## SSC MOCK TEST - 155 (SOLUTION)

1. (A) As, Akbar was mughal emperor and Ashok was maurya emperor.
2. (B) As, $(8+1)(8-1)=9 \times 7=63$

Similarly, $(6+2)(6-2)=8 \times 4=\mathbf{3 2}$
3. (C) As, $A \xrightarrow{\text { Next vowel }} \mathrm{E}$

$$
\begin{aligned}
& \mathrm{M} \xrightarrow{+1} \mathrm{~N} \\
& \mathrm{~N} \xrightarrow{+1} \mathrm{O}
\end{aligned}
$$

Similarly, $\mathbf{E} \xrightarrow{\text { Next vowel }} \mathrm{I}$

$$
\mathbf{M} \xrightarrow{+1} \mathrm{~N}
$$

$$
\mathbf{F} \xrightarrow{+1} \mathrm{G}
$$

4. (C) Expect worship, other are places to worship.
5. (B) Except ' $\mathbf{O}$ ' others are consonant.
6. (D) $\sum_{1}^{10} n=\frac{10 \times(10+1)}{2}=55$
$\sum_{1}^{5} n=\frac{5 \times(5+1)}{2}=15$
$\sum_{1}^{7} n=\frac{7 \times(7+1)}{2}=28$
$\sum_{1}^{12} n=\frac{12 \times(12+1)}{2}=\mathbf{7 8} \neq 77$
7. (D) Subtle $\rightarrow$ Sucres $\rightarrow$ Sudoku $\rightarrow$ Sugary $\rightarrow$ Sullen
8. (C)

9. (A) $1331 \rightarrow 11^{3}$
$729 \rightarrow 9^{3}$
$343 \rightarrow 7^{3}$
$125 \rightarrow 5^{3}$
$27 \rightarrow 3^{3}$
10. (A)

11. (B) $8=2 \times 2 \times 2$ (a cube Number)

Four years ago
$8-4=2 \times 2$ (square of the same whole number)
Next perfect cube number $=27=3 \times 3 \times 3$
$\therefore$ He should wait for $27-8=\mathbf{1 9}$ years
12. (A)

13. (B) GENEROUS
14. (B) $15+6 \times 3 \div 5+7$

After changing the signs as per given details,
$15-6 \div 3+5-7=15-2+5-7$

$$
=20-9=11
$$

15. (A) $15 \times 32 \Rightarrow(1+5) \times 3^{2}=6 \times 9=54$
$16 \times 23 \Rightarrow(1+6) \times 2^{3}=7 \times 8=56$
$22 \times 13 \Rightarrow(2+2) \times 1^{3}=4 \times 1=4$
16. (B) $3+18=21$
$4+23=27$
$\therefore$ ? $+27=33$
? $=33-27=6$
17. (C) 15
18. (C)

I. True II. True

So, Both conclusion I and II follow
19. (B)


Here, digit $\mathbf{4}$ is opposite to 3 .
20. (B)

$\therefore$ Required direction $=$ South
21. (D) 22. (B) 23. (D) 24. (C) 25. (C)
26. (A) The Cyclical Unemployment refers to the change in the employment rate due to the change in the economic cycle, such as recession and inflation. Simply, the change in employment due to the fundamental shifts in the economy is called as cyclical unemployment.
27. (A) Tinkathia Pratha was the system under which the native peasants of Champaran ( Bihar) were forced to cultivate 3 kathaa Indigo out of every 20 kathaa (Bigha) of land. Peasants of Champaran with the help of Gandhi and Rajendra Prasad organized Satyagraha and led to the abolition of Tinkathia system.
29. (C) The original flag of Bangladesh was designed by painter Kamrul Hassan. On 2 March 1971, the initial version of the flag was hoisted in Bangladesh for the first time at the Dhaka University.
30. (A) The following are the required qualifications for becoming an MLA:

- The candidate must be a citizen of India.
- The age must be 25 years and above.
- As per the Representation of the People Act, 1951, the candidate must be an elector for any constituency in the State he is representing from.
- The candidate must not hold an office of interest under the Government of India.
- Representation of the People Act, 1951, states that any MLA found guilty and convicted by court cannot remain in the post.

