SBI PO Prelims Memory Based Mock 2017 : 13-Nov-2021 (Solutions)

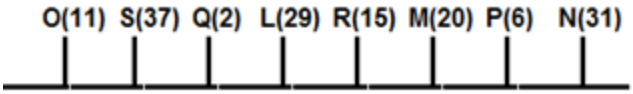
S1. Ans.(c)

Sol.

Days	Lecture
Monday	X
Tuesday	V
Wednesday	Z
Thursday	Y
Friday	W

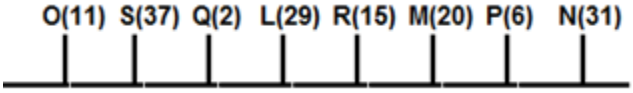
S2. Ans.(d)

Sol.



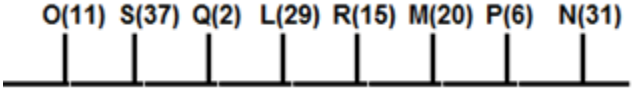
S3. Ans.(c)

Sol.



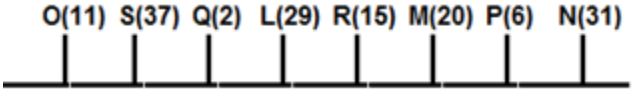
S4. Ans.(e)

Sol.



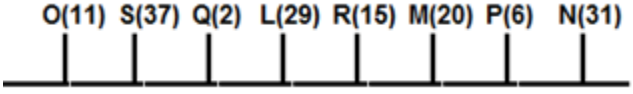
S5. Ans.(d)

Sol.



S6. Ans.(e)

Sol.



S7. Ans.(c)

S8. Ans.(d)
Sol. Q>P>S>T>U>R

S9. Ans.(c)
Sol. Q>P>S>T>U>R

S10. Ans.(d)
Sol. I. L = R (False)
II. L >R(False)

S11. Ans.(c)
Sol. I. D < R(False)
II. E > P (True)

S12. Ans.(e)
Sol. I. S > K (True)
II. F >B (True)

S13. Ans.(e)

S14. Ans.(d)
Sol.

Floor	Persons	Month
8	C	December
7	M	January
6	G	February
5	P	March
4	F	October
3	K	November
2	R	September
1	X	April

S15. Ans.(d)
Sol.

Floor	Persons	Month
8	C	December
7	M	January
6	G	February
5	P	March
4	F	October
3	K	November
2	R	September
1	X	April

S16. Ans.(a)
Sol.

Floor	Persons	Month
8	C	December
7	M	January
6	G	February
5	P	March
4	F	October
3	K	November
2	R	September
1	X	April

S17. Ans.(d)
Sol.

Floor	Persons	Month
8	C	December
7	M	January
6	G	February
5	P	March
4	F	October
3	K	November
2	R	September
1	X	April

S18. Ans.(c)
Sol.

Floor	Persons	Month
8	C	December
7	M	January
6	G	February
5	P	March
4	F	October
3	K	November
2	R	September
1	X	April

S19. Ans.(d)
Sol.

Carton	Object
O	Eraser
M	Cookies
L	Shoes
N	Bottles

S20. Ans.(a)
Sol.

Carton	Object
O	Eraser
M	Cookies
L	Shoes
N	Bottles

S21. Ans.(b)
Sol.

Word	Code
Pay	LA
Must	ZU
Amount	FU
Timely	PR

S22. Ans.(a)
Sol.

Date → / Month ↓	8th	15th
January	T	W
August	X	S
September	Q	Y
November	Z	R

S23. Ans.(d)
Sol.

Date → / Month ↓	8th	15th
January	T	W
August	X	S
September	Q	Y
November	Z	R

S24. Ans.(e)
Sol.

Date → / Month ↓	8th	15th
January	T	W
August	X	S
September	Q	Y
November	Z	R

S25. Ans.(d)
Sol.

