# SBI PO Preliminary Grand Test –SPP-180758

# HINTS & SOLUTIONS

## ANSWER KEY

| | | | | |
|---|---|---|---|---|
| 1. (4) | 21. (2) | 41. (4) | 61. (4) | 81. (4) |
| 2. (4) | 22. (2) | 42. (1) | 62. (2) | 82. (5) |
| 3. (3) | 23. (5) | 43. (3) | 63. (3) | 83. (2) |
| 4. (2) | 24. (4) | 44. (5) | 64. (5) | 84. (3) |
| 5. (1) | 25. (4) | 45. (2) | 65. (1) | 85. (1) |
| 6. (1) | 26. (4) | 46. (1) | 66. (3) | 86. (5) |
| 7. (2) | 27. (1) | 47. (5) | 67. (4) | 87. (5) |
| 8. (3) | 28. (3) | 48. (2) | 68. (2) | 88. (3) |
| 9. (5) | 29. (4) | 49. (2) | 69. (2) | 89. (3) |
| 10. (3) | 30. (4) | 50. (3) | 70. (3) | 90. (1) |
| 11. (2) | 31. (4) | 51. (4) | 71. (4) | 91. (3) |
| 12. (3) | 32. (1) | 52. (5) | 72. (1) | 92. (3) |
| 13. (4) | 33. (2) | 53. (2) | 73. (2) | 93. (2) |
| 14. (5) | 34. (1) | 54. (3) | 74. (4) | 94. (3) |
| 15. (4) | 35. (4) | 55. (2) | 75. (1) | 95. (1) |
| 16. (3) | 36. (3) | 56. (2) | 76. (3) | 96. (1) |
| 17. (2) | 37. (3) | 57. (5) | 77. (4) | 97. (1) |
| 18. (4) | 38. (1) | 58. (2) | 78. (2) | 98. (4) |
| 19. (5) | 39. (5) | 59. (5) | 79. (3) | 99. (1) |
| 20. (5) | 40. (3) | 60. (5) | 80. (3) | 100. (3) |

## HINTS & SOLUTIONS

1. (4) *The paragraph is describing about the supreme court's verdict on the misinterpreted information by Telecom companies on linking of Aadhar card with SIM cards.* Therefore, the sequence of the rearranged sentences should be **AEBDF**. *Sentence (C)* fails to connect with the theme of the paragraph after rearrangement as it is describing about the usage of Aadhar card in several fields. As sentence (C) is the incoherent one, *option (4)* becomes the most suitable answer choice for the given question.

2. (4) **Sentence (E)** can be interlinked with the first sentence of the paragraph i.e., **sentence (A),** as " *this"* in sentence (E) is referring to the subject mentioned in sentence (A *) [government has issued instructions to mobile phone operators to accept alternative identification documents].* Moreover, **sentences (B) and (D)** can find relation as they both are describing about telecom industry. **Sentence (F)** should consecutively follow **sentence (D)** to make the paragraph coherent. However, *sentence (C)* fails to connect with the paragraph coherently. Therefore, the sequence thus formed after the rearrangement of sentences is **AEBDF**. As sentence (E) is the second statement of the rearranged paragraph, **option (4)** becomes the most suitable answer choice.

3. (3) **Sentence (E)** can be interlinked with the first sentence of the paragraph i.e., **sentence (A)**, as " *this"* in sentence (E) is referring to the subject mentioned in sentence (A *) [government has issued instructions to mobile phone operators to accept alternative identification documents].* Moreover, **sentences (B) and (D)** can find relation as they both are describing about telecom industry. **Sentence (F)** should consecutively follow **sentence (D)** to make the paragraph coherent. However, *sentence (C)* fails to connect with the paragraph coherently. Therefore, the sequence thus formed after the rearrangement of sentences is **AEBDF**. As sentence (D) is the fourth statement of the rearranged paragraph, **option (3)** becomes the most suitable answer choice.

4. (2) **Sentence (E)** can be interlinked with the first sentence of the paragraph i.e., **sentence (A)**, as " *this"* in sentence (E) is referring to the subject mentioned in sentence (A *) [government has issued instructions to mobile phone operators to accept alternative identification documents].* Moreover, **sentences (B) and (D)** can find relation as they both are describing about telecom industry. **Sentence (F)** should consecutively follow **sentence (D)** to make the paragraph coherent. However, *sentence (C)* fails to connect with the paragraph coherently. Therefore, the sequence thus formed after the rearrangement of sentences is **AEBDF**. As sentence (B) is the third statement of the rearranged paragraph, **option (2)** becomes the most suitable answer choice.