32. (B) Dahod district in Gujarat has been ranked first among 108 "aspirational districts" by the NITI Aayog on the basis of incremental development. West Sikkim district stood second.

## NITI AAYOG:

- National Institution for Transforming India
- Formed: 1 January 2015
- Chairman : Narendra Modi
- Vice Chairman : Rajiv Kumar
- CEO : Amitabh Kant
- Headquarters: New Delhi.

35. (B) Satapatha Brahmana is the Vedic text which mentioned the western and eastern seas for the first time. It belongs to the later part of the Brahmana period of Vedic Sanskrit.
36. (A) Chand Bardai was a Hindu charan and the court poet of the Indian king Prithviraj III Chauhan, who ruled Ajmer and Delhi from 1165 to 1192 . A native of Lahore, Chand Bardai composed the Prithviraj Raso, an epic poem in Hindi about the life of Prithviraj.
37. (D) Jupiter is the largest planet of the solar system. It is thought to have a small, hot rocky core. This is surrounded by concentric layers of hydrogen. The fastest rotating planet around the axis is Jupiter
which takes approximately 9 hrs to spin once.
38. (C) Polyethylene, polypropylene, polyvinyl chloride, polystyrene, acrylic, nylon and Teflon are examples of thermoplastics. Thermo-softening plastic, or thermoplastic, becomes soft and flexible at a certain temperatures and solidifies on cooling.
39. (B) A respiratory pigment is any molecule that increases the oxygen carrying capacity of blood. The oxygen carrying capacity is simply the amount of oxygen the red blood cells in our blood can carry to our tissues and organs. In humans and other vertebrates, the most common respiratory pigment is a protein called hemoglobin.
40. (C) Polish track star Irena Szewinska, who won Olympic gold medals in three different events, has passed away recently. She was 72 and the only athlete, male or female, to hold the World record in the $100 \mathrm{~m}, 200 \mathrm{~m}$ and 400 m .
41. (C) Bharata Natyam is a dance form of Southern India. In ancient times the dance was known as "Sadirattam" which means "court dance" and was danced in temples of South India by the devadasis. Through this dance the devadasis worshiped the Gods ond told different stories from Indian mythology.
42. (B) Part XVII is a compilation of laws pertaining to the constitution of India as a country and the union of states that it is made of. This part of the constitution consists of Articles on Official Language.
43. (C) The hills, Black, Blue and Green Hill, are located in western South Dakota, and extended to the into eastern Wyoming, USA.
44. (A) Under Article 109 (1), a Money Bill cannot be introduced in Rajya Sabha. Once passed by Lok Sabha, it is sent to Rajya Sabha - along with the Speaker's certificate that it is a Money Bill - for its recommendations. However, Rajya Sabha can neither reject nor amend the Bill, and must return it within 14 days, after which

