SBI PO Prelims 2019 Memory Based Paper (Solutions)

Direction (1-5):

<table>
<thead>
<tr>
<th>Boxes</th>
<th>Colors</th>
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<tbody>
<tr>
<td>E</td>
<td>Pink</td>
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<tr>
<td>C</td>
<td>White</td>
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<tr>
<td>F</td>
<td>Orange</td>
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<tr>
<td>D</td>
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<tr>
<td>A</td>
<td>Yellow</td>
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<td>B</td>
<td>Red</td>
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</tbody>
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S1. Ans.(a)
S2. Ans.(b)
S3. Ans.(a)
S4. Ans.(a)
S5. Ans.(d)

S6. Ans.(a)
Sol.

S7. Ans.(e)
Sol.

S8. Ans.(c)
Sol.
S9. Ans.(b)
Sol.

S10. Ans.(c)
Sol.

Direction (11-15):

S11. Ans.(e)
S12. Ans.(c)
S13. Ans.(b)
S14. Ans.(c)
S15. Ans.(d)

Direction (16-18):

S16. Ans.(b)
S17. Ans.(b)
S18. Ans.(c)
S19. Ans.(c)  
Sol.

S20. Ans.(a)  
Sol.

S21. Ans.(b)  
Sol.

S22. Ans.(a)  
Sol.

S23. Ans.(e)  
Sol. The logic for the above question is discussed below.

\[ H \rightarrow F \rightarrow K \]
S24. Ans.(a)  
Sol.

S25. Ans.(b)  
Sol.

S26. Ans.(d)  
Sol.

S27. Ans.(e)  
Sol.

Direction (28-32):

<table>
<thead>
<tr>
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<tr>
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<td>2</td>
<td>X</td>
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<td>1</td>
<td>V</td>
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Direction (33-35):

S33. Ans.(b)  S34. Ans.(d)  S35. Ans.(a)

S36. Ans.(d)  
Sol. Let the present age of A, B and C be x, y and z years respectively

ATQ
\[(x + 4) + (y + 4) = (y + z) + 16\]
\[x - z = 8 \ldots (i)\]
And \[(x - 4) + (z - 4) = 32\]
\[x + z = 40 \ldots (ii)\]
From (i) and (ii)
\[z=16 \text{ years}\]

S37. Ans.(b)  
Sol. Let the profit earned on second article be \(x\)%

Using allegation method,

\[
\begin{align*}
12 & \quad x \\
15 & \quad (x-15) \\
3 & \\
\hline
1 & 1 & \text{(ratio of cost price)}
\end{align*}
\]
\[\Rightarrow x = 18\%\]
ATQ
\[6\% = \text{Rs 90}\]
So, cost price = 100\% = Rs 1500
S38. Ans.(c)
Sol. Let the speed of boat in still water and the speed of current be 10x km/hr and x km/hr respectively.
ATQ
\[
\frac{D}{11x} = \frac{3}{2}
\]
\[D = 99 \text{ km}\]

S39. Ans.(e)
Sol. Let the quantity of mixture be 100x lit.
Quantity of milk = 76x lit
And quantity of water = 24x lit
Quantity of water taken = 12x lit
Quantity of milk taken = 38x lit
ATQ
26x = 78
x = 3 lit
required quantity of milk = 114 lit

S40. Ans.(a)
Sol. Let side of square be ‘4x’ cm
So, length of rectangle = 4x × \frac{3}{4} = 3x cm
And, breadth of rectangle = 2x cm
ATQ
4 × 4x − 2(3x + 2x) = 36
6x = 36 \implies x = 6 \text{ cm}
Perimeter of triangle = perimeter of rectangle
= 2(18 + 12) = 60 cm

S41. Ans.(c)
Sol. Total males visiting national park on Monday
= \frac{30}{100} \times 400 \times \frac{5}{12} \times \frac{120}{100} = 120 \times \frac{5}{12} \times \frac{6}{5} = 60
Total females visiting national park on Monday
= \frac{25}{100} \times 400 \times \frac{3}{5} \times \frac{4}{3} = 80
Required sum = 80 + 60 = 140