5. (1) **Sentence (E)** can be interlinked with the first sentence of the paragraph i.e., **sentence (A),** as " *this"* in sentence (E) is referring to the subject mentioned in sentence (A *) [government has issued instructions to mobile phone operators to accept alternative identification documents].* Moreover, **sentences (B) and (D)** can find relation as they both are describing about telecom industry. **Sentence (F)** should consecutively follow **sentence (D)** to make the paragraph coherent. However, *sentence (C)* fails to connect with the paragraph coherently. Therefore, the sequence thus formed after the rearrangement of sentences is **AEBDF**. As sentence (F) is the last i.e., fifth statement of the rearranged paragraph, **option (1)** becomes the most suitable answer choice.

6. (1) 'resolution/ settlement' are the appropriate set of words delivering the correct meaning to the sentence. Resolution means to find redressal to a problem or an obstacle. Settlement refers to an official agreement intended to resolve a dispute or conflict. Here in the sentence, Deputy governor of RBI has shown his concern towards stressed assets and to complete the sentence resolution/ settlement can be used interchangeably. Other words are irrelevant. Hence option (1) is the correct choice.
Futility means pointlessness or uselessness.
Vaunt means boast about or praise.

7. (2) 'Inability/ failing' are the correct set of words making the sentence meaningful and complete. A negative word must be filled in the blank. Failing means to be unsuccessful in achieving one's goal, which is similar in meaning to Inability and thus can be used interchangeably.

Hence option (2) is the correct choice.

Assailing means criticize strongly.

8. (3) 'propped up' and 'fortified' are the most suitable words for the blanks.

'propped up' means reinforcing, bolstering or boosting, which is justifying the meaning of the sentence. 'propped up' is similar in meaning to 'fortified' that can be filled in the blank giving the correct meaning to the sentence. Other words do not go in harmony with the theme of the sentence. Hence option (3) is the correct choice.

Fortified means strengthen (someone) mentally or physically.

Valued means considered to be important or beneficial; cherished.

9. (5) 'ensure/ guarantee' are the correct set of words delivering a meaningful sense.

Ensure means to make certain that (something) will occur or it can be the case which is similar in meaning to guarantee. Hence, they can be filled in the blank interchangeably providing correct interpretation of the sentence and thus proving option (5) as correct.

Inundate means overwhelm (someone) with things or people to be dealt with.

Subdue means overcome, quieten, or bring under control (a feeling or person).

10. (3) 'uphold/ support' are the correct words for the sentence.

Uphold means to confirm or support (something which has been questioned) is imparting the correct meaning to the sentence. The word should go similar in meaning with 'provide' as conjunction 'and' takes similar tone sentences at both its ends. 'support or uphold' are giving the correct meaning and thus can be used interchangeably.

Other words fail to deliver the correct meaning to the sentence.

Hence option (3) is the correct choice.

Exacerbate means make (a problem, bad situation, or negative feeling) worse.

Covet means desire.

11. (2) The phrasal conjunction "even though" in the phrase given in bold makes the sentence grammatically incorrect as 'even though' means despite the fact that. However, the context of the sentence requires a conjunction of time. Therefore, the phrases "When reliance entered telecom" and "As soon as the reliance entered telecom" provide the precise meaning and makes the sentence grammatically correct and contextually meaningful. Hence, option (2) becomes the most suitable answer choice.

12. (3) The preposition "at" and the omission of the article "the" in the highlighted expression makes the sentence grammatically incorrect. It should be replaced by "in". Among the three expressions, statement (I) and (III) can be used to replace the existing phrase to make the sentence grammatically correct and logically meaningful.

13. (4) The preposition "*to*" in the highlighted expression makes the sentence grammatically incorrect. It should be replaced by "*by*". The phrase given in bold is contextually incorrect as the incentives or benefits are provided by the government to enhance the use of renewables rather than provided to the government. Among the three expressions, all the above expressions can be used to replace the existing phrase to make the sentence grammatically correct and logically meaningful. If we consider the grammatical aspect of the sentence, all the three expressions given as alternatives follow the correct grammar syntax that make the sentence contextually meaningful as well. Hence option (4) is the correct choice.

14. (5) The expression "**equaling 24 times the money"** is the correct expression and it also adds a meaningful sense to the sentence. The expressions given as options do not fit into the sentence as they are both grammatically incorrect and contextually meaningless. Hence option (5) is the correct choice.

15. (4) The given expression is grammatically as well as contextually incorrect. The highlighted phrase **[referred for reducing of symptoms as measuring]** does not adhere to the precise grammatical syntax of the sentence. Among the three expressions, all the above expressions can be used to replace the existing phrase to make the sentence grammatically correct and logically meaningful. If we consider the grammatical aspect of the sentence, all the three expressions given as alternatives follow the correct grammar syntax that make the sentence contextually meaningful as well. Hence option (4) is the correct choice.

