## SSC MOCK TEST - 268 (SOLUTION)

1. (B) Loss of memory is called Amnesia, while loss of movement is called Paralysis.
2. (B) As,


Similarly,

3. (D) As,
$135 \rightarrow 1^{3} 3^{3} 5^{3} \rightarrow 127125$
Similarly,
$678 \rightarrow 6^{3} 7^{3} 8^{3} \rightarrow 216343512$
4. (D) (A) $\sqrt{4489}=67$
(B) $\sqrt{3025}=55$
(C) $\sqrt{625}=25$
(D) $\sqrt[3]{1331}=11$
5. (B) Except oil, others are the product of milk.
6. (C) (A) $\mathrm{B} \stackrel{\text { opposite }}{\longleftrightarrow} \mathrm{Y}$
(B) $\mathrm{D} \stackrel{\text { opposite }}{ } \mathrm{W}$
(C) $\mathrm{H} \stackrel{\text { opposite }}{ } \mathrm{S} \neq \mathrm{T}$
(D) $\mathrm{J} \stackrel{\text { opposite }}{\longleftrightarrow} \mathrm{Q}$
7. (D) 3. Training $\rightarrow$ 4. Translate $\rightarrow 2$. Treadmill $\rightarrow$ 1. Treasure
8. (A)


Aman is the son of Nisha.


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9. (A) $\underbrace{15}_{+10}$
10. (B) $\mathrm{C}>\mathrm{A}>\mathrm{B}$

B > D > E
From (i) and (ii),
C $>\mathrm{A}>\mathrm{B}>\mathrm{D}>\mathrm{E}$
C is tallest.
11. (D) In these two positions, one of the common face having digit 1 is in the same position. Therefore, 4 is opposite to 5 .
12. (A) From Column I ${ }^{\text {st }}$,
$17 \times(1+7=8)=136$
From Column II ${ }^{\text {nd }}$,
$19 \times(1+9=\mathbf{1 0})=190$

## From Column III ${ }^{\text {rd }}$,

$44 \times(4+4=8)=352$
13. (D) $18^{3}-18^{2}=5832-324=5508$
$25^{3}-25^{2}=15625-625=15000$
14. (D) As,

TAPERECORDER $\rightarrow$ !\#\&@^@?\%^+@^
Similarly,
REPORTER $\rightarrow$ ^@\&\%^!
15. (B)
16. (B) There are nine triangles in the given figure.
17. (C) def/efg/fgh/ghi
18. (A)

I. True
II. False

Hence, only conclusion I is true.
19. (D) 7 V 42 M 56 L 8 S 5

After putting the value,
$=7-42+56 \div 8 \times 5$
$=7-42+7 \times 5$
$=7-42+35=0$
20. (A)


Required distance $=\sqrt{100^{2}+25^{2}}$
$=\sqrt{10000+625}=\sqrt{10625}$
$=\sqrt{5 \times 5 \times 5 \times 3 \times 3 \times 3 \times 3}=45 \sqrt{5} \mathrm{~m}$
21. (C) As,
$R A M \rightarrow(18)^{2}+(1)^{2}+(13)^{2}=494$
Similarly,
SITA $\rightarrow(19)^{2}+(9)^{2}+(20)^{2}+(1)^{2}=843$
22. (C)
23. (C)
24. (D)
25. (C)
26. (D) The chief male deity was Pashupati Mahadeva (proto-Siv(A), represented in seals as sitting in a yogic posture on a low throne, and having three faces and two horns. He is surrounded by four animals (elephant, tiger, rhino and buffalo), each facing a different direction and two deers appear at his feet. The chief female deity was Mother Goddess, who has been depicted in various forms. Indus people also worshiped Gods in the form of trees (pipal, etc) and animals (unicorn) etc.
29. (B) The transpiration aspect of evapotranspiration is essentially evaporation of water from plant leaves.
30. (C) Black soil is also known as black lava soil. This soil black in color. It is formed from lava rocks and is rich in clay. Suitable Crops: It is ideal for growing crops such as cotton, sugarcane, tobacco, wheat, millets, and oilseeds.
31. (B) The Constitution of India describes India as the Union of States. ... After independence, India, as it is now, was formed by the decision of the princely states, who decided to join India. Therefore, India is known as Union of States.
32. (C) Soft iron is selected for making the core of an electromagnet because the core is used in a solenoid for the production of the strongest magnetism.
33. (B) This $11.2 \mathrm{~km} / \mathrm{s}$ is also known as the escape velocity. It works out to roughly 25000 miles per hour.
35. (D) In order to promote road safety and reduce vehicular pollution, Rajasthan Transport department is going to observe a "No Vehicle Day" once a month in 2020. The employees of the transport department are to come to their offices as pedestrians, via bicycles or a public transport.
36. (B) Vitamin D is a hormone the kidneys produce that controls blood calcium concentration and impacts the immune system. It is also known as calcitriol, ergocalciferol, calcidiol and cholecalciferol.