S42. Ans.(e)
Sol. Total female visiting national park on Sunday and Saturday together
= \frac{30}{100} \times 400 \times \frac{7}{12} + \frac{45}{100} \times 400 \times \frac{4}{9}
= 70 + 80 = 150
Total male visiting national park on Friday and Sunday together
= \frac{25}{100} \times 400 \times \frac{2}{5} + \frac{45}{100} \times 400 \times \frac{5}{9}
= 40 + 100 = 140
Required percentage = \frac{150−140}{140} \times 100 = 7 \frac{1}{7} \%
S43. Ans.(a)
Sol. Required average = \( \frac{40+50+100}{3} = \frac{190}{3} = 63 \frac{1}{3} \)

S44. Ans.(b)
Sol. Total amount obtained on Friday = 40 × 45 + 60 × 40
= 1800 + 2400 = Rs 4200
Total amount obtained on Sunday = 100 × 45 + 80 × 40 = 4500 + 3200 = 7700
Required difference = 7700 – 4200 = Rs 3500

S45. Ans.(d)
Sol. Required ratio = 40 : 70 = 4 : 7

S46. Ans.(e)
Sol. I. \( x^2 - 14x + 45 = 0 \)
\( x^2 - 9x - 5x + 45 = 0 \)
x(x - 9) - 5(x - 9) = 0
x = 9, 5
II. \( y^2 - 12y - 6y + 72 = 0 \)
y(y - 12) - 6(y - 12) = 0
y = 12, 6
no relation can be established between x and y.

S47. Ans.(b)
Sol. I. \( x^2 + 7x + 12 = 0 \)
x^2 + 4x + 3x + 12 = 0
x(x + 4) + 3(x + 4) = 0
(x + 4) (x + 3) = 0
x = -3, -4
II. \( y^2 + 5y + 4y + 20 = 0 \)
y(y + 5) + 4(y + 5) = 0
y = -5, -4
So, \( x \geq y \)

S48. Ans.(e)
Sol. I. \( 4x^2 - 4x - 3x + 3 = 0 \)
\( 4x(x - 1) - 3 (x - 1) = 0 \)
x = 1, 3/4
II. \( 7y^2 - 17y + 6 = 0 \)
\( 7y^2 - 14y - 3y + 6 = 0 \)
7y (y - 2) - 3 (y - 2) = 0
y = 2, 3/7
So, no relation can be established between x and y.
S49. Ans.(a)
Sol. I. $2x^2 - 10x - 9x + 45 = 0$
$2x(x - 5) - 9(x - 5) = 0$
$x = 5, 9/2$
II. $2y^2 - 8y - y + 4 = 0$
$2y(y - 4) - 1(y - 4) = 0$
y = 4, 1/2
So, x > y

S50. Ans.(b)
Sol. I. $x^2 = 144$
x = −12, +12
II. $y = -12$
So, x ≥ y

S51. Ans.(a)
Sol. Required % = \( \frac{(84 + 72) - (72 + 80)}{(72 + 84)} \times 100 = 3\% \)

S52. Ans.(b)
Sol. Required ratio = \( \frac{92 + 54}{44 + 72} = 73 : 58 \)

S53. Ans.(c)
Sol. Required % = \( \frac{(92 + 64) - (80 + 40)}{(80 + 40)} \times 100 = 30\% \)

S54. Ans.(d)
Sol. No. of packets sold by store F
\[= \frac{1}{3} [72 + 54 + 84] + \frac{1}{2} [44 + 72] \]
\[= 70 + 58 = 128 \]
Required price = \( 128 \times 240 \times \frac{120}{100} = Rs \ 36864 \)

S55. Ans.(c)
Sol. Required difference = \( (92 + 64 + 72 + 54 + 84) - (44 + 88 + 80 + 40 + 72) \)
\[= 366 - 324 = 42 \]