16. (3) The highlighted phrase in the sentence is grammatically incorrect and contextually meaningless. It is to be noted that the subject [populists and strongmen] associated with the verb [has] given in highlighted phrase is plural thus, it conceives an error of subject-verb agreement. Therefore, expression (II) and (III) can be used appositely to replace the highlighted phrase to attain a comprehensive sentence. "tinker" is a verb which means attempt to repair or improve something in a casual or desultory way while "fiddle" means "tinker with something in an attempt to make minor adjustments or improvements". The verb 'tinker' is always associated with the preposition 'with'. Hence, option (3) is the most suitable answer choice.

17. (2) The determiner 'its' in the highlighted phrase is contextually incorrect. 'its' should be replaced by "it's" as "It's", is an English contraction of 'it is' or 'it has' while 'Its' is the possessive form of the pronoun 'it'. Moreover, the phrasal verb 'put on' means to make part of one's appearance or behavior while 'put off' means an undesirable or unpleasant feature of something therefore, only the third expression aptly replaces the highlighted phrase providing a comprehensive meaning to the sentence. Hence, option (2) is the most feasible answer choice.

18. (4) The expression "*could turn off their phones*" doesn't provide the correct structure to the sentence as it doesn't follow the latter part of the sentence. The use of "*or*" gives a clue that it is the case of "*either...or...*". Among the three alternatives, only the second expression gives both the contextual and grammatical

meaning to the sentence. The other two expressions cannot be used owing to the similar mistakes as the expression given in the sentence. Hence option (4) is the correct choice.

19. (5) The expression "**that would enable insurgency**" is the correct expression and it also adds a meaningful sense to the sentence. The expressions given as options do not fit into the sentence as they are both grammatically incorrect and contextually meaningless. Hence option (5) is the correct choice.

20. (5) The expression "**stand out as promising instruments**" is the correct expression and it also adds a meaningful sense to the sentence. The expressions given as options do not fit into the sentence as they are both grammatically incorrect and contextually meaningless. Hence option (5) is the correct choice.

21. (2) Second paragraph suggests that income of the farmers cannot be raised by raising minimum support prices due to deficient ground- implementation framework but from non- farm sources.
All the other options are not mentioned in the passage. This makes option (2) as the correct choice.
Refer the line of the paragraph "Incomes of rural households need to be augmented from non-farm income sources."

22. (2) With respect to third paragraph of the passage, we can conclude that fragmentation of landholdings leading to unemployment and lack of workforce in non- farm sector are the factors responsible for decline of the Indian economy.
Hence option (2) will be the most appropriate choice.
Refer the lines "The problem of disguised unemployment and under-employment, fuelled by fragmentation of landholdings, has long plagued the Indian agricultural sector."
"Notwithstanding challenges, the industry and service sectors have shown more consistent real growth in the last five years and a shift of workforce is required from the farm to the non-farm sector."

23. (5) With Reference to the fourth, fifth and sixth paragraph of the passage, we can conclude that all the given sentences are correct.
Hence option (5) is the correct choice.

24. (4) Refer the last paragraph of the passage, that suggests the steps need to be taken by India in order to improve its non- farm employment. Sentences (2) and (3) are correct according to the last paragraph.
Hence option (4) is the correct choice.
Refer the lines "Lack of required skills and technical knowledge are the major barriers, apart from good quality infrastructure and power."

25. (4) Sentence (4) is the correct explanation of the phrase "leave the land, but not the village".
Refer the fifth paragraph of the passage "Additionally, non-farm activities were rapidly developed in rural China, which absorbed a large quantity of surplus agricultural labour. This form of labour mobility was christened "leave the land, but not the village".

26. (4) 'woefully inadequate' is the correct usage of the phrase that will deliver a grammatically correct sentence. Here 'woefully' is an adverb which modifies an adjective, verb or other adverb and 'inadequate' is an adjective which describes the noun or pronoun.

Here 'has been' is a linking verb after which an adjective should be used and then before that we can use an adverb. Hence option (4) is the correct choice.

27. (1) Disguised is the word which means making (something) unrecognizable by altering its appearance, sound, taste, or smell.
Persistence means the fact of continuing in an opinion or course of action in spite of difficulty or opposition.
Abject means experienced or present to the maximum degree.
Abet means encourage or assist (someone) to do something wrong, in particular to commit a crime.
Despair means the complete loss or absence of hope.

28. (3) Disparity is the word, which means a great difference.
Tumbled means fall suddenly.
Hegemonic means ruling or dominant in a political or social context.
Hype means extravagant or intensive publicity or promotion.
Rile means make annoyed or irritated.

29. (4) Augment is the word, which means make (something) greater by adding to it.
Despicable means deserving hatred and contempt.
Entrench means establish, settle
Taper means diminish or reduce in thickness.
Harness means control or tackle

30. (4) The word cue as means a hint or indication about how to behave in particular circumstances.
Invigoration means making one feel strong, healthy and full of energy.
Axiomatic means self- evident or unquestionable.
Subdued means soft and restrained.
Dissent means the holding or expression of opinions at variance with those commonly or officially held.

