## SSC MOCK TEST - 116 (SOLUTION)

1. (B) Anemia is a disease caused due to lack of Iron. Similarly, Goiter is caused due to lack of Iodine.
2. (C)


Similarly,

3. (A) $(5-1)^{2}+(4-1)^{2}=25$

Similarly, $(9-1)^{2}+(4-1)^{2}=73$
4. (D) Except 633, all others are multiple of 11.
5. (D) $50 \rightarrow 63 \Rightarrow 7^{2}+1 \rightarrow 8^{2}-1$
$122 \rightarrow 143 \Rightarrow 11^{2}+1 \rightarrow 12^{2}-1$
$170 \rightarrow 195 \Rightarrow 13^{2}+1 \rightarrow 14^{2}-1$
$\mathbf{2 2 7} \rightarrow \mathbf{2 5 8} \Rightarrow \mathbf{1 5}^{\mathbf{2}}+\mathbf{2} \rightarrow \mathbf{1 6}^{\mathbf{2}} \mathbf{+ 2}$
6. (D)

$\mathrm{A} \quad \mathrm{D}$ H $\quad \mathbf{M} \mathbf{F} \quad \mathbf{J} \quad \mathbf{M} \quad \mathbf{R}$

7. (C) Flunchers $\rightarrow$ Flunching $\rightarrow$ Flunpites $\rightarrow$

Fluntlock $\rightarrow$ Fluntlocks
8. (C)
$\underline{\boldsymbol{x}} y z a a \underline{z} y \underline{x} x y \underline{z} a a z y \underline{x}$
9. (B) $\mathbf{C}>\mathrm{B}>\mathrm{D}>\mathrm{A}>\mathrm{E}$
10. (B)

$$
\text { Required Number }=64-(17+11)+1
$$

$$
=37^{\text {th }}
$$

11. (B)

12. (A)

13. (B)

14. (A)


Similarly

15. (C) $10-2 \neq 5 \div 5+5$
$10+2-5 \div 5 \neq 5$
$\mathbf{1 0} \div \mathbf{2}+\mathbf{5} \mathbf{- 5} \mathbf{= 5}$
$10-2 \div 5+5 \neq 5$
16.
(C) $8^{2}-45=19$
$10^{2}-54=46$
$\mathbf{1 1}^{\mathbf{2}}-77=44$
17. (B) $3 \times 2=6 \Rightarrow 6 \times \frac{3}{2}=9$
$8 \times 2=16 \Rightarrow 16 \times \frac{3}{2}=24$
$17 \times 2=\mathbf{3 4} \Rightarrow \mathbf{3 4} \times \frac{3}{2}=51$
18. (D) $(1+5)^{2}=36$
$(4+9)^{2}=169$
$(3+7)^{2}=\mathbf{1 0 0}$
19. (B)
)

