2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

## HARYANA SSC MOCK TEST - 47 (SOLUTION)

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

## Explanation:

41. (A)
42. (D) 1stLetter: $\mathrm{Z} \xrightarrow{-2} \mathrm{X}_{\xrightarrow[-2]{ }} \mathrm{V}^{-2} \mathrm{~T}^{-2} \mathrm{R}^{-2} \mathrm{P} \xrightarrow{-2} \mathrm{~N}$

2nd Letter: $\mathrm{Z}^{+3} \mathrm{D} \xrightarrow{+3} \mathrm{G} \xrightarrow{+3} \xrightarrow{\mathrm{~J}} \mathrm{M}^{\mathrm{M}+3} \mathrm{P} \xrightarrow{+3} \mathrm{~S}$ Number Series

$$
\begin{aligned}
& \text { 1, 2, 6, 21, 88, 44s, } 2676 \\
& { }_{(1+1)(\times 2+2)}^{(\times 3+3)}(\times x+4) \quad(\times 5+5) \quad(\times 6+6) \quad(\times 7+7)
\end{aligned}
$$ Thus Answer N2676S

43. (D) Clearly $210=(15)^{2}-5$ and
$380=(15+5)^{2}-(15+5)$
Now $182=(13)^{2}+13$
So, required number
$=(13+5)^{2}+(13+5)=342$
44. (A)

and


Every letter has its code against it.
So, NISHAR $\rightarrow 261739$
45. (C) The sum of the numbers in each column is 200
$\therefore$ Missing number $=200-(87+56+50)=7$
46. (B) If 5th Date falls on Tuesday

So, 1st Friday falls on 1st, 2nd Friday falls on 8th, 3rd Friday falls on 15th.
So, three days after 3rd Friday will be 19.
47. (A) Deepti > Sweta $>$ Seema $>$ Sohan $>$ Seeta
48. (A) Present ;

$(x+7)+(x+37)=66 \mathrm{yrs}$
$\Rightarrow 2 x+44=66$
$\Rightarrow 2 x=66-44 \Rightarrow 2 x=22 \Rightarrow x=11$
Thus,

Rahim's age $=11 \mathrm{yrs}$
$\&$ His uncle's age $=11+30=41 \mathrm{yrs}$
49. (C)