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39. (C) International Criminal Police Organisation (INTERPOL) was established in September 7, 1923. It is the largest police organisation in the world. The headquarters of INTERPOL is at Lyons, France (earlier its headquarters was in Paris). It has 190 member-states. It facilitates cross border police cooperation; supports and assists all organisations, authorities and services whose aim is to prevent or combat international crime.
40. (A) 'Gidda' is a recreational folk dance of Punjab. It is performed on all happy occasions by the womenfolk.
44. (C) The functional head of the Government is the Prime Minister
45. (B) The ohm is the standard unit of electrical resistance in the International System of Units (SI).
46. (B) The state government of Madhya Pradesh has formed a dedicated commission to create employment opportunities for the migrant labourers.
47. (C) Bronze contains $\mathrm{Cu} 90 \%$, Sn (10\%) Brass contains $\mathrm{Cu}(80 \%)$, Zn ( $20 \%$ ) Gun metal contains $\mathrm{Cu}(80 \%), \mathrm{Zn}(10 \%), \mathrm{Sn}(10 \%)$ Solder is an alloy of $\mathrm{Pb}(50 \%)$ and $\mathrm{Sn}(50 \%)$.
50. (D) Cocaine which is an alkaloid produces numbness and is used as local anaesthetic.
51. (A) Let sides be $15 x, 20 x$ and $25 x$ respectively.
$(15 x)^{2}+(20 x)^{2}=(25 x)^{2}$

The triangle is right angled $\frac{1}{2} \times 15 x \times 20 x=15000$
$150 x^{2}=15000$
$x^{2}=100$
$x=10$
Perimeter of triangle $=(15+20+25) \times 10$
$=(60) \times 10=600 \mathrm{~cm}$
52. (A) $\frac{A B}{A D}=\frac{B C}{C D}$
$\frac{4 a}{7 a}=\frac{3 b+9}{14 b}$
$56 b=21 b+63$
$35 b=63$
$b=\frac{63}{35}=\frac{9}{5}$
$a=2 b=2 \times \frac{9}{5}=\frac{18}{5}$
53. (B) Volume of the box $=(65 \times 36 \times 80) \mathrm{cm}^{3}$

Volume of a cake $=(13 \times 18 \times 16) \mathrm{cm}^{3}$
Number of cakes $=\frac{65 \times 36 \times 80}{13 \times 18 \times 16}=50$

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54. (B)

$\tan 30^{\circ}=\frac{y}{x} \Rightarrow x=\sqrt{3} y$

In $\triangle \mathrm{AOB}$,
$\frac{16}{x}=\tan 60^{\circ}$
$16=\sqrt{3} \times \sqrt{3} y$
$\frac{16}{3}=y$
$y=5.33$
So, height of tower $=(16+5.33)=21.33 \mathrm{~m}$
55. (D)


By pythagorous theorem,

$$
\begin{aligned}
& (x+10)^{2}=x^{2}+(x+5)^{2} \\
& x^{2}+100+20 x=x^{2}+x^{2}+25+10 x \\
& x^{2}-10 x-75=0 \\
& (x-15)(x+5)=0 \\
& x=15, x \neq 5
\end{aligned}
$$

Hypotenuse $=x+10=15+10=25$
56. (B)


AD is diameter of circle, so $\angle \mathrm{ACD}=90^{\circ}$ ABCD is a cyclic quadrilateral

So, $\angle \mathrm{ABC}+\angle \mathrm{ADC}=180^{\circ}$
$125^{\circ}+\angle \mathrm{ADC}=180^{\circ}=\angle \mathrm{ADC}=55^{\circ}$
In $\triangle \mathrm{ACD}$,
$\angle x+\angle \mathrm{ACD}+\angle \mathrm{CDA}=180^{\circ}$
$x+90+55^{\circ}=180^{\circ}$
$x=35^{\circ}$
57. (D)