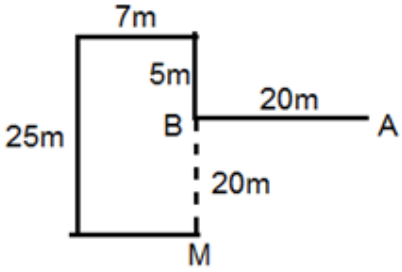
Date → / Month ↓	8th	15th
January	T	W
August	X	S
September	Q	Y
November	Z	R

S26. Ans.(d)
Sol.

Date → / Month ↓	8th	15th
January	T	W
August	X	S
September	Q	Y
November	Z	R

S27. Ans.(c)

S28. Ans.(d)
Sol.



S29. Ans.(e)

S30. Ans.(d)

Sol.

Year	Age	Persons
1950	67	E
1962	55	G
1971	46	A
1978	39	H
1982	35	F
1995	22	D
1999	18	B

S31. Ans.(e)

Sol.

Year	Age	Persons
1950	67	E
1962	55	G
1971	46	A
1978	39	H
1982	35	F
1995	22	D
1999	18	B

S32. Ans.(e)

Sol.

Year	Age	Persons
1950	67	E
1962	55	G
1971	46	A
1978	39	H
1982	35	F
1995	22	D
1999	18	B

S33. Ans.(e)
Sol.

Year	Age	Persons
1950	67	E
1962	55	G
1971	46	A
1978	39	H
1982	35	F
1995	22	D
1999	18	B

S34. Ans.(d)
Sol.

Year	Age	Persons
1950	67	E
1962	55	G
1971	46	A
1978	39	H
1982	35	F
1995	22	D
1999	18	B

S35. Ans.(d)
Sol.

Day	Persons
Monday	A
Tuesday	C
Wednesday	E
Thursday	D
Friday	B

S36. Ans.(b)
Sol.

$\text{At SI:} \quad SI = \frac{1500\times12\times2}{100} = 360$

$\text{At CI}: \quad CI = (1500+P)\left[\left(1+\frac{20}{100}\right)^2 - 1\right]$

$= (1500+P)\left[\frac{36-25}{25}\right] = (1500+P)\frac{11}{25}$

According to question

$CI - SI = 652$

$1500\times\frac{11}{25} + \frac{11P}{25} - 360 = 652$

$\Rightarrow \frac{11P}{25} = 652 + 360 - 660$

$\Rightarrow P = 25\times32 = 800$

S37. Ans.(a)
Sol. Investment = 4x :6x :7x
After 4 months
According to question
7x=6x+x
So, C's initial investment = 7x which may happen only if A withdraws 75% of his investment.
Hence, new ratio of investment = x :6x :7x
= 1 : 6 : 7 for rest of months
⇒ Hence final investment ratio will be 2 : 6 : 7 [first 4 months investment + Last 8 months investment]
7 → 4200
∴ Annual profit'll be $15 \times \frac{4200}{7} = \text{Rs. } 9000$

S38. Ans.(d)
Sol.
Let CP of A = x
∴ CP of B = $x + 80$
According to Que.
$x \times \frac{1}{5} + (x + 80) \times \frac{7}{20} = 105$
$\Rightarrow \frac{11x}{20} = 105 - 28$
$\Rightarrow x = 140$
∴ CP of B = Rs. 220

S39. Ans.(c)
Sol.

	A	B	C
Present Age	a	$a+9$	$2a$

According to question
$\frac{a+9+11}{2a} = \frac{9}{8}$
$\Rightarrow 8a + 160 = 18a$
$\Rightarrow a = 16$
B's age after 4 yrs = $a + 9 + 4 = 29$ yrs

S40. Ans.(b)
Sol.
$\frac{d}{h} = \frac{7}{3}$
$\therefore \frac{R}{h} = \frac{7}{6}$
$\Rightarrow h = \frac{6R}{7}$ .....(i)
According to condition & from (i)
$\frac{2\pi R\left(\frac{6}{7}R\right)}{\pi R^2\left(\frac{6}{7}R\right)} = \frac{2}{21}$
$\Rightarrow R = 21$

$\therefore h = 18$

$\therefore$ total surface area $= 2 \times \frac{22}{7} \times 21\ [21 + 18]$

$= 132 \times 39$

$= 5148$ sq. unit

S41. Ans.(a)

Sol.