31. (4) 

32. (1) 

33. (2) 

34. (1) 

35. (4) 

36. (3) 

37. (3) Total possible remainders = [0, 1, 2, 3, 4........10]
Favorable remainders = [1, 3, 5, 7, 9]
Required probability $= \dfrac{5}{11}$

38. (1) Let P, Q and R takes time p, q and r hours respectively to complete the work alone

3

ATQ,

$$\frac{1}{p} + \frac{1}{q} + \frac{1}{r} = \frac{1}{11} \quad \dots(i)$$

After being opened for 6 hours, cistern remaining to be

filled $= 1 - 6 \times \frac{1}{11} = \frac{5}{11}$

Now,

$\frac{8}{p} + \frac{8}{r} = \frac{5}{11}$

$\frac{1}{p} + \frac{1}{r} = \frac{5}{88}$     ..(ii)

From (i) & (ii)

$\frac{1}{q} = \frac{1}{11} - \frac{5}{88}$

$\frac{1}{q} = \frac{3}{88}$

Q alone can fill the cistern in $= \frac{88}{3} = 29\frac{1}{3}$ hrs

**39. (5)** R E C O G N I T I O N

Required ways [such that 2 'O' and 2 'N' always come together]

$= \frac{9!}{2!} = 181440$ ways

**40. (3)** Let children age be 2x, 3x and 4x and Man's age be 'y' years.

ATQ,

$y = 4 \times \left[ \frac{2x + 3x + 4x}{3} \right]$

$y = 12x$    ...(i)

Also, y = 2x + 40    ....(ii)

From (i) & (ii)

12x = 2x + 40

10x = 40

x = 4

Required average age $= \frac{1}{4} [y + 2x + 3x + 4x]$

$= \frac{1}{4} [12x + 9x]$

$= \frac{1}{4} \times 21 \times 4 = 21$ years

**41. (4)** Total vacancies for Bank Po in 2015 $= 15000 \times \frac{100}{(100+87.5)}$

$= 15000 \times \frac{100}{187.5}$

$= 8000$

Number of applicants who gave interview $= \frac{70}{100} \times 15000 = 10500$

Number of applicants selected = 10500 – 8000 = 2500

**42. (1)** Average number of Bank Po applicants in 2014, 2016 & 2017 together

$= \frac{1}{3} [20000 + 13000 + 18000] = \frac{51000}{3} = 17000$

Average number of SSC applicants in 2012 & 2015 together

$= \frac{1}{2} [14000 + 11000]$

$= 12500$

Required % $= \frac{(17000 - 12500)}{12500} \times 100$

$= 36\%$

**43. (3)** Total no. of appeared applicants in 2016 in SSC

$= \frac{80}{100} \times 18000 = 14400$

Applicants finally selected = 14400 – 2100 = 12300

Percentage of applicants selected out of total SSC applicants in 2016

$= \frac{12300}{18000} \times 100 = 68\frac{1}{3}\%$

**44. (5)** Applicants not selected in Bank Po in 2017

$= 18000 \times \frac{(100 - 40)}{100}$

$= 10800$

Applicants not selected in SSC in 2017

$= 28000 \times \frac{(100 - 55)}{100}$

$= 280 \times 45$

$= 12600$

Required ratio $= \frac{10800}{12600} = 6 : 7$

**45. (2)** Number of SSC applicants in 2011 $= 14000 \times \frac{(100 + 40)}{100}$

$= 19600$

Number of Bank Po applicants in 2011 $= 19600 \times \frac{3}{4}$

$= 19600 \times \frac{3}{4}$

$= 14700$

Required Bank Po applicants = 14700

**46. (1)** Let total number of mouse manufactured by all six company in 2016 is 4x and in 2017 is 7x

ATQ -

$7x \times \frac{(24 + 12)}{100} - 4x \times \frac{(25 + 10)}{100} = 4480$

$\frac{63x}{25} - \frac{28x}{20}$

$\frac{252x - 140x}{100} = 4480$

$112x = 4480 \times 100$

$x = \frac{4480 \times 100}{112}$

x= 4000

Total number of mouse manufactured by Microsoft & Steel Series in 2017

$= (4000 \times 7) \times \frac{(13 + 16)}{100}$

$= 8120$

**47. (5)** ATQ

Let total number of mouse manufactured by all six company in 2016 is 4x and in 2017 is 7x

Required ratio $= \frac{4x \times \left( \frac{24}{100} + \frac{16}{100} + \frac{12}{100} \right)}{7x \times \left( \frac{25}{100} + \frac{13}{100} \right)}$

$= \frac{4x \times 52}{7x \times 38}$

$= 104 : 133$

**48. (2)** ATQ

Let total number of mouse manufactured by all six company in 2016 is 4x and in 2017 is 7x

