## SSC MOCK TEST - 269 (SOLUTION)

1. (D) Memory $\longrightarrow$ Amnesia is a disease which is related to Memory.

Movement $\longrightarrow$ Paralysis is a disease which is related to the movement of body part.
2. (A)

3. (B)

4. $\quad(\mathrm{C})(\mathrm{A}$

(B)

(C)

(D)

5. (D) Plash, Lotus and Red Jasmine are State flower of Uttar Pradesh, Haryana and Goa respectively, but Lily is not a state flower of any state of India.
6. (B) Except option (B), all are perfect squares.
7.
(A) $\frac{\text { Baffle }}{4} \frac{\text { Bandi1 }}{2} \frac{\text { Boisterous }}{3} \frac{\text { Bright }}{5} \frac{\text { Brook }}{1}$
8. (C)


Hence, Rinku is the Maternal uncle of Raju.
9. (B) $\mathrm{H} \quad \mathrm{F} D \quad \mathrm{~B} Z \mathrm{X} V \mathrm{~T} R \quad \mathbf{P} \quad \mathbf{N} \mathbf{L}$

10. (A)

11. (A)
12. (A) $(4 \times 4)+(6 \times 5)=46$,
$(5 \times 9)+(2 \times 8)=61$
Similarly,
$(6 \times 8)+(1 \times 9)=\mathbf{5 7}$
13. (A) $7 \times 3=21, \quad 9 \times 3=27$
$4 \times 9=36, \quad 2 \times 9=18$
Similarly,
$9 \times 6=54,4 \times 6=\mathbf{2 4}$
14. (A) NI APGNIT $\rightarrow$ P AINT ING $\begin{array}{ll}\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow & \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \\ 12345678 & 43218765\end{array}$

Similarly,
A LP RE Y $\rightarrow$ P LAYE R
$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \quad \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
123456321654
15. (B) NATION
16. (A) $6 \div 2+4 \times 7-3=28$
$3+28-3=28$
$31-3=28$
$28=28$
17. (B)


There are 20 triangles are in the given figure- $1,2,3,4,5,6,7,8,9,(1, A, 2,4),(3, C, 7,5)$ $(8,6, B, 9),(1, A, 2,3,4,5,7, C),(3, C, 7,8,5,6, B, 9)(4,5),(5,6),(1, A, 4,5),(7, C, 5,4),(3,5$, $6, C)$ and $(5,6, B, 9)$
18. (D) $\mathrm{ab} / \underline{\mathbf{b}} \underline{\mathbf{a}} / \mathrm{c} \underline{\mathbf{d}} / \underline{\mathbf{d}} \mathrm{c} / \underline{\mathbf{e}} \mathrm{f} / \mathrm{fe}$
19. (C)
20. (B)

21. (A) DELHI and CALCUTTA

| $\downarrow \downarrow \downarrow \downarrow \downarrow$ | $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$ |
| :--- | :--- |
| 73541 | 82589662 |

Similarly,
CALI C UT
$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
$\mathbf{8 2 5} \mathbf{5} \mathbf{8} 96$
22. (C) 23. (C) 24. (A)
25. (C) $\mathrm{S}=\mathbf{5 7}, 69,76,88,95$
$\mathrm{R}=\mathbf{0 2}, 14,21,34,40$
$P=\mathbf{5 6}, 68,75,87,99$
$\mathrm{G}=04,11,23, \mathbf{3 0}, 42$
27. (C) Iltutmis was a real founder of Delhi Sultanate. He made Delhi the capital in place of Lahore. He saved Delhi Sultamate from the warth of Chengiz khan- the Mongol Leader-by refuaing shelter to Khwarizm Shah, whom Chengiz was chasing. He completed uie construction of Qutub Minar.
29. (D) Venus is known as earth's twin because of its closeness to the earth with respect to size, mass (weight) and density.
31. (A) Additional and Acting Judges of High Court: The President can appoint duly qualified persons as additional judges of a High Court for a temporary period not exceeding two years when:
(i) there is a temporary increase in the business of the High Court; or
(ii) there are arrears of work in the High Court. The President can also appoint a duly qualified person as an acting judge of a High Court, when a judge of that High Court (other than Chief Justice) is
(i) unable to perform the duties of his office due to absence or any other reason; or
(ii) appointed to act temporarily as chief justice of that High Court.