Required probability $= \frac{13}{27} \times \frac{12}{26} + \frac{14}{27} \times \frac{13}{26} = \frac{13}{27}$

S42. Ans.(b)

Sol.

Given $S_{UP} : S_{Down} = 3 : 5$ .....(i)

$\therefore \frac{D+9}{3} = 2\left[\frac{D}{5}\right]$

$\Rightarrow D = 45$

Also,

Speed of boat in still water $= \frac{D-5}{2} = 20$ kmph

Let speed of current y kmph

$\therefore$ from (i)

$\frac{20-y}{20+y} = \frac{3}{5}$

$\Rightarrow y = 5$ kmph

S43. Ans.(a)

Sol.

Efficiency of A : B = 1 : 4 □

Efficiency of B : C = □ 2 : 1

Efficiency of A : B : C = 2 : 8 : 4

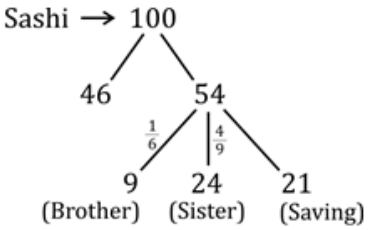
Since (B + C) → 8 days

$\therefore$ Total unit = 8 × (8 + 4) = 96 unit

$\therefore$ time taken by A = $\frac{96}{2} = 48$ days.

S44. Ans.(c)

Sol.



According to question

(24 – 9) → 3750

$\therefore 21 \equiv \frac{3750}{15} \times 21 =$ Rs. 5250

S45. Ans.(e)

Sol.

I. $\frac{x+1}{y-7}=\frac{5}{3}\Rightarrow 3x-5y=-38$ .....(i)

II. $\frac{x-3}{y+1}=\frac{4}{5}\Rightarrow 5x-4y=19$ .....(ii)

From (i) & (ii)

$y=\frac{247}{13}=19, x=\frac{257}{13}=19$

Required sum= 19+19=38

S46. Ans.(a)

Sol.

$$\text{Desired ratio}=\frac{600\times55+490\times45+750\times50}{530\times56+650\times60}$$

$$=\frac{33000+22050+37500}{29680+39000}$$

$$=\frac{92550}{68680}=\frac{9255}{6868}$$

S47. Ans.(e)

Sol. Top three populous cities = E, C and D

Total population in C, D and E = 200000

Total men in those cities = 39000 + 27000 + 37500

= 103500

Difference = 200000 – 103500 = 96500

S48. Ans.(b)

Sol.

$$\text{Desired value}=\frac{27000+37500}{530\times44+490\times45}=\frac{64500}{45370}\approx 1.4 \text{ times}$$

S49. Ans.(a)

Sol.

Female in C = 650 × 40 = 26,000

Female from E = 37,500

Difference = 11,500

$$\text{Desired \%}=\frac{11500}{37500}\times 100=30.66\% \text{ less}$$

S50. Ans.(c)

Sol. Two-third of total women population

= 2/3 (45370+26000+33000+37500)

=2/3 (141870)=94580

S51. Ans.(c)

Sol.

Difference $= -20 + 10 + 20 + 20 + 20 + 20$

$= 70$

Avg. $= \frac{70}{6} \approx 11.67$

S52. Ans.(a)

Sol.

Total students in 2012 & 2015 $= 650 + 820 = 1470$

Total students from A in all given years $= 2310$

Desired % $= \frac{1470}{2310} \times 100 = 63.6\%$

S53. Ans.(c)

Sol.

No. of children for Class B in all years $= 2240$

No of children for class A in all years $= 2310$

Desired ratio $= \frac{2240}{2310} = 32 : 33$

S54. Ans.(a)

Sol. Total desired sum = (320 + 400) + (400 + 440)

= 1560

S55. Ans.(d)

Sol.

$\left.\begin{matrix} \text{Class B} = 2240 \\ \text{Class A} = 2310 \end{matrix}\right\}$ Total = 4550

Desired value $= \frac{4550-2240}{4550} \times 100 \approx 50.8\%$

S56. Ans.(b)

Sol.