$7x \times \frac{10}{100} \times \frac{2}{5} - 4x \times \frac{10}{100} \times \frac{2}{5} = 480$

$\frac{14x}{50} - \frac{8x}{50} = 480$

$x = \frac{480 \times 50}{6}$

X= 4000

Total number of wire mouse manufactured by Roccat in both years

$= (4 \times 4000) \times \frac{10}{100} \times \frac{3}{5} + (7 \times 4000) \times \frac{10}{100} \times \frac{3}{5}$

$= 960 + 1680$

$= 2640$

**49. (2)** ATQ

Let total number of mouse manufactured by all six company in 2016 is 4x and in 2017 is 7x

Required % $= \frac{\frac{4x \times (24 + 16)}{100} - \frac{7x \times (12 + 10)}{100}}{\frac{7x \times (12 + 10)}{100}} \times 100$

$= \frac{160x - 154x}{160x} \times 100$

$= 3\frac{3}{4}\%$

**50. (3)** ATQ

Let total number of mouse manufactured by all the six companies in 2017 is 7x

ATQ -

$\frac{7x \times (24 + 16)}{100} = 11200$

$\frac{14x}{5} = 11200$

x = 4000

Required average

$= \frac{(4000 \times 4) \times \left( \frac{25 + 10 + 13}{100} \right)}{3}$

$= \frac{7680}{3}$

$= 2560$

**51. (4)**

Ratio of their profit sharing = A : B
= 7500×24 : 7800×20
= 15 : 13

Profit left after donation = $14000 - 14000 \times \frac{12.5}{100}$
= 14000 – 1750
= 12250

B's share in profit = $\frac{13}{15+13} \times 12250$
= $\frac{13}{28} \times 12250$
= Rs 5687.50

**52. (5)**

Let P can do work in x days

Q can do in = 4x days

And R can do work in = $\frac{x \times 4x}{4x+x} = \frac{4x}{5}$ days

ATQ—

All three together can complete work in = 16 days

So,

$\frac{1}{x} + \frac{1}{4x} + \frac{5}{4x} = \frac{1}{16}$

$\frac{4+1+5}{4x} = \frac{1}{16}$

x = 40 days

P can complete work in x = 40 days

Q can complete work in 4x = 4 × 40 = 160 days

Time taken by R to complete work = $\frac{4x}{5}$ days = $\frac{4 \times 40}{5}$ = 32 days

P and R can do work in = $\frac{40 \times 32}{40 + 32} = \frac{160}{9}$ days

**53. (2)**

Let speed of boat in still water = x kmph
And speed of current = y kmph
∴ upstream speed = (x – y) kmph
Downstream speed = (x + y) kmph
ATQ,

$\frac{D-11}{x-y} = \frac{5(D-21)}{x+y}$  …(i)  [using time = $\frac{Distance}{Speed}$]

Also,

$\frac{y}{x+y} = \frac{1}{3}$

$\Rightarrow x + y = 3y$

$\Rightarrow x = 2y$  …(ii)

From (i) & (ii)

$\frac{D-11}{2y-y} = \frac{5(D-21)}{2y+y}$

$D - 11 = \frac{5(D-21)}{3}$

3D – 33 = 5D - 105

2D = 72

D = 36 km

Also,

$\frac{D-8}{x-y} = 14$  [using time = $\frac{Distance}{speed}$]

$\frac{36-8}{2y-y} = 14$

$y = \frac{28}{14} = 2$ kmph

Speed of boat in still water = x = 2y
= 2 × 2 = 4 kmph

**54. (3)**

Let CP of 1000 gm goods be Rs 100

Shopkeeper purchased $\left[1000 + \frac{20}{100} \times 1000\right] = 1200$ gm in lieu of 1000 gm by using false weights.

And sold $\left[1000 - \frac{10}{100} \times 1000\right]$ = 900 gm in lieu of 1000 gm

So,

He purchased 1200 gm in Rs 100

And sold 900 gm in Rs $\left(100 + \frac{5}{100} \times 100\right) = Rs\,105$

$\Rightarrow$ Profit % = $\frac{SP-CP}{CP} \times 100$

$= \frac{\left(\frac{105}{900} - \frac{100}{1200}\right)}{\frac{100}{1200}} \times 100$