An acting judge holds office until the permanent judge resumes his office. However, both the additional or acting judge cannot hold office after attaining the age of 62 years.
32. (C) The force of attraction between 2 bodies is inversely proportional to the square of the distance between them.
33. (C) Iron rusts only in the presence of moist air. When iron comes into contact with water containing carbon dioxide, an internal voltaic cell is set up which leads to formation of rust.
35. (B) Chris Gayle, who plays for Kings XI Punjab, has recently become the first batsman in history to hit 1000 sixes in T20 cricket.
37. (A) LAN: Local Area Network is set up with an organisation, college etc.
40. (C) The Rhine, which flows in Switzerland, Liechtenstein, Austria, Germany, France and Netherlands, is the most important and busiest waterway in Europe. Other busy waterways include Seine and Loire rivers of France, Danube river of eastern Europe and Volga river of Russia.
41. (C) The Saraswati Samman is an annual award for outstanding prose or poetry literary works in any of the 22 languages of India listed in Schedule VIII of the Constitution of India. It is named after an Indian goddess of knowledge and is considered to be among the highest literary awards in India.
44. (C) While wind erosion is most common in deserts and coastal sand dunes and beaches, certain land conditions will cause wind erosion in agricultural areas. So, it is wind that drives the erosion, but it's mainly the landscape and condition of the land which leads to the most damaging wind erosion.
45. (C) Mount Everest (8850m) (the highest peak of the worl(D) and the $\mathrm{K} 2(8611 \mathrm{~m})$ (thp second highest peak of the worl(D) belong to the Himalayas ahd Karakorm (the trans-Himalayas) ranges respectively. Further, KJis the highest peak in the Indian Union. K2 has been named as Godwin Austin by the Britishers and Qogir by Chinese. The Mount Everest lies in Nepal whereas the Kanchenjunga (the second highest peak of Himalayan Range) lies in India. Thus, the highest jieak of Himalayan Range in India is the Kanchenjunga ( 8598 m ). Height of the Dhaolagiri Peak (belongs to Himalayas) is 8172 m above the mean sea level.
47. (B) A 'Proclamation of Emergency' may be made by the President at any time he is satisfied that the security of India or any part thereof has been threatened by war, external aggression or armed rebellion (Article 352). It may be made even before the actual occurrence of any such disturbance, for example, when external aggression is apprehended.
49. (B) Nitrous oxide is a colourless, non-toxic gas with a faint, sweet odour.

# $K D$ <br> <br> Campus <br> <br> Campus <br> K D Campus Pvt. Ltd 

1997, GROUND FLOOR OPPOSITE MUKHERJEE NAGAR POLICE STATION, OUTRAM LINES, GTB NAGAR, NEW DELHI - 09
51. (B) Required seconds $=\mathrm{LCM}$ of 48,50 and 72
$=3600$ seconds $=1$ hour
They will meet at 10 a.m.
52. (C) Ram $\begin{array}{rr}\text { Rat } \\ \text { Ravi } & 8 \\ 3\end{array}$

Ravi $8=\frac{3}{5}$
Time required $=\frac{24}{5}=4 \frac{4}{5}$ days
53. (B) A
B $\quad 15 \geq 30$
$\frac{2}{5}$

Actual work done by both in a day $=\frac{5}{2}$
Time required $=30 \times \frac{2}{5}=12$ days
54. (C) Let cost price $=₹ 100$

Selling price $=100+\frac{20}{100} \times 100=₹ 120$
Mark price $=120 \times \frac{100}{90}=₹ \frac{400}{3}$
New selling price $=\frac{400}{3}-\frac{400}{3} \times \frac{20}{100}=₹ \frac{320}{3}$
Profit percentage $=\frac{\frac{320}{3}-100}{100} \times 100=6 \frac{2}{3} \%$
55. (B) Let cost price $=₹ 100$

Selling price $=100+\frac{15}{100} \times 100=₹ 115$
Printed price $=₹\left(115 \times \frac{100}{90}\right)$
Required ratio $=$ cost price $:$ printed price $=100: \frac{23}{18} \times 100=18: 23$
56. (D) $\frac{1}{x}+\frac{1}{y}+\frac{1}{z}=0$

$$
\begin{aligned}
& \frac{y z+x z+x y}{x y z}=0 \\
& x y+y z+x y=0 \\
& x^{2}+y^{2}+z^{2}=25 \\
& x^{2}+y^{2}+z^{2}+2(x y+y z+x y)=25+0 \\
& (x+y+z)^{2}=( \pm 5)^{2} \\
& x+y+z= \pm 5
\end{aligned}
$$