S56. Ans.(b)
Sol.
\[
\begin{array}{cccccc}
200 & 197 & 185 & 163 & 130 & 85 \\
\uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\
-3 & -12 & -22 & -33 & -45 \\
9 & 10 & 11 & 12 & \\
\end{array}
\]
S57. Ans.(d)
Sol. The pattern is \(-15 \times 0.5 + 0.5 = 8\)
\(8 \times 1 + 1 = 9\)
\(9 \times 1.5 + 1.5 = 15\)
\(15 \times 2 + 2 = 32\)
\(32 \times 2.5 + 2.5 = 82.5\)

S58. Ans.(d)
Sol. The pattern is \(-6, 5, 4, 3, 2,\ldots\)
\(\therefore ? = 600 \times 3 = 1800\)

S59. Ans.(b)
Sol. The pattern is: \(0.5 - 1, 0.5 - 1, 0.5 - 1, 0.5 - 1,\ldots\)
\(? = 26 \times 0.5 - 1 = 12\)

S60. Ans.(a)
Sol. The pattern is: \(+8, -16, +24, -32, +40\)
\(? = 104 + 8 = 112\)

S61. Ans.(b)
Sol. A/q, \(\frac{\text{Profit of B}}{\text{Total Profit}} = \frac{3}{7} = \frac{(X+4000) \times 6}{X \times 12 + (X+4000) \times 6}\)
\(7X + 28000 = 9X + 12000\)
\(2X = 16000\)
\(X = 8000\)

S62. Ans.(a)
Sol. Interest earned from scheme A = \(\frac{1500 \times R \times 4}{100} = 60R\)
Interest earned from scheme B
\(= \frac{(1500 - x) \times 2R \times 4}{100} = \frac{2R(1500-x)}{25}\)
A/q, \(60R = \frac{3}{4} \times \frac{2R(1500-x)}{25}\)
\(1500 - x = 1000 \Rightarrow x = 500\)

S63. Ans.(a)
Sol. A/q, \(40 \times 48 = 64x + 96 \times \frac{50}{3}\)
\(120 = 4x + 100 \Rightarrow x = 5\)

S64. Ans.(b)
Sol. Radius of base of cylinder = \(\frac{66}{2 \times 22} \times 7 = \frac{21}{2}\) cm
Volume of cylinder = \(\frac{22}{7} \times \frac{21}{2} \times \frac{21}{2} \times 4 = 1386\) cm\(^3\)
S65. Ans.(d)
Sol. Let speed of train P = \( S_P \)
ATQ—
\[ S_P = \frac{175}{8.75} = 20 \text{ m/s} \]
Let speed of train Q = \( S_q \)
ATQ—
\[ 20 + S_q = \frac{(175+225) \times 7}{60} \]
\[ S_q = \frac{400 \times 7}{60} - 20 \]
\[ S_q = \frac{80}{3} \text{ m/s} \]
Relative speed if train P and Q running in same direction
\[ = \frac{80}{3} - 20 = \frac{20}{3} \text{ m/s} \]
Required time \[ = \frac{(175+225) \times 3}{20} = 60 \text{ sec} \]

S66. Ans.(b)
Sol.
<table>
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<th>A</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>Veg</td>
<td>72</td>
<td>60</td>
<td>63</td>
</tr>
<tr>
<td>Non-Veg</td>
<td>56</td>
<td>80</td>
<td>45</td>
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Required total amount
\[ = 60 \times 200 + 80 \times 300 = 12000 + 24000 \]
\[ = 36000 \]

S67. Ans.(a)
Sol. Required ratio \[ = \frac{72+63}{80+45} = \frac{135}{125} = \frac{27}{25} \]

S68. Ans.(e)
Sol. Required ratio \[ = \frac{72+60+63}{3} = 65 \]

S69. Ans.(b)
Sol. Required percentage \[ = \frac{135}{125} \times 100 = \frac{27}{25} \times 100 \]
\[ = 108\% \]

