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

## HARYANA SSC MOCK TEST - 48 (SOLUTION)

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

## Explanation:

2. (*) Sakshi malik
3. (*) Birendra Singh Dhanoa
4. (*) 1956
5. (D)

6. (C)
7. (B) The lack of blood is called Anaemia. Similarly the lack of governement is called Anarchy.

Similarly,

8. (B) Given, (11, -18, -25)

$$
11 \xrightarrow{+7} 18 \xrightarrow{+7} 25
$$

In option (B), (19-26-33)

$$
19 \xrightarrow{+7} 26 \xrightarrow{+7} 33
$$

46. (B) Ploughing, Sowing, Weeding, Harvesting
47. (C) a $\underline{\mathbf{b}} \mathrm{b} / \mathrm{ab} \underline{\mathbf{b}} / \mathrm{a} \mathrm{b} \underline{\mathbf{b}} / \mathrm{a} \mathrm{b} \mathrm{b}$
48. (B) Present Grandmother Leela

$$
\begin{array}{ccc} 
& x & x-60 \\
\text { After 10 yrs } & x+10 & x-60+10 \\
& & =(x-50)
\end{array}
$$

So,

$$
\begin{aligned}
& x+10+x-50=100 \\
& 2 x-40=100 \\
& 2 x=140 \\
& \quad x=70
\end{aligned}
$$

Thus,
Leela's age $=70-60=10 \mathrm{yrs}$
\& Her grandmother's age $=70 \mathrm{yrs}$
49. (C)


Total number of students

$$
=19+19-1=37
$$

50. (D)

51. (B) $\because 8$ men complete a piece of job in 40 days $\therefore 1$ man complete a piece of job in $40 \times 8$ days
$\therefore 10$ men complete a piece of job in $\frac{40 \times 8}{10}$

$$
=32 \text { days }
$$

52. (D) $x^{4}+\frac{1}{x^{4}}$

$$
\begin{aligned}
& =\left(x^{2}+\frac{1}{x^{2}}\right)^{2}-2 \cdot x^{2} \cdot \frac{1}{x^{2}} \\
& =\left[\left(x^{2}+\frac{1}{x^{2}}\right)^{2}+2 \cdot x \cdot \frac{1}{x}\right]-2 \\
& =\left(2^{2}+2\right)^{2}-2 \\
& =36-2 \\
& =34
\end{aligned}
$$

53. (D) Speed of the car $=36 \mathrm{~km} / \mathrm{h}$

$$
=36 \times \frac{5}{18}=10 \mathrm{~m} / \mathrm{s}
$$

Speed of the bus $=\frac{40+60}{20}=5 \mathrm{~m} / \mathrm{s}$

$$
\begin{aligned}
& =5 \times \frac{18}{5} \mathrm{~km} / \mathrm{h} \\
& =18 \mathrm{~km} / \mathrm{h}
\end{aligned}
$$

54. (C) $x=\frac{1}{1+\sqrt{2}}$
$=\frac{1}{\sqrt{2}+1}$
$=\frac{\sqrt{2}-1}{\sqrt{2}-1}=\sqrt{2}-1$
Now,

$$
x^{2}+2 x+3
$$

$=x^{2}+2 x+1+2$
$=(x+1)^{2}+2$
$=(\sqrt{2})^{2}+2$
$=4$
55. (B)Suppose 5 kg of tea @ Rs. 240/kg and 3 kg of tea @ Rs. 300/kg are blended.

Total cost of the $(5+3) \mathrm{kg}$
$=8 \mathrm{~kg}$ tea
$=240 \times 5+300 \times 3$
= ₹ 2100
Total SP of the tea @ $315 / \mathrm{kg}$
$=8 \times 315$
$=₹ 2520$
$\%$ gain $=\frac{2520-2100}{2100} \times 100$
$=\frac{420 \times 100}{2100}=20 \%$
56. (C) $\frac{1+\sqrt{2}}{\sqrt{5}+\sqrt{3}}+\frac{1-\sqrt{2}}{\sqrt{5}-\sqrt{3}}$
$=\frac{(1-\sqrt{2})(\sqrt{5}-\sqrt{3})}{5-3}+\frac{(1-\sqrt{2})(\sqrt{5}+\sqrt{3})}{5-3}$
$=\frac{\sqrt{5}-\sqrt{3}+\sqrt{10}-\sqrt{6}+\sqrt{5}+\sqrt{3}-\sqrt{10}-\sqrt{6}}{2}$
$=\frac{2(\sqrt{5}-\sqrt{6})}{2}=\sqrt{5}-\sqrt{6}$
57. (A) Let the initial investment of A \& B be $₹ 4 x$ and $₹ 5 x$ respectively.
Capital withdrawn by A
$=\frac{1}{4}$ of $4 x=x$
Remaining capital $=3 x$
Capital withdrawn by B
$=\frac{1}{5}$ of $5 x=x$
Remaining capital $=4 x$
$\frac{\text { Investment of } A}{\text { Investment of } B}=\frac{\text { Profit of } A}{\text { Profit of } B}$
$\frac{4 x \times 3+3 x \times 7}{5 x \times 3+4 x \times 7}=\frac{\text { Profit of A }}{\text { Profit of B }}$
$\frac{33 x}{43 x}=\frac{\text { Profit of } A}{\text { Profit of B }}$
A's share $=\frac{33}{33+43} \times 760$
$=\frac{33}{76} \times 760$
58. (D) HCF of $\frac{1}{2}, \frac{3}{4}, \frac{5}{6}, \frac{7}{8}, \frac{9}{10}$
$=\frac{\text { HCF of numerators }}{\text { LCM of denominators }}$
$=\frac{1}{120}$
59. (D) Let the printed price be Rs. $x$.

SP of the book $=₹ \frac{9 x}{10}$
CP of the book $=\frac{\frac{9 x}{10} \times 100}{100+15}$

$$
\begin{aligned}
& =\frac{9 x \times 100}{115 \times 10} \\
& =\frac{18 x}{23}
\end{aligned}
$$

Required ratio $=\frac{18 x}{23}: x=18: 23$
60. (C) Ist number
$=$ twice of 2 nd $\& 3$ rd numbers
$=\frac{1}{3}$ of Ist
Let the Ist number $=x$
2nd number $=\frac{x}{2}$
3rd number $=\frac{x}{3}$
$x+\frac{x}{2}+\frac{x}{3}=132$
$\frac{6 x+3 x+2 x}{6}=132$
$\frac{11 x}{6}=72$
2nd number $=\frac{x}{2}=36$

## Correction of mock test- 47

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
$21.75 \mathrm{x}+99=(\mathrm{x}+3) \times 22.875$
$22.875 x-21.75 x=99-68.625$
$1.125 x=30.375$
$\mathrm{x}=27$
Total number of innings played $=x+3$
$=27+3=30$
56. (C)
57. (C)
58. (B)
59. (D)
60. (B)
61. (A)
62. (D)
63. (D)

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