In $\triangle \mathrm{ABC}$ and $\mathrm{OD} \perp \mathrm{AC}$
$\angle \mathrm{AOD}=45^{\circ} \& \angle \mathrm{ODA}=90^{\circ}$
In $\triangle \mathrm{AOD}$,
$\angle \mathrm{OAD}+45^{\circ}+90^{\circ}=180^{\circ}$
$\angle \mathrm{OAD}=45^{\circ}$
$\angle \mathrm{BAC}=2 \times \angle \mathrm{OAD}=2 \times 45^{\circ}=90^{\circ}$
58. (C) Centroid $=\left(\frac{1}{3}\left(x_{1}+x_{2}+x_{3}\right), \frac{1}{3}\left(y_{1}+y_{2}+y_{3}\right)\right)$

$$
=\left(\frac{1}{3}(2+8-1), \frac{1}{3}(4+11+3)\right)=(3,6)
$$

59. (C) Number of diagonals $=\left[\frac{n \times(n-1)}{2}-n\right]=\left[\frac{8 \times(8-1)}{2}-8\right]$
$=28-8=20$

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60. (B) ATQ,

Cost price of each apple $=\frac{100}{10}=₹ 10$

Selling price of each apple $=₹\left(10+\frac{25}{100} \times 10\right)=₹ 12.5$
Apple sold in ₹ $100=\frac{100}{12.5}=8$
61. (C) To get $25 \%$ profit quantity of water mixed in one litre of milk $=1 \times \frac{25}{100}=\frac{1}{4}$
62. (D) Distance covered in 30 minutes by $P=\frac{1}{2} \times 30=15 \mathrm{~km}$

Relative speed of $P$ and $Q=40-30=10 \mathrm{~km} / \mathrm{hr}$
Time taken by Q to overtake $\mathrm{P}=\frac{15}{10}=\frac{3}{2}$ hours
63. (B) If interest rate is increased by $3 \%$ then interest increased $=\frac{800 \times 3 \times 3}{100}=₹ 72$

New amount will be = ₹ $(920+72)=₹ 992$
64. (B) Radius of circle $=\frac{\sqrt{144+25}}{2}=\frac{13}{2}=6.5 \mathrm{~cm}$
65. (A) $\sin \theta \cos \theta=\frac{1}{2}$
$2 \sin \theta \cos \theta=1$
$\sin 2 \theta=1$
$\sin 2 \theta=\sin 90^{\circ}$
$\theta=45^{\circ}$
Now, $\sin 45^{\circ}-\cos 45^{\circ}=\frac{1}{\sqrt{2}}-\frac{1}{\sqrt{2}}=0$
66. (B) Correct mean $=40-\frac{(83-53)}{100}$
$=40-0.3=39.7$
67. (B) $a^{3}+\frac{1}{a^{3}}=2$

By adding 6 on both sides,
$a^{3}+\frac{1}{a^{3}}+6=8$
$\left(a+\frac{1}{a}\right)^{3}=8$
$a+\frac{1}{a}=\sqrt[3]{8}=2$

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68. (D) $x\left(3-\frac{2}{x}\right)=\frac{3}{x}$
$3 x-2=\frac{3}{x}$
$3 x-\frac{3}{x}=2$
$x-\frac{1}{x}=\frac{2}{3}$
$x^{2}+\frac{1}{x^{2}}=\frac{4}{9}+2=2 \frac{4}{9}$
69. (C) ATQ,
$\frac{4}{3} \pi \times 5 \times 5 \times 5$
$=\frac{1}{3} \pi \times 5 \times 5 \times h$
$h=20 \mathrm{~cm}$
70. (C) $\mathrm{P}=\frac{(\mathrm{C} . \mathrm{I}-\mathrm{S} . \mathrm{I}) \times 100 \times 100}{R^{2}}$
$P=\frac{41 \times 100 \times 100}{5 \times 5}$
$P=₹ 16400$
71. (D) Speed of train $=\frac{10}{12} \times 60=50 \mathrm{~km} / \mathrm{hr}$

New speed $=50-5=45 \mathrm{~km} / \mathrm{hr}$
New time to over same distance $=10 \times \frac{60}{45}=\frac{40}{3}$
72. (A) Expenditure on rent $=25 \%$ of $₹ 25000=\frac{25}{100} \times 25000$

