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

## HARYANA SSC MOCK TEST - 51 (SOLUTION)

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

## Explanation:

41. (A) In all others there is one vowel.
42. (D)

43. (D) Editor is responsible for preparing a magazine. Similarly, Director is responsible for making film.
44. (B)

45. (C) $5+20+6+9=40$

$$
\begin{aligned}
& 4+8+15+13=40 \\
& 9+15+7+9=40 \\
& 22+7+8+x=40 \\
& x=40-37=3
\end{aligned}
$$

46. (C) $\frac{\text { Water }}{3} \frac{\text { Vaporisation }}{2} \frac{\text { Cloud }}{5} \frac{\text { Condensation }}{4}$

$$
\frac{\text { Rain }}{1}
$$

47. (A) cab/bde/ecd/fde/ge
48. (A) C and D are children of A and B . B is mother of C and D . Therefore, B is sister-in-law of E .
49. (D) The age of two daughters
$=22 \times 2=44$ years
$\therefore$ The age of their mother
$=44+6=50$ years
50. (B)


$$
A C=\sqrt{(A B)^{2}+(B C)^{2}}
$$

$$
=\sqrt{(3)^{2}+(4)^{2}}=\sqrt{9+16}=\sqrt{25}=5 \mathrm{~km}
$$

51. (B) $n=6 \times k+4$

$$
2 n=2(6 k+4)
$$

$$
=12 k+8
$$

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$$
\begin{aligned}
& =12 k+6+2 \\
& =6(2 k+1)+2
\end{aligned}
$$

Remainder $=2$
52. (D) $\frac{1}{20}+\frac{1}{30}+\frac{1}{42}+\frac{1}{56}+\frac{1}{72}+\frac{1}{90}$

LCM of $20,30,42,56,72,90=2520$
$=\frac{126+84+60+45+35+28}{2520}$
$=\frac{378}{2520}=\frac{3}{20}$
53. (C) $0.16, \sqrt{0.16} \cdot(0.16)^{2}, 0.04$
$=0.16,0.4,0.0256,0.04$
Greatest number $=0.4=\sqrt{0.16}$
54. (B) $\frac{A}{B}=\frac{3}{4}, \frac{B}{C}=\frac{6}{5}$

$$
\begin{array}{lr}
=\frac{3 \times 3}{4 \times 3}, & =\frac{6 \times 2}{5 \times 2} \\
=\frac{9}{12} & =\frac{12}{10}
\end{array}
$$

$\Rightarrow C: A=10: 9$
55. (C) Let the required number be $x$.

ATQ,
New number $=75 \%$ of $125 \%$ of $x$

$$
\begin{aligned}
& =\frac{75 \times 125 \times x}{100 \times 100} \\
& =0.9375 x
\end{aligned}
$$

\% decrease in number

$$
\begin{aligned}
& =\frac{(x-0.9375 x)}{x} \times 100 \\
& =\frac{0.0625 x}{x} \times 100 \\
& =6.25 \% \\
& =6 \frac{1}{4} \%
\end{aligned}
$$

56. (C) Let the original price of the rice be ₹ $x / \mathrm{kg}$.

Then, new price $=₹ 0.8 x / \mathrm{kg}$
ATQ,

$$
\begin{aligned}
& \frac{800}{0.8 x}-\frac{800}{x}=12.5 \\
\Rightarrow & \frac{800[1-0.8]}{0.8 x}=12.5 \\
\Rightarrow & x=\frac{800 \times 0.2}{0.8 \times 12.5}=₹ 16 / \mathrm{kg}
\end{aligned}
$$

57. (C) Relative speed $=(65+55) \mathrm{km} / \mathrm{h}$

$$
=120 \mathrm{~km} / \mathrm{h}
$$

$$
=120 \times \frac{5}{18}
$$

$$
=\frac{100}{3} \mathrm{~m} / \mathrm{s}
$$

Required time $=\frac{180+120}{\frac{100}{3}}$

$$
=\frac{300}{100} \times 3
$$

$$
=9 \text { seconds }
$$

58. (D) Work done by 3 men in 2 days

$$
=\frac{1}{6} \times 2=\frac{1}{3} \text { work }
$$

Remaining work $=1-\frac{1}{3}=\frac{2}{3}$ work
$\because 3$ men complete 1 work in 6 days.
$\Rightarrow 1$ man completes 1 work in 18 days.
$\Rightarrow 6$ men complete 1 work in $\frac{18}{6}=3$ days
$\Rightarrow 6$ men completes $\frac{2}{3}$ work $=3 \times \frac{2}{3}=2$ days
59. (C) Let ' $h$ ' be their height.

Let ' $r_{1}$ ' and ' $r_{2}$ ' be the radii of the two cones.
then,

$$
\begin{aligned}
& \frac{\mathrm{d}_{1}}{\mathrm{~d}_{2}}=\frac{3}{4} \\
\Rightarrow & \frac{2 \mathrm{r}_{1}}{2 \mathrm{r}_{2}}=\frac{3}{4} \\
\Rightarrow & \frac{\mathrm{r}_{1}}{\mathrm{r}_{2}}=\frac{3}{4}
\end{aligned}
$$

Now,
$\frac{\mathrm{v}_{1}}{\mathrm{v}_{2}}=\frac{\frac{1}{3} \pi \mathrm{r}_{1}^{2} \mathrm{~h}}{\frac{1}{3} \pi \mathrm{r}_{2}^{2} \mathrm{~h}}=\left(\frac{\mathrm{r}_{1}}{\mathrm{r}_{2}}\right)^{2}=\frac{9}{16}$
$\Rightarrow \mathrm{v}_{1}: \mathrm{v}_{2}=9: 16$
60. (C) Part of the cistern filled by pipe X in 18 minutes $=\frac{18}{24}=\frac{3}{4}$

Remaining part $=1-\frac{3}{4}=\frac{1}{4}$
$\because$ Pipe $Y$ can fill the whole cistern in 32 minutes
$\therefore$ Pipe Y can fill $\frac{1}{4}$ part in $\frac{1}{4} \times 32=8 \mathrm{~min}$
$\Rightarrow$ Pipe Y should be closed after 8 minutes.

