## SSC MOCK TEST - 267 (SOLUTION)

1. (C) As,


Similarly,
$\mathrm{V} \xrightarrow{\text { opposite }} \mathrm{E} \xrightarrow{-1} \mathrm{D}$
$\mathrm{W} \xrightarrow{\text { opposite }} \mathrm{D} \xrightarrow{-1} \mathrm{C}$
$\mathrm{R} \xrightarrow{\text { opposite }} \mathrm{I} \xrightarrow{-1} \mathrm{H}$
$A \xrightarrow{\text { opposite }} Z \xrightarrow{-1} Y$
2. (D) As,
$(8+7) \times(3+4)=15 \times 7=105$
Similarly,
$(9+9) \times(4+5)=18 \times 9=162$
3. (A) Snake lives in Burrows, while Pig lives in sty.
4. (D) Riboflavin, Biotin and Ascorbic acid is chemical name of vitamin $B_{2}, B_{7}$ and vitamin $C$ respectively, while ferrum is chemical name of Iron.
5. (B) There are 31 days in the month of March, July and August, while the number of days in April is 30 days.
6. (C) The numbers 93165,36747 and 76137 are divisible by 3 , while 85253 is not divisible by 3 .
7. (B) $\frac{\text { Catalogue }}{3} \frac{\text { Catapult }}{1} \frac{\text { Catastrophe }}{5} \frac{\text { Catenation }}{4} \frac{\text { Cathedral }}{2}$
8. (A)

9. (B)


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10. (B)

11. (D)
12. (B) From figure I,
$(1 \times 3 \times 4 \times 2)+(1+3+4+2)=34$
From figure II,
$(4 \times 3 \times 5 \times 7)+(4+3+5+7)=439$
From figure III,
$(3 \times 5 \times 2 \times 3)+(3+5+2+3)=103$
13. (D) Row wise,
$24+8+16=48$
$2+\mathbf{2 5}+21=48$
$22+15+11=48$
Column wise,
$24+2+22=48$
$8+\mathbf{2 5}+15=48$
$16+21+11=48$
14. (B) As,
$\mathrm{F} \xrightarrow{+2} \mathrm{H}$
$\mathrm{R} \xrightarrow{-2} \mathrm{P}$
$\mathrm{A} \xrightarrow{+2} \mathrm{C}$
$\mathrm{M} \xrightarrow{-2} \mathrm{~K}$
$\mathrm{E} \xrightarrow{+2} \mathrm{G}$

Similarly,
$\mathrm{G} \xrightarrow{+2} \mathrm{I}$
$R \xrightarrow{-2} P$
$\mathrm{E} \xrightarrow{+2} \mathrm{G}$
$\mathrm{A} \xrightarrow{-2} \mathrm{Y}$
$\mathrm{T} \xrightarrow{+2} \mathrm{~V}$
15. (A)


Hence the distance between starting point and end point is 5 meters.

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16. (C)

I. False
II. False
III. False
IV. False

Hence, no conclusion follows.
17. (C) QRSQQR
18. (B)


Hence, Rahul is cousin of that man in the photograph.
19. (B) 55 minutes covered in 60 minutes

60 minutes covered in $\frac{60}{55} \times 60=65 \frac{5}{11} \mathrm{~min}$
$\because \quad$ Loss in 65 minutes $=\left(65 \frac{5}{11}-65\right)=\frac{720}{11}-65=\frac{720-715}{11}=\frac{5}{11}$
$\therefore$ Loss in 24 hours $=\frac{5}{11} \times \frac{1}{65} \times 24 \times 60=10.22=10 \min ($ Approx $)$
20. (D) MANIA
21. (C) $35+7-5 \times 2 \div 25=20$

After changing the sign,
$35 \div 7-5 \times 2+25=20$
$5-10+25=20$
$20=20$
22. (C)
23. (D) After reading the question, we have :
$B+8=C$
$\mathrm{A}-8=\mathrm{C}-3$
$A+6=2 D$