$= \frac{(7-5)}{5} \times 100$

= 40% profit

**55. (2)**

Let two digit number be 10x + y
Atq,
y – x = 4
x = y – 4  …(i)
Also,
(10x + y) (x + y) = 576
Using (i)
[10(y - 4) + y] [y - 4 + y] = 576
[10y – 40 + y] [2y – 4] = 576
22y² - 44y – 80y + 160 = 576
11y² - 62y – 208 = 0
11y² - 88y + 26y – 208 = 0
(11y + 26) (y – 8) = 0
y = 8  (digit cannot be -ve)
∴ from (i), x = 8 – 4 = 4
Original number is 10x + y = 10 × 4 + 8 = 48
No. formed after reversing digits = 84
Required difference = 84 – 48
= 36
Alternate,
Let two digit number be 10x + y
So Reversed number be 10y + x
Required difference = 10y + x - 10x - y = 9y – 9x = 9(y – x)
ATQ, y – x = 4
So, Required difference = 9(y – x) = 9 × 4 = 36

**56. (2)**

(i) x² – 35x + 306 = 0
x² – 17x – 18x + 306 = 0
x (x – 17) – 18 (x – 17) = 0
x = 17, 18
(ii) y² – 33y + 272 = 0
y² – 17y – 16y + 272 = 0
y (y – 17) – 16 (y – 17) = 0
y = 16, 17
x ≥ y

**57. (5)**

(i) 2x² + 7x – 30 = 0
2x² + 12x – 5x – 30 = 0
2x (x + 6) – 5 (x + 6) = 0
x = $\frac{5}{2}$, – 6
(ii) 3y² + 6y – 24 = 0
3y² + 12y – 6y – 24 = 0
3y (y + 4) – 6 (y + 4) = 0
y = –4, 2
No relation

**58. (2)**

(i) $\frac{x}{(16)^{0.25}} = \sqrt{64}$
$x = \sqrt{64} \times (2^4)^{0.25}$
$x = \sqrt{64} \times 2$
x = 16
(ii) y² = 256
y = ±16
x ≥ y

**59. (5)**

(i) $3x^2 - 25x + 48 = 0$

$3x^2 - 9x - 16x + 48 = 0$

$3x(x - 3) - 16(x - 3) = 0$

$x = \dfrac{16}{3}, 3$

(ii) $4y^2 - 24y + 32 = 0$

$4y(y - 4) - 8(y - 4) = 0$

$y = 4, 2$

No relation

**60. (5)**

(i) $2x^2 - 19x + 42 = 0$

$2x(x - 6) - 7(x - 6) = 0$

$x = \dfrac{7}{2}, 6$

(ii) $5y^2 - 25y - 16y + 80 = 0$

$5y(y - 5) - 16(y - 5)$

$y = \dfrac{16}{5}, 5$

No relation

**61. (4)**

$(1331)^{\frac{1}{3}} \times 12 + \dfrac{62.5}{100} \times 400 - ? \approx (343)^{\frac{2}{6}} \times 49$

$\Rightarrow 11 \times 12 + \dfrac{5}{8} \times 400 - ? = (343)^{\frac{1}{3}} \times 49$

$\Rightarrow 132 + 250 - ? = 7 \times 49$

$\Rightarrow ? = 382 - 343$

$\Rightarrow ? = 39$

**62. (2)**

$60\% \text{ of } 1540 + \dfrac{37.5}{100} \times 96 + 1 \approx (?)^2$

$\Rightarrow 924 + \dfrac{3}{8} \times 96 + 1 = (?)^2$

$\Rightarrow (?)^2 = 924 + 36 + 1$

$\Rightarrow (?)^2 = 961$

$\Rightarrow ? = 31$

**63. (3)** $67 + 3 + ? = 52 + 64$

$? = 46$

**64. (5)**

$16\sqrt{?} + 69\sqrt{?} - 10\sqrt{?} \approx \dfrac{75}{34} \times (?)$

$75\sqrt{?} = \dfrac{75}{34} \times (?)$

$\Rightarrow \sqrt{?} = \dfrac{?}{34}$

$\Rightarrow \sqrt{?} = 34$
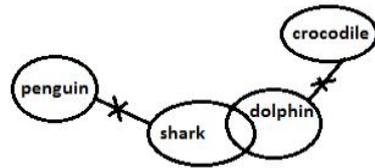
$\Rightarrow ? = (34)^2$

$\Rightarrow ? = 1156$

**65. (1)**

$(25)^{\frac{9}{6}} + \dfrac{22}{100} \times 450 \approx ? + (3 \times 2)^3$

$(25)^{\frac{3}{2}} + 99 = ? + (6)^3$

$125 + 99 = ? + 216$

$? = 224 - 216$

$? = 8$

**66. (3)**



**67. (4)**



**68. (2)**
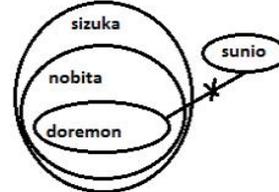


**69. (2)** The letters are Q, U, I, T, O and the word formed is---- QUOIT

**70. (3)**

C O M P O U N D
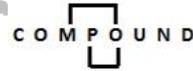
**(71 – 75)** O visit Cheruthoni dam after Friday. Only two persons visit the dams between O and P who visit Sardar Sarovar dam. So, O can visit the dam on either Saturday or Sunday. Only one person visits the dam in between N and the one who visit Bhakra Nagal Dam. Bhakra Nagal dam is being visited after N but N visit the dam before P.