I. False
II. False
20. (C)

21. (A)
22. (D)
23. (B)
24. (C)
25. (A)
26. (A) Force Motors chairman Abhay Firodia has been elected as the new president of Society of Indian Automobile Manufactures. Headquarter of SIAM is in New Delhi. Rajan Wadhera has been elected as the new vice president of the organization
27. (A) Men's Single in the 2017 US Open Tennis Tournament was won by Rafael Nadal. Nadal Captured the third US open title and he defeated Kevin Anderson.
28. (B) Benzazir Bhutto is the author of the book "Pakistan the Gathering Storm".
29. (C) Qutub Minar world heritage site comprises the tomb of Iltumish
30. (C) Highest civilian honour received by Mary Kom is Padma Bhushan. She is five times winner at National Boxing Championship and she is the first Indian women boxer to get a Gold Medal in the Asian Games in 2014 in Incheon, South Korea. She is nominated MP in Rajya Sabha in sports Catagories.
31. (B) Tramadol is used for Pain Relief.
32. (D) Sugarcane is a type of grass. It is used in Production of Sugar. India is the second largest sugar producing country Brazil is the first. India is also first in sugar consumption. Maharashtra is the largest sugar producing state in India followed by Uttar Pradesh.
33. (B) Antonie Philips van Leenwenhoek is commonly knows as "the father of Microbiology"
34. (C) Neoprene is a Synthetic rubber. It has heat and water resistant proporty
35. (D) Nacl has ionic bonds like $\mathrm{Na}^{+}$and $\mathrm{Cl}^{-}$. It is commonly used in food.
36. (D) 1024 Bytes is equivalent to 1 Kilobyte.
37. (B) Marathi is the official language of Dadra and Nagar Haveli. It's capital is Silvas. Hindi and Gujrati are also its official language. Dhodia, Dubla, Kathodi etc are its Tribes.
38. (D) The coastal City of Kochi is hosting the BWF World Senior Badminton Cham pionship. The Championship is been held in India for the first time. BWF world Senior Badminton Championship 2015 was held in Helsingborg, Sweden.
40. (D) For the aquatic organisms, the source of food is phytoplankton. Phytoplankton are the first link in the food chain They are primary producers.
41. (C) Hemoglobin has the highest affinity with Carbon monoxides (Co). Co is produced by fuel, gas, oil, kerosene, wood etc. When we breath Co replace the oxygen and dissolve in our blood and in the absence of oxygen, cells die.
44. (A) Badrinath city is located on the bank of the river Alaknanada, Allahabad on the bank of Ganga, Ayodhya on the bank of Saryu and Lucknow on the bank of Gomti
45. (B) Kalinga war was fought in the year of 261 BC against Kalinga Dynasty by Ashoka.
46. (B) The league of Nations was formed at the end of world war II on 24 October 1995. United Nation Day is celebrated on $24^{\text {th }}$ October.
47. (A) Charles Darwin developed the theory of Evolution.
48. (B) Light year, Astronomical Unit, Parsec are the unit at distance while Long sec is not the unit at distance.
49. (C) The apparent weight at a person in a lift which is moving down with uniform acceleration is less than the weight when the person is stationary.
50. (C) The form of power structure in which power effectively rests with a faction of person or families is called oligarchy. Ohgarchy means 'ruled by few'.
51. (C) ATQ,
efficiency A B

$$
2.5 \quad 1
$$

then, $2.5-1=12$ days

then, 7 unit is done in 2 days
Such pairs will be 5
then, Remaining work $=40-7 \times 5=5$
work done by A in one day $=5$
then, Total time $=5 \times 2+1=\mathbf{1 1}$ days
52. (C) ATQ,

LCM of $(13,43$ and 26$)=1118$
So, Required number $=1118-1113=\mathbf{5}$
53. (C) ATQ,

Let the larger diagonal $=100 x$
then, square of $\quad:$ area of rhombus larger diagonal

| $(100 x)^{2}$ | $:$ | $\frac{100 x \times 35 x}{2}$ |
| :---: | :--- | :---: |
| 40 | $:$ | 7 |

Hence, Ratio of those $=40: 7$
54. (A) ATQ,

Required profit
$=\frac{\left((100-34)-\frac{(100-25)}{(100+25)} \times 100\right)}{\frac{(100-25)}{(100+25)} \times 100} \times 100=\mathbf{1 0 \%}$
55. (B) ATQ,
$\mathrm{A}: \mathrm{B}: \mathrm{C}$
$6: 4$
4 : 5
$6: 4: 5$
then, $(\mathrm{A}+\mathrm{B})^{3}:(\mathrm{B}+\mathrm{C})^{3}:(\mathrm{C}+\mathrm{A})^{2}$

| $(10)^{3}$ | $:(4+5)^{3}$ | $:(6+5)^{2}$ |  |
| :---: | :---: | :---: | :---: |
| 1000 | $: 729$ | $:$ | $\mathbf{1 2 1}$ |

56. (D) ATQ,

Distance travelled by man till 2:00 pm + one hour rest $=15 \times 3=45 \mathrm{~km}$