- (iii)
$B+D=50$

Putting $\mathrm{C}=\mathrm{A}-5$ from (ii) into (i), we have :
$\mathrm{B}+8=\mathrm{A}-5$ or $\mathrm{A}-\mathrm{B}=13$
Putting $\mathrm{D}=50-\mathrm{B}$ from (iv) into (iii), we have :
$A+6=100-2 B$ or $A+2 B=94$
Solving (v) and (vi), we get
$B=27$ and $A=40$
24. (B)
25. (C)
27. (A) There are 7 principles are in the UN Charter.
30. (C) A consumer maximize his utility or satisfaction when marginal utility is zero. When marginal utility is zero, total utility reach its maximum level. Beyond this point, total utility starts decreasing and marginal utility becomes negative.
31. (A) A production function shows the relationship between inputs of capital and labor and other factors and the outputs of goods and services. The simplest possible production function is a linear production function with labor alone as an input.
32. (B) The custom of sacrificial fire was also followed by Romans, Greeks, Iranians along with Vedic Aryans.
33. (D) The origin of Indian music can be traced to Samaveda in Vedic Samhita.
37. (D) Grassroots democracy is a tendency towards designing political processes that shift as much decision-making authority as practical to the organization's lowest
38. (A) Agastya was the first to write grammar of Tamil language. He spread the Aryan culture and literature in South India.
39. (A) Minimum four forces would be required. The resultant of any three forces must be equal and opposite to the fourth one to maintain the equilibrium.
42. (A) Genes are a part of the chromosome and are found in pairs in somatic cells. One member of the gene pair segregates into a gamete, thus each gamete only carries one member of the gene pair. Gametes unite at random and irrespective of the other gene pairs involved.
44. (B) Work done by the string of the simple pendulum during one complete oscillation is zero. Pressure in the string precisely drops the segment parallel to the string. This leaves a net reestablishing power back toward the balance position as equivalent to zero.
45. (A) Gamma rays have the shortest wavelengths of all electromagnetic radiation, has the greatest penetrating power.
48. (A) The nuclear power plant, Kumharia is related to the state of Haryana. It is situated in the village, Kumharia in the district of Fatehabad. It is a nuclear power plant with a capacity of 2800 MW under the Nuclear Power Corporation of India.
50. (D) The minimum age is 25 years of age if he wins the election from Lok sabha
51. (A) $4 * 3=\frac{4^{2}-3^{2}}{4^{2}+3^{2}}$

$$
=\frac{16-9}{16+9}=\frac{7}{25}
$$

52. (C) $x=2 \frac{\sqrt{10}}{7}$

$$
\begin{aligned}
& 1+x=1+\frac{2 \sqrt{10}}{7} \\
& 1+x=\frac{7+2 \sqrt{10}}{7}
\end{aligned}
$$

$$
\begin{aligned}
& 1+x=\frac{(\sqrt{5}+\sqrt{2})^{2}}{7} \\
& \sqrt{1+x}=\frac{\sqrt{5}+\sqrt{2}}{\sqrt{7}} \\
& 1-x=1-\frac{2 \sqrt{10}}{7} \\
& =\frac{7-2 \sqrt{10}}{7}=\frac{(\sqrt{5}-\sqrt{2})^{2}}{7} \\
& \sqrt{1-x}=\frac{\sqrt{5}-\sqrt{2}}{\sqrt{7}} \\
& \frac{\sqrt{1+x}-\sqrt{1-x}}{\sqrt{1+x}+\sqrt{1-x}}=\frac{\frac{\sqrt{5}+\sqrt{2}}{\sqrt{7}}-\frac{\sqrt{5}-\sqrt{2}}{\sqrt{7}}}{\sqrt{7}}+\frac{\sqrt{5}-\sqrt{2}}{\sqrt{7}} \\
& =\frac{\sqrt{5}+\sqrt{2}-\sqrt{5}+\sqrt{2}}{\sqrt{5}+\sqrt{2}+\sqrt{5}-\sqrt{2}}=\frac{\sqrt{2}}{\sqrt{5}}
\end{aligned}
$$