Pattern is $-3^2, -5^2, -7^2, -9^2$, & so on

$\therefore ? = 235 - 11^2 = 114$

S57. Ans.(a)

Sol.

Pattern is $(\times 1 - 1)$, $(\times 2 - 2)$, $(\times 3 - 3)$, & So on

$\therefore ? = 63 \times 4 - 4 = 252 - 4 = 248$

S58. Ans.(c)

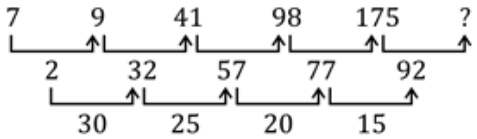
Sol.

Pattern in $(\times 0.5 + 0.5),\ (\times 1 + 1),\ (\times 1.5 + 1.5),\ (\times 2 + 2)$ & so on

$\therefore ? = 13.5 \times 2 + 2 = 29$

S59. Ans.(b)

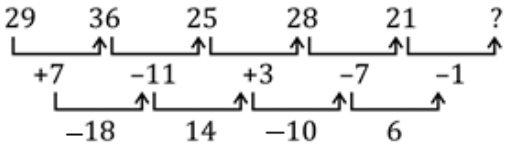
Sol.



$\therefore ? = 175 + 92 = 267$

S60. Ans.(e)

Sol.



$? = 21 - 1 = 20$

S61. Ans.(b)

Sol.

$?^2 = 20 \times 26 + \frac{224}{4} = 520 + 56$

$? = 24$

S62. Ans.(a)

Sol.

$32 + 34 \div \left(\frac{1}{2}\right) = 32 + 34 \times 2 = 100$

S63. Ans.(c)

Sol.

$\frac{5600}{14} + \sqrt{196} \times 3 = 400 + 14 \times 3 = 442$

S64. Ans.(a)

Sol.

$? \times \frac{600}{100} + 121 = 211$

$? = \frac{90}{6} = 15$

S65. Ans.(d)

Sol.

$(598-94)] \div ? = 126 \times 4$

$\Rightarrow ? = \frac{504}{126 \times 4}$

$\Rightarrow ? = 1$

S66. Ans.(a)

Sol.

I. $3x^2 + 17x + 10 = 0$

$\Rightarrow 3x^2 + 15x + 2x + 10 = 0$

$\Rightarrow 3x(x+5) + 2(x+5) = 0$

$\Rightarrow (3x+2)(x+5) = 0$

$\Rightarrow x = -5, \left(-\frac{2}{3}\right)$

II. $10y^2 + 9y + 2 = 0$

$\Rightarrow 10y^2 + 5y + 4y + 2 = 0$

$\Rightarrow 5y(2y+1) + 2(2y+1) = 0$

$\Rightarrow (5y+2)(2y+1) = 0$

$\Rightarrow y = \frac{-2}{5}, -\frac{1}{2}$

$\therefore x < y$

S67. Ans.(a)

Sol.

I. $x^2 + x - 6 = 0$

$\Rightarrow x^2 + 3x - 2x - 6 = 0$

$\Rightarrow x(x+3) - 2(x+3) = 0$

$\Rightarrow (x-2)(x+3) = 0$

$\Rightarrow x = 2, -3$

II. $2y^2 - 13y + 21 = 0$

$\Rightarrow 2y^2 - 7y - 6y + 21 = 0$

$\Rightarrow 2y(y-3) - 7(y-3) = 0$

$\Rightarrow (2y-7)(y-3) = 0$

$\Rightarrow y = \frac{7}{2}, 3$

$\therefore y > x$

S68. Ans.(a)
Sol.

$\text{I. } 4x^2 = 49 \quad \therefore \quad x = \pm 3.5$

$\text{II. } 9y^2 - 66y + 121 = 0$

$9y^2 - 33y - 33y + 121 = 0$

$y = \frac{11}{3}, \frac{11}{3}$

S69. Ans.(e)
Sol.