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

Travelling till 2:00 +1 hour $=3: 00 \mathrm{PM}$
So, Distance travelled by man till 3:00 $\mathrm{pm}=45 \mathrm{~km}$
Again, Distance travelled by another man till 3:00 pm $=25 \mathrm{~km}$
So, Time to cross one-another
$=\frac{45-25}{25-15}=2$ hours
Hence, Required time $=3: 00 \mathrm{pm}+$ 2hours
$=5: 00 \mathrm{pm}$
57. (A) ATQ,
$47 \%-35 \%=36$
$\Rightarrow 12 \%=36$
$\Rightarrow 100 \%=300$
Hence, maximum number $=\mathbf{3 0 0}$
58. (B) ATQ,

Required value $=\frac{90 \times 100}{(100-25)}=\mathbf{1 2 0}$
59. (B) ATQ,

Total present age $=30 \times 3+6 \times 3$
$=108$ years
then, Required age $=108-(46 \times 2+3 \times 2)$
$=10$ years
60. (B) ATQ,

then, $y=9 \quad$ and
$3 y+z=29$
$\Rightarrow \quad z=2$
Hence, Required rate $=\frac{2}{9} \times 100=\frac{\mathbf{2 0 0}}{\mathbf{9}} \%$
61. (A) ATQ,
$a^{3}+b^{3}+c^{3}=3 a b c$
then, $a+b+c=0$
Hence, $(\mathrm{a}+\mathrm{b}+\mathrm{c})^{3}=\mathbf{0}$
62. (B) ATQ,
$x+\frac{1}{x}=9$ $\qquad$
taking cube on both sides
$\Rightarrow x^{3}+\frac{1}{x^{3}}=729-27=702$
Taking square of both sides of equation (i)
$\Rightarrow x^{2}+\frac{1}{x^{2}}=9^{2}-2=79$ $\qquad$
multiply equation (ii) and equation (iii)
$x^{5}+\frac{1}{x^{5}}+x+\frac{1}{x}=702 \times 79$
$\Rightarrow x^{5}+\frac{1}{x^{5}}=55458-9=55449$
63. (B) ATQ,

$$
\begin{aligned}
& a(a+b+c): b(a+b+c): c(a+b+c) \\
& 45: 75 \text { : } 105 \\
& \Rightarrow \quad \mathrm{a} \quad \mathrm{~b} \quad \text { : c } \\
& 9 \text { : } 15 \text { : } 21 \\
& 3 \text { : } 5 \text { : } 7
\end{aligned}
$$

64. (D) ATQ,

$$
x^{2}+\frac{1}{x^{2}}=1
$$

square on both sides,

$$
\Rightarrow x+\frac{1}{x}=\sqrt{3}
$$

Taking cubes on both sides,
$\Rightarrow x^{3}+\frac{1}{x^{3}}=3 \sqrt{3}-3 \sqrt{3}=0$
$\Rightarrow x^{6}+1=0$
then, $x^{36}\left(x^{6}+1\right)+x^{24}\left(x^{6}+1\right)+x^{2}\left(x^{6}+1\right)+3=\mathbf{3}$ $\left[\therefore x^{6}+1=0\right]$
65. (D) ATQ,
$4 x+3 x+3 x=40$
$\Rightarrow \quad x=4$
So, sides $=12,12$ and 16
then, area of triangle $=\frac{1}{2} \times 16 \sqrt{12^{2}-\frac{16^{2}}{4}}$

$$
\begin{aligned}
& =\frac{1}{2} \times 16 \sqrt{80} \\
& =32 \sqrt{5}=\mathbf{7 1 . 5 5} \mathbf{~ c m}^{2}
\end{aligned}
$$