S70. Ans.(a)
Sol. Required sum \[ = \frac{4}{3} \times 60 + \frac{7}{4} \times 56 \]
\[ = 80 + 98 = 178 \]
S71. Ans.(e)  
Sol. All of the given facts are correct as per the given passage. Facts can be derived from the lines, “As the price of clean energy technology plummets, it has become an increasingly attractive prospect for world governments. China was by far the world’s largest investor in renewable energy in 2017, accounting for nearly half of the new infrastructure commissioned. This was mainly a result of its massive support for solar power, which globally attracted nearly a fifth more investment than in the previous year.” And “Egypt is also considering financing options to conduct feasibility studies for building the world largest solar power plant for both electricity generation and water desalination.” Thus option (e) is the best answer choice.

S72. Ans.(d)  
Sol. Statements (II) and (III) can be easily inferred from the given line “The electricity sector remains the brightest spot for renewables with the exponential growth of solar photovoltaics and wind in recent years, and building on the significant contribution of hydropower generation.” Thus (d) is the correct answer.

S73. Ans.(b)  
Sol. As per the given passage only (II) is correct. This can be inferred from the line, “The global replacement of traditional fuels with renewables led to around 1.8 gigatonnes of carbon dioxide emissions being avoided last year – the equivalent of removing the entire US transport system.” Thus option (b) is correct answer choice.

S74. Ans.(b)  
Sol. Refer to the last line of the passage.

S75. Ans.(e)  
Sol. Critical here means having a decisive or crucial importance in the success, failure, or existence of something.

S76. Ans.(b)  
Sol. Account for is a phrasal verb which means supply or make up (a specified amount or proportion)

S77. Ans.(d)  
Sol. Plummets means fall or drop straight down at high speed hence slump is the word which is most similar in meaning to the given word.

S78. Ans.(a)  
Sol. Option (a) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line “.......... as investors _____ some 16 million shares on the New York Stock Exchange in a single day,” itself suggests that investors can only trade, out of the given options the correct answer choice should be option (a).

Segregated- set apart from the rest or from each other; isolate or divide.
Daunted- make (someone) feel intimidated or apprehensive.
Hence option (a) is the correct answer choice.
S79. Ans.(b)
Sol. Option (b) is the correct answer choice. The line “Billions of dollars were lost, _______ out thousands of investors.” (wiping- remove or eliminate (something) completely) suggest that option (b) should be the right answer choice. As the line conveys that after such a huge trading of Billions of dollars investors got eliminated from their job they then had nothing with them. Hence option (b) should be the correct answer choice.

S80. Ans.(c)
Sol. Option (c) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line “. In the aftermath of Black Tuesday, America and the rest of the industrialized world ______ downward into the Great Depression” itself suggest that the consequences or after-effects of a significant unpleasant event like stock market crash resulted into the continuous downfall and depression of America and rest of the industrialized world.
Spiraled- decrease or deteriorate continuously.
Reprimanded- address a reprimand to.
Hence option (c) is the correct answer choice.

S81. Ans.(d)
Sol. Option (d) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line “the deepest and longest-lasting economic ______ in the history of the Western industrialized world up to that time” is talking about the great depression that was caused due to the stock market crash the line conveys that it was the greatest depression or downturn in the history of Western industrialized word that it has faced ever.
Dismantle- take (a machine or structure) to pieces.
Downturn- a decline in economic, business, or other activity.
Hence the meaning of the given word suggests that option (d) should be the right answer choice.

S82. Ans.(d)
Sol. Option (d) is the correct answer choice. Option (b), (c) and (e) are out of context. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line “Among the other causes of the eventual market collapse were low wages, the _____ of debt, a struggling agricultural sector and an excess of large bank loans that could not be liquidated” conveys that out of the many, one of the reason of the collapse were low wages, rapid increase in the number of debt, the unliquidated large bank loan.
Commotion- a state of confused and noisy disturbance.
Proliferation- rapid increase in the number or amount of something.
Hence the right answer choice is option (d).