Lok Sabha may choose to accept or reject all or any of its recommendations. In either case, the Bill is deemed to have been passed by both Houses. Under Article 109(5), if Rajya Sabha fails to return the Bill to Lok Sabha within 14 days, it is deemed to have been passed anyway. The Lok Sabha Speaker presides, and the Bill is passed if it is backed by a majority of the total number of members of both Houses present and voting.
49. (C) Newton's Second Law: The rate of change of momentum of an object is directly proportional to the resultant force applied and is in the direction of the resultant force. The resultant force is equal to the rate of change of momentum.
50. (C) 4th Australia India Education Council (AIEC) meeting was held at Adelaide, Australia. India and Australia have decided to step up institution partnership, collaboration in school policy, skill development and vocational education.
51. (B) $y^{2}=x . z$ (given)
$2 b=a+c$ (given)
$\Rightarrow b+b=a+c$
$\Rightarrow b-c=a-b$
Now, $x^{b-c} \cdot y^{c-a} \cdot z^{a-b}$
$=x^{a-b} \cdot y^{c-a} \cdot z^{a-b}$
$=(x . z)^{a-b} \cdot(y)^{c-a}$
$=(y)^{2(a-b)} \cdot(y)^{c-a}$
$=(y)^{2}$
$=(y)^{a+c-2 b}=(y)^{2 b-2 b}$
$=y^{\rho}$
$=1$
52. (A) $\frac{b}{y}+\frac{z}{c}=1$ (given)
$\Rightarrow \frac{b}{y}=1-\frac{z}{c}=\frac{c-z}{c}$
$\Rightarrow \quad \frac{y}{b}=\frac{c}{c-z}-\cdots-(\mathrm{i})$
and, $\frac{c}{z}+\frac{x}{a}=1$
$\Rightarrow \frac{x}{a}=1-\frac{c}{z}=\frac{z-c}{z}$
$\Rightarrow \quad \frac{a}{x}=\frac{z}{z-c}-$
Now, $\frac{a \cdot b+x \cdot y}{b \cdot x}=\frac{a}{x}+\frac{y}{b}$
From (i) and (ii), we get
$=\frac{Z}{Z-c}+\frac{c}{c-Z}$
$=\frac{z}{z-c}-\frac{c}{z-c}$
$=\frac{z-c}{z-c}=\mathbf{1}$
53. (C) $\mathrm{a} \mathrm{x}^{2}+\mathrm{b} x+\mathrm{c}=0$

If $\alpha$ and $\beta$ are the roots, then $\alpha+\beta=$
$\frac{-b}{a}$ and $\alpha . \beta=\frac{c}{a}$
$(\alpha+1)(\beta+1)$
$=\alpha \cdot \beta+(\alpha+\beta)+1$
$=\frac{c}{a}+\left(\frac{-b}{a}\right)+1$
$=\frac{\mathbf{c}-\mathbf{b}+\mathbf{a}}{\mathbf{a}}$
54. (C) Smallest number ( N ) that has 5 factors $=$ $16(1,2,4,8,16)$
$\therefore \quad(\mathrm{N}-1)=15$
Factors of $15=1,3,5,15=4$
So, $X=4$
Required value $=N-X=16-4=12$
55. (C) $2 \sqrt[3]{32}-33 \sqrt[3]{4}+\sqrt[3]{500}$
$2 \sqrt[3]{2^{3} \cdot 4}-3 \sqrt[3]{4}+\sqrt[3]{5^{3} \times 4}$
$=2.2 \sqrt[3]{4}-3 \sqrt[3]{4}+5 \sqrt[3]{4}$
$=9 \sqrt[3]{4}-3 \sqrt[3]{4}$
$=6 \sqrt[3]{4}$
56. (C) A.T.Q,
$16 \times 20 \mathrm{~W} \times 2=1 \times 16 \mathrm{M} \times 15$
$\Rightarrow \frac{\mathbf{8}}{\mathbf{3}}=\frac{M}{W}$
57. (C) Let two numbers be $a$ and $b$.
arithmetic mean $=\frac{a+b}{2}=10$
$\Rightarrow \quad a+b=20$
Geometric mean $=\sqrt{a \cdot b}=8$
$\Rightarrow a . b=64$
From (i) and (ii), we get
$a=16, b=4$
$\therefore$ Two numbers are 16 and 4.
58. (D) $\sin ^{4} \theta-\cos ^{4} \theta$
$=\left(\sin ^{2} \theta\right)^{2}-\left(\cos ^{2} \theta\right)^{2}$
$=\left(\sin ^{2} \theta+\cos ^{2} \theta\right)\left(\sin ^{2} \theta-\cos ^{2} \theta\right)$
$=(1)\left(1-\cos ^{2} \theta-\cos ^{2} \theta\right)$
$=\left(1-2 \cos ^{2} \theta\right)$
59. (A) $\mathrm{m}_{1}=\frac{y_{2}-y_{1}}{x_{2}-x_{1}}=\frac{0-3}{2-(-2)}=\frac{-3}{4}$