66. (B) ATQ,
$\angle \mathrm{ABD}=90^{\circ}$
(angle made in semicircle)
So, $\angle \mathrm{CBE}=30^{\circ}$
and $\angle \mathrm{ECB}=180^{\circ}-60^{\circ}=120^{\circ}$
[ $\therefore$ ACB $=60^{\circ}$, angle of equilateral triangle]
then, $\mathrm{CEB}=180^{\circ}-120^{\circ}-30^{\circ}=30^{\circ}$

|  | Hence, $\angle \mathrm{CEB}$ | $:$ | $\angle \mathrm{CBE}$ |
| :---: | :---: | :---: | :---: |
| $\Rightarrow$ | $30^{\circ}$ | $:$ | $30^{\circ}$ |
| $\Rightarrow$ | $\mathbf{1}$ | $\mathbf{:}$ | $\mathbf{1}$ |

67. (B) ATQ,

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

$\angle \mathrm{DCB}=60^{\circ}$
then,
$\triangle B C D$ is an isosceles triangle because $\mathrm{BC}=\mathrm{CD}$

So, $\angle \mathrm{CDB}=\angle \mathrm{CBD}=60^{\circ}$
Hence, $\triangle \mathrm{BCD}$ in an equilateral triangle with side $\mathbf{1 0 c m}$
68. (C) ATQ,
$\frac{x(x-3)}{2}=2 x$
$\Rightarrow \quad x=7$
Hence, Required sum $=7+2 \times 7=\mathbf{2 1}$
69. (B) ATQ,

$$
\begin{aligned}
& \frac{\sin 2 \mathrm{~A}}{\left(1+\tan ^{2} \mathrm{~A}\right) \cot \mathrm{A}}=\frac{2 \sin \mathrm{~A} \cos \mathrm{~A}}{\sec ^{2} A \times \frac{\cos A}{\sin A}} \\
= & \frac{2 \sin \mathrm{~A} \times \cos \mathrm{A} \times \sin \mathrm{A} \times \cos \mathrm{A} \times 2}{2}=\frac{\sin ^{2} \mathbf{2 A}}{2}
\end{aligned}
$$

70. (C) ATQ,
$\frac{\operatorname{cosec} A}{\tan A+\cot A}=\frac{\operatorname{cosec} A}{\frac{\sin ^{2} A+\cos ^{2} A}{\sin A \cos A}}$

$$
=\frac{\sin A \cos A}{\sin A}=\cos A=\frac{1}{\sec A}
$$

71. (C) ATQ,
$1+\tan A \tan \frac{A}{2}=\frac{\tan A-\tan \frac{A}{2}}{\tan \left(A-\frac{A}{2}\right)}$
$=\frac{\tan A}{\tan \frac{A}{2}}-\frac{\tan \frac{A}{2}}{\tan \frac{A}{2}}$
$=\cot \frac{A}{2} \tan A-1$
72. (B) ATQ,

Required difference $=\frac{23-13}{100} \times 1400$
73. (C)

ATQ, Ratio
Avg. for : Avg. for remaining
Nike and Adidas brand
$\frac{(18+25)}{100} \times 1400: \quad \frac{(100-43) \times 1400}{3 \times 100}$
74. (B) ATQ,

38

Required sum $=\frac{(21+13+23)}{100} \times 1400$
$=798$
75. (A) ATQ,

Total number $=\frac{18 \times 1400}{100}=\mathbf{2 5 2}$


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

## MEANINGS IN ALPHABETICAL ORDER

## Word <br> Agglutinate

Catechumen

## Cleave

Conductor
Excoriate
Flay
Gnome
Heave
Hew
Maestro
Neophyte
Peel
Prune
Runt
Scalp
Sheath
Sheath

Sheath
Shrimp
Sophomore
Troll

Troll
Wimp
Worthwhile

## Meaning in English

To cause to adhere
One receiving instruction in the basic doctrines of Christianity

To split or severe (something) especially along a natural line

The leader of a musical ensemble
To censure scathingly
To strip off the skin or surface
An ageless and often deformed dwarf
Lift or haul (something heavy)
To cut with blows of a heavy cutting instrument
A master usually in an art
A person who is new to a subject
To strip off an outer layer of
To cut off dead or unwanted parts of a bush or tree
A person of small stature
The part of the integument of the human head usually covered with hair