53. (D) $\frac{1}{x}+\frac{1}{y}+\frac{1}{z}=0$

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

54. (A) Length of $\mathrm{AD}=\frac{3}{2} \mathrm{AG}$
$=\frac{3}{2} \times 4=6 \mathrm{~cm}$
55. (C) $\angle \mathrm{BOC}=180^{\circ}-\angle \mathrm{BAC}$
$=180^{\circ}-52^{\circ}=128^{\circ}$
56. (D) $x=\frac{1+\sin \theta}{\cos \theta}$

$$
\begin{aligned}
& \frac{1}{x}=\frac{\cos \theta}{1+\sin \theta} \\
& =\frac{\cos \theta}{1+\sin \theta} \times \frac{1-\sin \theta}{1-\sin \theta}=\frac{\cos \theta(1-\sin \theta)}{\cos ^{2} \theta} \\
& =\frac{1-\sin \theta}{\cos \theta}
\end{aligned}
$$

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57. (D) $\sin ^{6} A+\cos ^{6} A+3 \sin ^{2} A \cos ^{2} A$
$=\left(\sin ^{2} \mathrm{~A}\right)^{3}+\left(\cos ^{2} \mathrm{~A}\right)^{3}+3 \sin ^{2} \mathrm{~A} \cos ^{2} \mathrm{~A}\left(\sin ^{2} \mathrm{~A}+\cos ^{2} \mathrm{~A}\right) \quad\left[\therefore \sin ^{2} \mathrm{~A}+\cos ^{2} \mathrm{~A}=1\right]$
$=\left[\sin ^{2} \mathrm{~A}+\cos ^{2} \mathrm{~A}\right]^{3}=1$
58. (B) A
$\begin{array}{ll}\text { A } & 10 \searrow_{30}^{3} \\ \text { B } & 15 \geq 3 \\ 2\end{array}$

Actual work done by both in a day $=\frac{5}{2}$

Time required $=30 \times \frac{2}{5}=12$ days
59. (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 $=\frac{\frac{320}{3}-100}{100} \times 100=6 \frac{2}{3} \%$
60. (B) Largest Diameter $=6 \mathrm{~cm}$

Area of circle $=\pi r^{2}$
$=\frac{22}{7} \times 3 \times 3=28 \frac{2}{7}$ sq. m
61. (D) Rquired volume $=\pi r^{2} h$
$=\frac{22}{7} \times 7 \times 7 \times 0.5 \times 50=3850$
62. (A)

$=\frac{8 \times 6}{8+6+10}=2 \mathrm{~cm}$
Area of incircle $=\pi r^{2}=4 \pi \mathrm{~cm}^{2}$
63. (C) SP after a discount of $40 \%$ on ₹ 500
$=60 \%$ of $500=₹ 300$
SP after two successive discount of $36 \%$ \& $5 \%$ on 500
= $64 \%$ of $95 \%$ of 500
$=\frac{64}{100} \times \frac{95}{100} \times 500=₹ 304$
Difference $=304-300=₹ 4$
64. (D) Let $x$ be added to $2,1,5,3$ to get 4 proportionals
then, $\frac{2+x}{1+x}=\frac{5+x}{3+x}$
$x=1$
65. (D) $\because 2, \mathrm{~b}$ and 8 are in continued proportion
$\therefore \quad \frac{2}{\mathrm{~b}}=\frac{\mathrm{b}}{8}$
b $=4$
66. (A) $\frac{(33.3)^{2}-(10.3)^{2}}{23}$
$=\frac{(33.3+10.3)(33.3-10.3)}{23}=43.6$
67. (A) The series is: $+15,+20,+25,+30,+35,+40$

So, 70 should come in the place of 65 .
68. (B) $\mathrm{m}^{\mathrm{n}}=25$
$\mathrm{m}^{\mathrm{n}}=5^{2}$
$\therefore \quad \mathrm{n}^{\mathrm{m}}=2^{5}=32$
69. (A) $99999=777 \times 128+543$