Let the slope of required line be $\mathrm{m}_{2}$

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$\therefore \quad \mathrm{m}_{1} \times \mathrm{m}_{2}=-1$
$\Rightarrow \quad \frac{-3}{4} \times \mathrm{m}_{2}=-1$
$\Rightarrow \quad \mathrm{m}_{2}=\frac{\mathbf{4}}{\mathbf{3}}$
60. (C) 4096

So, Total Numbers = $\mathbf{1}$
61. (A) Required total surface area $=6 \pi r^{2}-4 \pi r^{2}$
$=2 \pi r^{2}$
$=2 \times \frac{22}{7} \times \frac{7}{2} \times \frac{7}{2}$
$=77 \mathrm{~cm}^{2}$
62. (D) Let M.R.P $=100 \%$

Discount = 23\%
$\therefore \quad$ Selling price $=77 \%$
ATQ,
$\Rightarrow 77 \%=1848$
$\Rightarrow 1 \%=\frac{1848}{77}$
$\Rightarrow \quad 100 \%=\frac{1848}{77} \times 100=\mathbf{2 4 0 0}$
63. (A) $a_{3}=a+2 d=13$

From (i) and (ii), we get

$$
\begin{array}{rlrl} 
& d=4 & \text { and } a=5 \\
\therefore & a_{13}=a+12 d=5+12(4)=\mathbf{5 3}
\end{array}
$$

64. (D) Total surface Area $=\frac{1}{2} \times$ (perimeter of base) $\times$ slant height of pyramid + Area of base
$=\left[\frac{1}{2} \times 40 \times \sqrt{5^{2}+12^{2}}+10 \times 10\right]$
$=260+100$
$=360 \mathrm{~cm}^{2}$
65. (B) Let total profit $=100$ units

Profit left after donation $=(100-5)$
$=95$ units
Share of $x=\frac{3}{5} \times 95=57$
ATQ,
57 units $=8550$
1 unit $\rightarrow \frac{8550}{57}$
100 units $\rightarrow ₹ \mathbf{1 5 , 0 0 0}$
66. (A) No. of vertices of prism (v) $=6$

No. of edges of prism (e) $=9$

No. of faces of prism ( f ) $=5$
$\therefore \quad$ Required value $=\mathrm{v}+\mathrm{e}+\mathrm{f}=6+9+5=\mathbf{2 0}$
67. (A) $\frac{3}{1^{2} \times 2^{2}}+\frac{5}{2^{2} \times 3^{2}}+\frac{7}{3^{2} \times 4^{2}}+-----+$
$\frac{19}{9^{2} \times 10^{2}}$
Difference of denominator $=2-1=1$
using formula $=\frac{1}{\begin{array}{l}\text { Difference of } \\ \text { denominator value }\end{array}}$
$\left[\frac{1}{1^{\text {st }} \text { term }}-\frac{1}{\text { Last term }}\right]$
$=\frac{1}{1}\left[\frac{1}{1}-\frac{1}{100}\right]=\frac{\mathbf{9 9}}{\mathbf{1 0 0}}$
68. (D) Price paid by $A=91 \times \frac{100}{104} \times \frac{100}{105}$
$=₹ \mathbf{8 3 . 3 3}$
69. (C) Let third proportional be $n$

ATQ,
12: 18:18:n
$\Rightarrow \quad \frac{12}{18}=\frac{18}{n}$
$\Rightarrow \mathrm{n}=\frac{18 \times 18}{12}$
$\Rightarrow \mathrm{n}=27$
70. (B) $0.34 \overline{67}=0.34676767$
$0.13 \overline{33}=0.13333333$
$0.34 \overline{67}+0.13 \overline{33}=0.48010101$
$=0.48 \overline{\mathbf{0 1}}$
71. (C) ATQ,
$3 \mathrm{~A}=2 \mathrm{~B}=12 \mathrm{C}$
A: B: C $=2 \times 12=3 \times 12: 3 \times 2$
$\mathrm{A}: \mathrm{B}: \mathrm{C}=\mathbf{4}: \mathbf{6 : 1}$
72. (D) In $2012 \& 2015$ the net exports was more than that of the previous year.
73. (D) In 2013,
$($ exports - Imports $)=-10$
$\Rightarrow 90$ - Imports $=-10$
$\Rightarrow$ Imports $=\mathbf{1 0 0}$ million USD
74. (D) Required ratio $=\frac{30}{20}=\mathbf{3}: \mathbf{2}$
75. (C) Required net exports $=20-10-20+30$