A case for a sword
An investing cover or case of a plant or animal body

A person small in height
A student in the second year of college
A dwarf or giant in Scandinavian folklore inhabiting caves or hills
To cause to move round and round
A weak, cowardly or ineffectual person
Being worth the time or effort spent

Meaning in Hindi
चिफ्क ना
ई स इ र्ध्म के मू लभ $T_{\circ}$ तचि
ले रहा अनु य ये
विभ $T T$ जि क्रना

सं गी तनिदे ${ }^{`}$ वर क
ज्म के ड ${ }^{\text {T }}$ ट ना
चमड. $१$ उ ता रना
बा' ना आ दमी
भ $T T$ री समा न उ ठ $T$ ना
कु ल हा ड. $\cap$ से का ट ना
निपु प
नाँ सिखि य
बा हरी प्रतनिका लना
छँ ट T ई करना
छा' ट' कद का आ दमी
ख $\dagger^{\prime}$ पड. $\uparrow$

I य न
अ वरप

ना ट T आ दमी
दू से वण ${ }^{\circ}$ का छाラT
बा ना आ दमी

गा' ल गा' ल हा, मा ना
कमजों र अ दमी
ला 9 T प्र द

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
SSC MOCK TEST - 116 (ANSWER KEY)

| 1. | (B) | 26. | (A) | 51. | (C) | 76. | (C) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. | (C) | 27. | (A) | 52. | (C) | 77. | (C) |
| 3. | (A) | 28. | (B) | 53. | (C) | 78. | (A) |
| 4. | (D) | 29. | (C) | 54. | (A) | 79. | (B) |
| 5. | (D) | 30. | (C) | 55. | (B) | 80. | (D) |
| 6. | (D) | 31. | (B) | 56. | (D) | 81. | (C) |
| 7. | (C) | 32. | (D) | 57. | (A) | 82. | (A) |
| 8. | (C) | 33. | (B) | 58. | (B) | 83. | (A) |
| 9. | (B) | 34. | (C) | 59. | (B) | 84. | (C) |
| 10. | (B) | 35. | (D) | 60. | (B) | 85. | (A) |
| 11. | (B) | 36. | (D) | 61. | (A) | 86. | (D) |
| 12. | (A) | 37. | (B) | 62. | (B) | 87 | (C) |
| 13. | (B) | 38. | (D) | 63. | (B) | 88. | (B) |
| 14. | (A) | 39. | (C) | 64. | (D) | 89. | (A) |
| 15. | (C) | 40. | (D) | 65. | (D) | 90. | (A) |
| 16. | (C) | 41. | (C) | 66. | (B) | 91. | (B) |
| 17. | (B) | 42. | (C) | 67. | (B) | 92. | (A) |
| 18. | (D) | 43. | (B) | 68. | (C) | 93. | (B) |
| 19. | (B) | 44. | (A) | 69. | (B) | 94. | (C) |
| 20. | (C) | 45. | (B) | 70. | (C) | 95. | (D) |
| 21. | (A) | 46. | (B) | 71. | (C) | 96. | (A) |
| 22. | (D) | 47. | (A) | 72. | (B) | 97. | (B) |
| 23. | (B) | 48. | (B) | 73. | (C) | 98. | (D) |
| 24. | (C) | 49. | (C) | 74. | (B) |  | (B) |
| 25. | (A) | 50. | (C) | 75. | (A) | 100 | (B) |

82. (A) The sentence is in active voice. Thus replace 'to be asked' with 'to ask'.
83. (A) 'Knocked out by someone' means 'to make someone unconscious'.
84. (A) Hardly, scarcely, rarely etc are negative adverbs. They have negative meaning so we use them without another negative word. The correct sentence will be 'Mother hardly knows...'. So remove 'not' from part 'A'.
85. (B) Replace 'doors' with 'door'.

Mock 115 Corrections
77. (A)
91. (D)
92. (B)
93. (A)
99. (C)

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 Sunday Mock Test.

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

