of K; k ÷H →K is daughter of N



→N is mother of K.

94. (2) F ÷R →F is the daughter of R; R x H →R is the father of H.
H –L → H is husband of L →H is brother of F
95. (5) G x T → G is the father of T; T + Q → T is the sister of Q.
Q ÷M →Q is the daughter of M



96. (1) If the Government has decided to construct super highway, it implies that the Government has adequate resources to construct it.
97. (2) The statement given against option (2) contradicts the finding.
98. (3) The third statement shows that impact of flu is diminishing.
99. (5) All the four statements are possible effects.
100. (3) The third statement is the probable cause of price rise in case of petroleum products.