Case-1:

| Days | Persons | Dams |
|---|---|---|
| Monday | | |
| Tuesday | N | |
| Wednesday | P | Sardar Sarovar dam |
| Thursday | | Bhakra dam |
| Friday | | |
| Saturday | O | Cheruthoni dam |
| Sunday | | |

Case-2:

| Days | Persons | Dams |
|---|---|---|
| Monday | | |
| Tuesday | | |
| Wednesday | N | |
| Thursday | P | Sardar Sarovar dam |
| Friday | | Bhakra Nagal dam |
| Saturday | | |
| Sunday | O | Cheruthoni dam |

Only two persons visit the dam between J and M and none of them visit the dam before P. From this there is no place left for J and M in case-2 so case-2 will be eliminated. Further Only two persons visit the dam in between Bhakhra Nagal dam and Hirakund dam.

| Days | Persons | Dams |
|---|---|---|
| Monday | | Hirakund dam/ |
| Tuesday | N | |
| Wednesday | P | Sardar Sarovar dam |
| Thursday | J/M | Bhakra dam |
| Friday | | |
| Saturday | O | Cheruthoni dam |
| Sunday | J/M | Hirakund dam/ |

Mettur dam is visited immediately after Tehri dam. So, from this it is clear that Tehri dam is visited on Monday and Mettur dam is visited on Tuesday. Neither J nor L visit the Tehri dam. M visit the dam after K. From this we get that K visited Tehri dam. J does not visit Hirakund dam. So, J visited Bhakra dam further L visited Indira Sagar dam on Friday. So, the final arrangement is----

| Days | Persons | Dams |
|---|---|---|
| Monday | K | Tehri dam |
| Tuesday | N | Mettur dam |
| Wednesday | P | Sardar Sarovar dam |
| Thursday | J | Bhakra dam |
| Friday | L | Indira Sagar dam |
| Saturday | O | Cheruthoni dam |
| Sunday | M | Hirakund dam |

71. (4)  72. (1)
73. (2)  74. (4)  75. (1)

**(76 – 80)** The box which contain Pencil is placed at the bottom. More than three boxes are placed between box P and the box which contain Pencil. Two boxes are placed between box P and U. So there can be two possible cases-

Case-1: When four boxes are placed between box P and the box which contain Pencil.

| Boxes | Item |
|---|---|
|  |  |
| P |  |
|  |  |
|  |  |
| U |  |
|  |  |
|  | Pencil |

Case-2: When five boxes are placed between box P and the box which contain Pencil.

| Boxes | Item |
|---|---|
| P |  |
|  |  |
|  |  |
| U |  |
|  |  |
|  |  |
|  | Pencil |

Only one box is placed in between S and Q. Box S is placed above box U. Only two boxes are placed between Q and V which contain Scale. Box V is not placed immediately above and immediately below U. Box Q contain Ring.

Case-1: When four boxes are placed between box P and the box which contain Pencil.

| Boxes | Item |
|---|---|
|  |  |
| P |  |
| V | Scale |
| S |  |
| U |  |
| Q | Ring |
|  | Pencil |

Case-2: When five boxes are placed between box P and the box which contain Pencil.

| Boxes | Item |
|---|---|
| P |  |
| V | Scale |
| S |  |
| U |  |
| Q | Ring |
|  |  |
|  | Pencil |

Box R contain Pen. Only three boxes are placed between the box which contain Pen and the box which contain Chocolate. So, from this condition case-2 has been eliminated. Now, with case-1 It is clear that Box U contain Chocolate. Box S does not contain Toffee. From this it is clear that Box P contain Toffee and box S contain Eraser. So, the final arrangement is--

| Boxes | Item |
|---|---|
| R | Pen |
| P | Toffee |
| V | Scale |
| S | Eraser |
| U | Chocolate |
| Q | Ring |
| T | Pencil |

76. (3)  77. (4)
78. (2)  79. (3)  80. (3)

**(81 - 85)** A sits at one of the ends of the row. More than four persons sit between A and D. H sits 3rd left to B. A is not neighbor of H. Odd number of persons sit between H and D. we get four possibilities:



C who is one of the immediate neighbors of H, sits 3rd left to the one who distributes meal on Mahavir Jayanti. The one who distributes meal on Mahavir Jayanti sits immediate left of B, So, case4 gets eliminated as C cannot be placed next to D. The one who distributes meal on Budh Purnima sits at extreme left end, therefore in all the remaining cases A distributes meal on Budh Purnima.



There is one person less sit between A and G as compared to the number of persons who are sitting between G and F, as there is no place left for G and F in

case 1 according to this condition, therefore case1 gets eliminated.