S83. Ans.(c)
Sol. Option (c) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line “Investment companies and leading bankers attempted to ______ the market by buying up great blocks of stock, producing a moderate rally on Friday” talks about the efforts made by the leading bankers and investment companies to stabilize the market after such a huge depression in the stock market.
Rationalize- attempt to explain or justify (behaviour or an attitude) with logical reasons, even if these are not appropriate.
Hence option (c) is the correct answer choice.
S84. Ans.(b)
Sol. Replace “has been no reducing” with “has been no reduction”.

S85. Ans.(c)
Sol. The subject “Retail prices” is in plural number therefore the usage of “is” is incorrect.
We will replace “is revising” with “will be revised”.

S86. Ans.(a)
Sol. Use “We had got” in place of “we got” because when we talk about the two incidents of past for the
first incident use past perfect and for the later activity we use past indefinite.

S87. Ans.(e)
Sol. The given sentence, along with the highlighted phrase is grammatically correct and contextually
meaningful; thus it doesn’t require any corrections. Hence, option (e) is the most suitable answer choice.

S88. Ans.(c)
Sol. Here, we will replace 'their' with 'his'. When two singular nouns are connected by 'and' and 'each' or
'every' is used before them, then they are considered as singular nouns. In such cases, the verb used with
them will be in singular form and the pronoun used for the subject will also be singular. Hence, option (c)
is the correct answer.

S89. Ans.(d)
Sol. Option (d) is the correct choice for the given question.
Revamp means give new and improved form, structure, or appearance to.
Dispel means make (a doubt, feeling, or belief) disappear.

S90. Ans.(d)
Sol. Lucrative is correct.
Lucrative means producing a great deal of profit.
It also makes the sentence grammatically correct.

S91. Ans.(a)
Sol. Option (a) is the correct choice for the given question.
Stimulate means encourage or arouse interest or enthusiasm in.

S92. Ans.(b)
Sol. Look around means [INTRANSITIVE] to try to find something that you want or need.

S93. Ans.(e)
Sol. Option (e) is the correct choice for the given question.

S94. Ans.(e)
Sol. B-D :: The body of camera makes it highly resistant for outdoor use.
A-E::: The rumors of petrol shortage turned out to be false.
S95. Ans.(c)
Sol. Only sentence (A) and (F) makes a perfect match. Word ‘highway’ and ‘traffic’ give us a clue. None of the two sentences makes the meaningful coherent sense. Had the sentence C and E been connected with ‘but’ it would be a possible match. Hence option (c) is the correct answer choice.

S96. Ans.(d)
Sol. The error is in the part (d) of the sentence. ‘have’ should be replaced by ‘has’ because ‘each of’, ‘either of’, always takes the singular verb.

S97. Ans.(c)
Sol. ‘Has fallen’ will be used in place of ‘has been fallen’ as there is no passive form of intransitive verb (fall).
(Note: Verbs are of two types namely transitive verbs and intransitive verbs. Transitive verbs need an object while Intransitive verbs cannot have an object. Ex. “I bought a car” in which ‘bought’ is transitive. “The Baby smiled”, ‘smiled’ is an intransitive verb)

S98. Ans.(a)
Sol. Replace ‘While he used to walk’ with ‘while he was walking’. For the two incidents of past, if one continues and the other one has happened, then past continuous tense is used for the former and simple past for latter.
Example. While I was walking along the road, a mad dog attacked me.

S99. Ans.(d)
Sol. The sentence becomes grammatically incorrect in part (d) of it. Instead of “introduces”, “introduce” is required as after the phrase ‘one of the’ the noun or pronoun used is plural, however, the verb should be in its singular form as there is the use of “to-infinitive” which is followed by the first form of the verb. Hence, option (d) is the most viable choice.

S100. Ans.(e)
Sol. The given sentence is grammatically correct