1997, GROUND fLoor opposite mukherjee nagar police station, outram lines, gtb nagar, new delhi - 09
57. (A) Length of $\mathrm{AD}=\frac{3}{2} \mathrm{AG}$
$=\frac{3}{2} \times 4=6 \mathrm{~cm}$
58. (C) $\angle \mathrm{BOC}=180^{\circ}-\angle \mathrm{BAC}$

$$
=180^{\circ}-52^{\circ}=128^{\circ}
$$

59. (A)

$\frac{\mathrm{AB}}{\mathrm{AD}}=\frac{\mathrm{BC}}{\mathrm{DE}}$
[By Similar triangles]
$\frac{2}{1}=\frac{\mathrm{BC}}{\mathrm{DE}} \Rightarrow \mathrm{BC}=2 \mathrm{DE}$
$\frac{\mathrm{LM}}{\mathrm{DE}}=\frac{\mathrm{LF}}{\mathrm{DF}}$
[ By Similar triangles]
$\frac{\mathrm{LM}}{\mathrm{DE}}=\frac{1}{2}$
$\mathrm{DE}=2 \mathrm{LM}$
$2 \times 2 \mathrm{LM}=\mathrm{BC}$
$\mathrm{LM}: \mathrm{BC}=1: 4$
60. (D)

61. (B)
62. (B) Required time $=\frac{216 \times 5}{24}=45$ minutes

## $K D$ <br> Campus <br> K D Campus Pvt. Ltd

1997, GROUND FLOOR OPPOSITE MUKHERJEE NAGAR POLICE STATION, OUTRAM LINES, GTB NAGAR, NEW DELHI - 09
63. (C) $\sec \alpha+\tan \alpha=2$
$\frac{1}{\cos \alpha}+\frac{\sin \alpha}{\cos \alpha}=2$
$\frac{(1+\sin \alpha)}{\cos \alpha}=2$
Squaring both the sides,
$\frac{(1+\sin \alpha)^{2}}{\cos ^{2} \alpha}=4$
$\frac{(1+\sin \alpha)^{2}}{\left(1-\sin ^{2} \alpha\right)}=4$
$\frac{(1+\sin \alpha)^{2}}{(1-\sin \alpha)(1+\sin \alpha)}=4$
$\frac{(1+\sin \alpha)}{(1-\sin \alpha)}=4$
$1+\sin \alpha=4-4 \sin \alpha$
$5 \sin \alpha=3$
$\sin \alpha=0.6$
64. (B) Let the number of sides be ' $x$ '.

Then ATQ,
$5 \times 192+(x-5) \times 160=(x-2) \times 180$
$960+160 x-800=180 x-360$
$20 x=520$
So, $x=26$
65. (B) $x^{3}=\left((\sqrt{2}+1)^{-\frac{1}{3}}\right)^{3}$
$x^{3}=\frac{1}{\sqrt{2}+1}$ and $\frac{1}{x^{3}}=\sqrt{2}+1$
then, $x^{3}-\frac{1}{x^{3}}=\frac{1}{\sqrt{2}+1}-(\sqrt{2}+1)$
$=\frac{1-(\sqrt{2}+1)^{2}}{\sqrt{2}+1}=\frac{1-(2+2 \sqrt{2}+1)}{\sqrt{2}+1}$
$=\frac{-2-2 \sqrt{2}}{\sqrt{2}+1}=-2$
66. (D) Different of interest in 1 year $=\frac{13.50}{3}=4.5=\frac{9}{2}$

As, the difference is on ₹ 1500 . So, we need to find the rate of interest and calculation is to be done on 100

On ₹ 100 , the difference of interest $=\frac{9}{2}\left(\frac{1}{1500}\right) \times 100=\frac{3}{10}=0.3 \%$
Different of rate of interest $=0.3 \%$