The ones who distribute meal on Diwali and Lohri sit together. Neither A nor C distributes on Lohri and Diwali. The one who distributes meal on republic day sits 3rd right to the one who distributes on Lohri, who sits immediate left to the one who distributes on Diwali, but given that B does not distribute meal on republic day so case2 gets eliminated.

Continuing with case 3, one person sit between A and G and two persons are there in between G and F. So, only place left for E is immediate right to A. E distributes on Lohri, G on Diwali and H on republic day.

Only one person sits between the ones who distribute meal on Christmas and Eid-ul-fitr and none of them sit at the corner. So, B distributes meal on Independence Day. More Than one person sits between the one who distribute meal on independence day and Eid-ul-fitr. So, C distributes on Eid-al-fitr .

The final arrangement is:
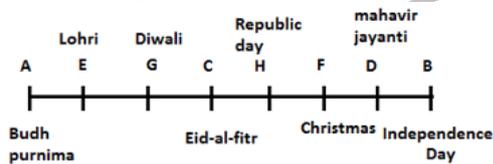


81. (4)  82. (5)
83. (2)  84. (3)  85. (1)

**(86 – 90)** From "The representative of Ayushman scheme is 3rd right to D. Two persons sit between D and A. F sits opposite to C and both of them are male. A is not a female", we get 2 cases as follows:
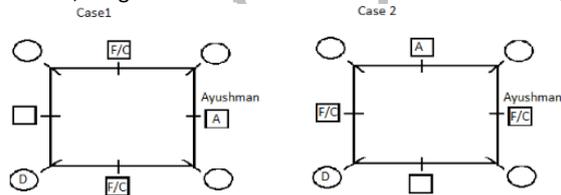


From "A is not a representative of Ayushman", case1 gets cancelled. From "E, is a female representative of Eklavya school. There are as many persons between E and F as between F and B", we get 2 cases:
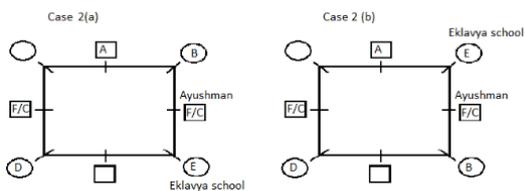


From "The representative of DARPAN sits opposite to that of bamboo mission. Neither A nor D is representative of Darpan and bamboo mission." Case2(1) gets cancelled.

"The one who represents RISE sits immediate right to the one from Eklavya school", means A is from RISE.

From "H does not sit opposite to the one who is representative of RISE", we get H is immediate right to A and G sits opposite to A.

From "F, who is representative of Saubhagya scheme does not sit next to DARPAN. D is neither representative of UDAN nor Saubhagya ", we get D is from Kifayati awas

yojna, G from UDAN and B from DARPAN .The final arrangement is:
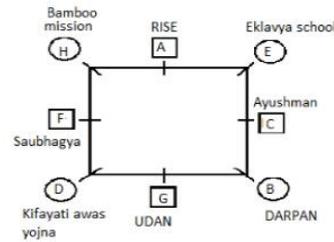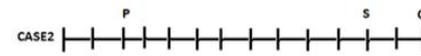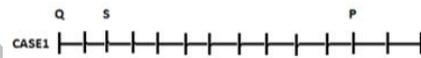


86. (5)  87. (5)
88. (3)  89. (3)  90. (1)

**(91 – 93)** Given "Q stand at one of the end of the row. Eight persons are standing between S and P. Only 1 person stands between Q and S.P is 3rd from one of the end.", from this we conclude that there are total 14 members in the row, and there will be two possibilities.



From, "As many persons are standing between R and T as between S and R. L is 5th to the left of R", we get further 3 possibilities in case 2.
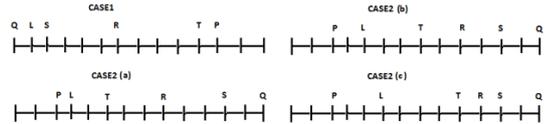


Given "More than 6 persons are standing between Q and T. Not more than 5 persons are standing between P and L.", from this case 1, case2(2), case2(3) gets eliminated. So the final arrangement is:
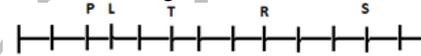


91. (3)  92. (3)  93. (2)
94. (3)  I. A > K (False)
      II. K ≥ A(False)
95. (1)  I. O < I (True)
      II. P < L (False)

**(96 – 100)**

| Words | Code |
|---|---|
| Appoint | tp |
| Refuse | pr |
| Opposition | rt |
| Process | oq |
| Meeting/leader | ge/hg |
| Committee | ac |
| Panel | df |
| Approval | la |
| Penalty | rs |

96. (1)  97. (1)
98. (4)  99. (1)  100. (3)