So, total no.of students

$$
\begin{aligned}
& =7+26-1 \\
& =32
\end{aligned}
$$

50. (C)
51. (A) $\frac{\sqrt{2}, \sqrt{3}}{3 \sqrt{2}-2 \sqrt{3}} \propto \frac{3 \sqrt{2}, 2 \sqrt{3}}{3 \sqrt{2}, 2 \sqrt{3}}$
$=\frac{6,3 \sqrt{6}, 2 \sqrt{6}}{\left.3 \sqrt{2} *^{2}-\right) 2 \sqrt{3} *^{2}}=\frac{12,5 \sqrt{6}}{6}$
$=2, \frac{5}{6} \sqrt{6}=a, b \sqrt{6}$
$a=2 ; b=\frac{5}{6}$
52. (A) $\frac{\sqrt{1}, x, \sqrt{1 \cdot x}}{\sqrt{1}, x \cdot \sqrt{1 \cdot x}} \propto \frac{\sqrt{1}, x, \sqrt{1 \cdot x}}{\sqrt{1}, x, \sqrt{1 \cdot x}}$
$=\frac{(\sqrt{1, x})^{2},(\sqrt{1 \cdot x})^{2}, 2 \sqrt{1 \cdot x^{2}}}{(\sqrt{1, x})^{2} \cdot(\sqrt{1 \cdot x})^{2}}$
$=\frac{1, x, 1 \cdot x, 2 \sqrt{1 \cdot x^{2}}}{1, x \cdot 1, x}$
$=\frac{2,2 \sqrt{1 \cdot x^{2}}}{2 x}=\frac{1, \sqrt{1 \cdot x^{2}}}{x}$
Put $\mathrm{x}=\sqrt{3} / 2$
G.E. $=\frac{1, \sqrt{1 \cdot \frac{3}{4}}}{\sqrt{3} / 2}=\frac{\frac{3}{2}}{\sqrt{3} / 2}=\sqrt{3}$
53. (C) Increase in amount due to price rise $=25 \%$ of Rs. 500 .
$=\frac{25}{100} \propto 500=$ Rs. 125
Increase price of 50 oranges $=$ Rs. 125
Increase price per dozen $=\frac{125}{50} \propto 12$
$=$ Rs. 30
54. (A) Net $\%$ change in area $=P_{1}+P_{2}+\left(\frac{P_{1} P_{2}}{100}\right)$
$=4.5, \frac{4(.5)}{100}$
$=4.5 \cdot \frac{1}{5}=\frac{.6}{5} \%$
55. (B) Suppose the batsman played ' $x$ ' innings in beginning
Total score in x innings $=21.75 \mathrm{x}$
Total score in next 3 innings $=28+34+37$
$=99$
Total score of $(x+3)$ innings $=21.75 x+99$
New average $=21.75+1.125=22.875$
Total score $=$ New average $\times$ Total innings
$21.75 \mathrm{x}+99=(\mathrm{x}+3) \times 22.875$
$22.875 x-21.75 x=99-68.625$
$1.125 x=30.375$
$\mathrm{x}=30$
Total number of innings played $=x+3$
$=30+3=33$
56. (C) Total earning for the week
$=4 \times 18+4 \times 22-20=$ Rs. 140
Average earning $=$ Rs. $\left|\frac{140}{71}\right|=$ Rs. 20
57. (B) $\mathrm{A}+\mathrm{B}+\mathrm{C}=800$ $\qquad$
$\frac{3}{5} A+50=\frac{4}{9} B+20=\frac{5}{19} C+40=K$ (say)
$A=\frac{5}{3}(K-50)$
$B=\frac{9}{4}(K-20)$
$C=\frac{19}{5}(K-40)$
Putting in equation (1)
$\frac{5}{3}(\mathrm{~K}-50)+\frac{9}{4}(\mathrm{~K}-20)+\frac{19}{5}(\mathrm{~K}-40)=800$
$K\left|-\frac{5}{3}, \frac{9}{4}, \frac{19}{5}\right| \cdot \frac{250}{3} \cdot 45.152=800$
$\frac{463}{60} K=\frac{3241}{3}$

$$
K=140
$$

B's share $=\frac{9}{4}(K-20)=\frac{9}{4} \times 120=270$
58. (A) Part of spirit in the first mixture $=\frac{3}{3,1}=\frac{3}{4}$ Part of spirit in the second mixture $=\frac{5}{5,3}=\frac{5}{8}$ Part of spirit in the new mixture $=\frac{2}{2,1}=\frac{2}{3}$

$\left(\frac{2}{3}-\frac{5}{8}\right) \quad\left(\frac{3}{4}-\frac{2}{3}\right)$
$\frac{\text { Quantity of mixture } I}{\text { Quantity of mixture } I I}=\frac{\frac{2}{3} \cdot \frac{5}{8}}{\frac{3}{4} \cdot \frac{2}{3}}=\frac{1}{2}$
59. (B) Let the CP be Rs. 100

Profit = 19\%
Selling Price $=$ Rs. $100+19=$ Rs. 119
Discount= 15\%
SP = 85\% of MP
$85 \%$ of MP = 119
$\Rightarrow \mathrm{MP}=\frac{119}{85} \times 20=140$
He must mark 40\% above C.P.
60. (B) Let the share of $A$ and $B$ be $x$ and $y$ respectively.
R = 4\%
A's share at end of 7 years $=x_{k}\left(1, \frac{4}{100}\right)^{7}$
B's share at end of 9 years $=y\left(1, \frac{4}{100}\right)^{9}$
According to question

$$
\begin{aligned}
& x-1,\left.\frac{4}{100}\right|^{7}>\mid y 1, \frac{4}{100}{ }^{9} \\
& \Rightarrow \frac{x}{y}=\frac{676}{625}
\end{aligned}
$$

Share of $A=\frac{676}{676,625} \times 39030=$ Rs. 20280

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003