$\text{I. } x^2 + 8x + 4x + 32 = 0 \quad | \quad \text{II. } y^2 + 3y + 6y + 18 = 0$

$x = -4, -8 \quad | \quad y = -3, -6$

No relation between x & y

S70. Ans.(e)
Sol.

$\text{I. } x^2 - 20x - 5x + 100 = 0 \quad | \quad \text{II. } y^2 - 20y - 6y + 120 = 0$

$x = 5, 20 \quad | \quad y = 6, 20$

No relation

S71. Ans.(c)
Sol. Here the title "Divided we stand" is more potent. As mentioned in the passage, Dr. Franz's multicompiler trades a bit for diversity in the code to secure the software from being hacked.

S72. Ans.(b)
Sol. Here the author's tone is impersonal as he is concerned about computer's security.

S73. Ans.(b)
Sol. Refer to the second last line of last paragraph, "This leeway …… of the original program."

S74. Ans.(d)
Sol. Refer to the second line of first paragraph, "Minor variations aside, every copy of these products—like all other mass-market software—has exactly the same bits in it. This makes such software a honeypot for hackers."

S75. Ans.(a)
Sol. Refer to the last paragraph, "Dr Franz's "multicompiler" trades a bit of this optimality for diversity in the compiled code. This leeway, which diminishes the code's speed of execution by an amount imperceptible to the user, enables a multicompiler to create billions of different, but functionally identical, interpretations of the original program." Hence only option (a) is incorrect in context of the passage.

S76. Ans.(c)
Sol. Refer to the last sentence of second last paragraph, "Some mass-market software companies have instead introduced modest diversity to deter attackers, such as randomly choosing the starting addresses of big blocks of memory, but this is not enough to defeat a determined hacker".
Refer to the last sentence of the second paragraph, "Symantec, one of the commercial pioneers of online security, estimates that antivirus software now stops only 45% of attacks. The firm recently declared that this approach was "dead" and a new one was needed." Hence both statements (i) and (ii) are correct in context of the passage.

S77. Ans.(a)
Sol. Hone means sharpen or refine. Hence it has opposite meaning to '**wreck'**.

S78. Ans.(a)
Sol. Onslaught means a destructive attack. Hence it has opposite meaning to '**defense'**.

S79. Ans.(b)
Sol. Bane means a cause of great distress. Hence it has same meaning as **scourge**.

S80. Ans.(d)
Sol. Nigh means near. Hence it has same meaning to **nearly**.

S81. Ans.(e)
Sol. '**Keep off'** means to avoid encroaching on or touching hence option (e) is the correct choice for the given question.

S82. Ans.(d)
Sol. 'Give in' means to cease fighting or arguing; admit defeat therefore it is most appropriate in context of the sentence and is the correct choice for the given question.

S83. Ans.(e)
Sol. There is no error in the statement as 'called forth' means to cause (something) to come into action or existence.

S84. Ans.(a)
Sol. Disappointed 'at' is the correct usage here.

S85. Ans.(c)
Sol. 'get on with' means to continue or resume doing (something); make progress regarding hence option (c) is the correct choice for the given question.

S86. Ans.(d)
Sol. 'Catch up with' is the correct usage as it means succeed in reaching a person who is ahead of one. It is also the most appropriate option if you consider the context of the sentence hence option (d) is the correct choice for the given question.

S87. Ans.(b)
Sol. 'look out for' means be vigilant and take notice hence option (b) is the correct choice for the given question as other options change the meaning of the sentence.

S88. Ans.(c)
Sol. 'Talk back' means reply defiantly or insolently hence option (c) is the correct choice for the given question.

S89. Ans.(d)
Sol. The use of 'further' which means additional to what already exists or has already taken place, been done, or been accounted for is correct and the first form of 'take' should be used therefore option (d) is the correct choice for the given question.

S90. Ans.(a)
Sol. 'Think back on' means to recall and is the most appropriate choice for the given question.

S91. Ans.(c)

S92. Ans.(b)

S93. Ans.(a)

S94. Ans.(e)

S95. Ans.(d)

S96. Ans.(c)

S97. Ans.(e)
Sol. No correction is required

S98. Ans.(a)

S99. Ans.(d)

S100. Ans.(b)