So required number is $=777 \times 128=99456$
70. (D) $\mathrm{A}=\mathrm{B}+7$
$A-B=7$
15 years ago,
$B-15=\frac{3}{4}(B+7-15)$
$4 B-60=3 B-24$
$\therefore \quad B=36$ years
B's age $=36$ years
$\therefore \quad$ A's age $=36+7=43$ years
71. (B) Required difference $=\frac{1}{6} \times(14+18+23+21+27+26)-15=21.5-15$ $=6.5$ thousand
72. (D) Required ratio $=18: 15: 9=6: 5: 3$
73. (B) From graph the required year is 2000
74. (C) Required percentage $=\frac{29}{35} \times 100 \simeq 83 \%$
75. (A) Required percentage increase $=\frac{27-18}{18} \times 100=50 \%$

## MEANINGS IN ALPHABETICAL ORDER

| Abjure/Renounce | To reject formally | छा' ड. दे ना |
| :---: | :---: | :---: |
| Auspicious | Prosperous, favourable | शु \% T, मं गल |
| Batten | Long flat squared timber/metal for fastening | प ट, ] T |
| Boisterous | Noisy, lacking in discipline | हु $\overline{\mathrm{c}}$ लड बा ज |
| Catastrophe | Disaster, event causing | प्र लय |
| Contagious | Capable of transmission by touch | सं क्रा म |
| Contemporary | Occurring at the same time | स्मका ली न |
| Deist | One who advocates natural religion | प्र कृतिवा दी / प्र < स्ष़ा वा दी |
| Epitomize | A perfect example of | प्र ती कहा' ना |
| Fastidious | Very attentive to accuracy and detail / hard to please | दु रा धय नख रे बा ज |
| Hatches | A small opening | निका स |
| Hireling | A person employed to do menial work | निIन का य करने वा ला |
| Irrelevant | Having no connection with subject | बे मतलब |
| Loquacious | Talkative | बा तू नी |
| Mime | Communication by gestured facing expressions (especially without words) | मू कअभि $T$ नय |
| Mobilize | Make moveable or capable of movement | इ स ते मा ल करना |
| Nirvana | Place of complete bliss/delight | स वर्ग |
| Officious | Intrusively offensive in offering help or advice | ज्ञरद£ती दख लदे ने वा ला |
| Proliferation | Rapid increase in numbers | बहु जन/ संख मं बढ़ ना |
| Rationalist | Who believes in practical reason \& knowledge | ता र्के क |
| Respectably | In a decent \& reputable manner | स मा ननी यढ ग से |
| Serenity | Absence of mental stress | प्र T ताचर T ता |
| Tangent | Diverging from the original purpose | अलग रा स ते में चले जा ना |
| Underneath | On the lower side | नी चे |
| Venal | Motivated by bribery, corrupt | बिक्र उ亏 |
| Volunteer | A person freely offering to do something | स वयं सेवक |

## SSC MOCK TEST - 267 (ANSWER KEY)

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


| 51. | (A) |
| :--- | :--- |
| 52. | (C) |
| 53. | (D) |
| 54. | (A) |
| 55. | (C) |
| 56. | (D) |
| 57. | (D) |
| 58. | (B) |
| 59. | (C) |
| 60. | (B) |
| 61. | (D) |
| 62. | (A) |
| 63. | (C) |
| 64. | (D) |
| 65. (D) |  |
| 66. | (A) |
| 67. | (A) |
| 68. | (B) |
| 69. | (A) |
| 70. | (D) |
| 71. | (B) |
| 72. | (D) |
| 73. | (B) |
| 74. | (C) |
| 75. | (A) |

76. (A)
77. (A)
78. (A)
79. (A)
80. (B)
81. (C)
82. (B)
83. (A)
84. (A)
85. (B)
86. (C)
87. (D)
88. (C)
89. (A)
90. (C)
91. (A)
92. (C)
93. (A)
94. (C)
95. (D)
96. (B)
97. (A)
98. (C)
99. (D)
100. (B)
101. (A) Change 'a' into 'an' . 'Earth quake' starts with vowel sound.
102. (A) Change 'does' into 'do'. 'Parents' is a plural noun.
103. (C) The correct spelling is 'Conscience'
104. (A) The correct spelling is 'Nirvana'.