Expenditure on food $==\frac{80^{\circ}}{360} \times 25000$

Required ratio $=\left(\frac{25}{100} \times 25000: \frac{80^{\circ}}{360} \times 25000\right)=\frac{25}{100}: \frac{80}{360}=9: 8$
73. (D) Central angle of sector corresponding to expenditure on cloth

$$
=\left(\frac{125}{6 \times 100} \times 360\right)=75^{\circ}
$$

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74. (D) Expenditure on miscellaneous $=12.5 \%$

Expenditure on education $=\left(\frac{45^{\circ}}{360^{\circ}} \times 100\right) \%=\frac{25}{2} \%=12.5 \%$
Required $\%=\left(\frac{12.5}{12.5} \times 100\right) \%=100 \%$
75. (D) Expenditure on education $=\frac{45}{360} \times 25000=₹ 3125$

Expenditure on rent $=\frac{25}{100} \times 25000=₹ 6250$
Total expenditure $=3125+6250=₹ 9375$

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## MEANINGS IN ALPHABETICAL ORDER

Adamant
Aftermath
refusing to be persuaded or to change one's mind the consequences or after effects of a significant unpleasant event

| Anther | the part of a stamen that contains the pollen |
| :--- | :--- |
| Apiary | a place where bees are kept; a collection of bee hives |

Aviary a large cage, building, or enclosure for keeping birds in Comic

Coup attempt an illegal an violent way of an act to a sudden change of government

Deed an action that is performed intentionally or consciously
Distraught
extremely upset and anxious so that you cannot think clearly

Elated thrilled or delighted
Heave a sigh to respire deeply with relief of relief
Lullaby a quiet, gentle song sung to put a child to sleep
Oust $\quad$ drive out or expel (someone) from a position or place
Perspicacious having a ready insight into and understanding of things
Ponder think about (something) carefully before making a

|  | decision or reaching a conclusion |
| :--- | :--- |
| Prevailing | existing at a particular time; current |
| Sentence | declare the punishment decided for (an offender) |
| Soprano | a singing voice with the highest range for a |
|  | woman or boy |
| Stumble | trip and almost fall |
| Summon | authoritatively or urgently call on (someone) to be |
|  | present, especially as a defendant |

जिजि
परिण $T$ म
परा ग- को प्र
मधु मकिख यें के प लने का さथाТ न

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तख्ञा फ्लट के प्र य स

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हणिण ${ }^{`}$ त, उ ल लस्त
रा हत की सा सले ना
ला री
बे दख लकरना
ती क्ष्प - बु द्धि
गहनता से स' चना

माँ जू दा , वर्त मा न
सा दे ना
गा ने की ऊँची आ वा

ठ $\mathrm{T}^{\prime}$ कर ख T ना
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जेतले ना, हरा दे ना
हिग नाँ ना अपरा ध

## SSC MOCK TEST - 268 (ANSWER KEY)

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

51. (A)
52. (A)
53. (B)
54. (B)
55. (D)
56. (B)
57. (D)
58. (C)
59. (C)
60. (B)
61. (C)
62. (D)
63. (B)
64. (B)
65. (A)
66. (B)
67. (B)
68. (D)
69. (C)
70. (C)
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73. (D)
74. (D)
75. (D)
76. (C)
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78. (B)
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80. (B)
81. (D)
82. (A)
83. (D)
84. (A)
85. (C)
86. (D)
87. (C)
88. (A)
89. (C)
90. (C)
91. (A)
92. (B)
93. (A)
94. (A)
95. (A)
96. (D)
97. (D)
98. (D)
99. (D)
100. (D)
101. (C) Since the subject (i.e, every voter) is singular, it will take singular possessive adjective. Replace 'their' by 'his/her'. Also change 'caste' into 'cast'.
102. (B) The tense of the first part (is - present tense) does not match with the second part (could past tense), though the sentence refers a past event. Thus, replace 'is' by 'was'.
103. (B) The part of the sentence which starts with 'unless' takes simple present tense. Change 'unless we will qualify' into 'unless we qualify'.
104. (B) When two actions take place in past then earlier one takes past perfect tense and the 2nd one simple present tense.
105. (C) Sentence starting with 'Hardly' takes an inversion form.
106. (A) 'None' takes singular verb after it.
107. (B) Sentence starting with 'only' takes inversion form.