$$
=20
$$



MEANINGS IN ALPHABETICAL ORDER



## SSC MOCK TEST - 155 (ANSWER KEY)

| 1. | (A) | 26. | (A) | 51. | (B) | 76. | (A) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. | (B) | 27. | (A) | 52. | (A) | 77. | (C) |  |  |
| 3. | (C) | 28. | (D) | 53. | (C) | 78. | (B) | Fncilish tor general | English, |
| 4. | (C) | 29. | (C) | 54. | (C) | 79. | (D) | - | $\pm$ cmenm |
| 5. | (B) | 30. | (A) | 55. | (C) | 80. | (B) |  | e. 23 |
| 6. | (D) | 31. | (D) | 56. | (C) | 81. | (A) | Now | Or7 |
| 7. | (D) | 32. | (B) | 57. | (C) | 82. | (A) | N |  |
| 8. | (C) | 33. | (D) | 58. | (D) | 83. | (B) | 0 |  |
| 9. | (A) | 34. | (C) | 59. | (A) | 84. | (B) |  |  |
| 10. | (A) | 35. | (B) | 60. | (C) | 85. | (D) |  | - |
| 11. | (B) | 36. | (A) | 61. | (A) | 86. | (A) |  | tu Singh |
| 12. | (A) | 37. | (D) | 62. | (D) | 87. | (B) | 10, Neters som |  |
| 13. | (B) | 38. | (C) | 63. | (A) | 88. | (D) | 2-¢亿KD Publication | KD Publication |
| 14. | (B) | 39. | (A) | 64. | (D) | 89. | (B) |  |  |
| 15. | (A) | 40. | (B) | 65. | (B) | 90. | (B) |  |  |
| 16. | (B) | 41. | (C) | 66. | (A) | 91. | (D) | * | 7ers |
| 17. | (C) | 42. | (C) | 67. | (A) | 92. | (A) |  |  |
| 18. | (C) | 43. | (C) | 68. | (D) | 93. | (D) | 5 | $1!81$ |
| 19. | (B) | 44. | (B) | 69. | (C) | 94. | (C) | volt | Vot.2) |
| 20. | (B) | 45. | (B) | 70. | (B) | 95. | (B) |  |  |
| 21. | (D) | 46. | (C) | 71. | (C) | 96. | (A) |  |  |
| 22. | (B) | 47. | (A) | 72. | (D) | 97. | (B) |  |  |
| 23. | (D) | 48. | (A) | 73. | (D) | 98. | (D) |  |  |
| 24. | (C) | 49. | (C) | 74. | (D) | 99. | (C) |  | mamm |
| 25. | (C) | 50. | (C) | 75. | (C) | 100 | (A) |  |  |

76. (A) 'Only' will come before 'a subsidiary vole' as it qualifies it.
77. (C) Change 'mean' into 'means' where 'means' denote 'an instrument by which an act can be accomplished'.
78. (B) 'Spectrum' means 'a range or scale of something.'
79. (D) 'Manifestation' means 'a sign that shows something clearly.
80. (B) Change 'involves takes' into 'involves taking' because 'involve + v4' is always used.
For ex: To accept the position your offer would involve my living in London.
91.(D) No improvement.

Hold somebody prisoner/ hostage/ captive is used.


Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003

Note:- Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the doubts. Join the group and you may also share your suggestions and experience of
Sundau Mock Test.
Note:- If you face any problem regarding result or marks scored, please contact 9313111777