1997, GROUND FLOOR OPPOSITE MUKHERJEE NAGAR POLICE STATION, OUTRAM LINES, GTB NAGAR, NEW DELHI - 09
67. (D) $x^{3}+y^{3}=9$ and $x+y=3$
then, $x^{3}+y^{3}=(x+y)\left(x^{2}-x y+y^{2}\right)$
$9=3\left((x+y)^{2}-3 x y\right)$
$9=3(9-3 x y) \Rightarrow 9=27-9 x y$
$x y=2$
$x^{4}+y^{4}-\left(x^{2}+y^{2}\right)^{2}-2 x^{2} y^{2}$
$\left[(x+y)^{2}-2 x y\right]^{2}-2 x^{2} y^{2}$
$\left[^{2}-2 \times 2\right]^{2}-2 \times 2^{2}$
$=5^{2}-8=17$
68. (A) $1^{3}+2^{3}=\left(2 \times \frac{3}{2}\right)^{2}=3^{2}=9$
$1^{3}+2^{3}+3^{3}+\ldots \ldots+10^{3}$
$=\left(\frac{10 \times 11}{2}\right)^{2}=3025$
Required sum $=3025-9=3016$
69. (B) Let C be 100.

Then, $B=80$ and $A=80 \times \frac{8}{5}=128$
$2 \mathrm{~A}: 3 \mathrm{~B}: 5 \mathrm{C}=2 \times 128: 3 \times 80: 5 \times 100$
$=256: 240: 500=64: 60: 125$
70. (B) $a^{2}+a+1=0$
$(a-1)\left(a^{2}+a+1\right)=0(a-1)$
$a^{3}-1^{3}=0$
$\mathrm{a}^{3}=1$
$\left(a^{3}\right)^{3}=1^{3}$
$a^{9}+2=1^{3}+2$
$a^{9}+2=3$
71. (B)


Given,
ABCD is a Rectangle.
Then,
$\mathrm{AB}^{2}+\mathrm{BC}^{2}+\mathrm{CD}^{2}+\mathrm{DA}^{2}=\mathrm{AC}^{2}+\mathrm{BD}^{2}$
72. (B) Required students $=30+30+20+40=120$
73. (C) Required ratio $=60: 50=6: 5$
74. (D) Required difference $=(60+40)-(40+50)=10$
75. (A) Required ratio $=40: 50: 50=4: 5: 5$

## MEANINGS IN ALPHABETICAL ORDER



## SSC MOCK TEST - 269 (ANSWER KEY)

| 1. (D) | 26. (B) |
| :---: | :---: |
| 2. (A) | 27. (C) |
| 3. (B) | 28. (D) |
| 4. (C) | 29. (D) |
| 5. (D) | 30. (D) |
| 6. (B) | 31. (A) |
| 7. (A) | 32. (C) |
| 8. (C) | 33. (C) |
| 9. (B) | 34. (C) |
| 10. (A) | 35. (B) |
| 11. (A) | 36. (D) |
| 12. (A) | 37. (A) |
| 13. (A) | 38. (C) |
| 14. (A) | 39. (C) |
| 15. (B) | 40. (C) |
| 16. (A) | 41. (C) |
| 17. (B) | 42. (A) |
| 18. (D) | 43. (B) |
| 19. (C) | 44. (C) |
| 20. (B) | 45. (C) |
| 21. (A) | 46. (A) |
| 22. (C) | 47. (B) |
| 23. (C) | 48. (B) |
| 24. (A) | 49. (B) |
| 25. (C) | 50. (B) |


| 1. (B) |
| :---: |
| 52. (C) |
| 53. (B) |
| 54. (C) |
| 55. (B) |
| 56. (D) |
| 57. (A) |
| 58. (C) |
| 59. (A) |
| 60. (D) |
| 61. (B) |
| 62. (B) |
| 63. (C) |
| 64. (B) |
| 65. (B) |
| 66. (D) |
| 67. (D) |
| 68. (A) |
| 69. (B) |
| 70. (B) |
| 71. (B) |
| 72. (B) |
| 73. (C) |
| 74. (D) |
| 75. (A) |

76. (A)
77. (D)
78. (C)
79. (D)
80. (D)
81. (C)
82. (C)
83. (D)
84. (A)
85. (B)
86. (B)
87. (D)
88. (C)
89. (D)
90. (D)
91. (C)
92. (C)
93. (D)
94. (A)
95. (A)
96. (B)
97. (A)
98. (B)
99. (D)
100. (C)
101. (A) Replace 'based' by 'having'.
102. (D) No error
103. (D) The correct spelling of 'Bordeux' is 'Bordeaux', 'Ambienc' is 'Ambience' and 'Macakues' is Macaques'.
104. (C) The correct spelling of 'Metaleed' is 'Metaled', 'Lonsome' is 'Lonesome' and 'Shufled' is 'Shuffled'.
