## SSC MOCK TEST - 115 (SOLUTION)

1. (D) Woodcutter works with Axe. Similarly, Tailors works with Needle.
2. (C) As, E K M R


Similarly,

3. (C) $(12)^{2}-2=142$ Similarly, $(17)^{2}-2=\mathbf{2 8 7}$
4. (B) Except Option B, in all others, 1st belongs to 2nd.
5. (A)

6. (D) Except $83-97$, all others are two continuous prime numbers.
7. (A) Beep $\rightarrow$ Boxed $\rightarrow$ Boxer $\rightarrow$ Brain $\rightarrow$ Brand
8. (C)

9. (B)


Similarly, S T R A Y
DEUVT

10. (B)
11. (C)

13. (A)

14. (C) $32 \times 2+8 \neq 14 \div 4$
$32+2+8 \neq 14 \times 4$
$\mathbf{3 2} \times \mathbf{2 - 8}=\mathbf{1 4} \times \mathbf{4}$
$32 \div 2 \times 8 \neq 4 \times 4$
15. (A)
$\mathbf{2 4} \div \mathbf{8} \times \mathbf{9 + 9} \mathbf{- 1 0}=\mathbf{2 6}$
$24 \times 8 \div 9-9+10 \neq 26$
$24+8 \div 9 \times 9-10 \neq 26$
$24 \times 8-9+9 \div 10 \neq 26$
16. (A) $3+3+3+5=14$
$6+2+2+4=14$
$5+5+3+\mathbf{1}=14$
17. (B) $3+4+(4)^{2}=23$
$4+6+(3)^{2}=19$
$2+5+(3)^{2}=16$
18. (A)
$3+2+8+6+4+2=25$
$4+4+4+5+3+5=25$
$9+1+9+2+3+\mathbf{1}=25$
20. (C)
21. (C)
19. (A)
22. (D)
23. (D)
24. (C)
25. (B)
26. (B) The Shompen are the indigenous people of the interior of Great Nicobar Island, part of the Indian union territory of Andaman and Nicobar Islands. The Shompen are designated Scheduled Tribe.
27. (C) The Pangolakha Wildlife Sanctuary (PWS) is located in the East Sikkim district of the state of Sikkim. The total notified area of the park is around 123 square kilometres while inside the wildlife sanctuary there are a few hamlets: Aritar, Lingtam, Phadamchen, Gnathang valley and Kupup. This wildlife sanctuary is linked to the forests of Bhutan and Neora Valley National Park of West Bengal. It is home to many birds such as kalij pheasant, Oriental honey buzzard, blood pheasant, white-crested laughing thrush, striated laugh in thrush, etc. It is also home to some rare species like the speckled wood pigeon and bay woodpecker.
29. (B) In India, at present, there are 6 Zonal Council. Originally five councils were

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
created as per the States Reorganization Act 1956 which are as follows: Northern Zonal Council, Central Zonal Council, Eastern Zonal Councils, Southern Zonal Council, Western Zonal Council. The North East Council was set up in 1971.
30. (B) Adam West (88), the well-known US actor, passed away in Los Angeles, United States. He was the popular star of 1960s "Batman" TV show.
31. (C) Rank in order of precedence :-

1. President- Ram Nath Kovind
2. Vice-Presideny-Mohammad Hamid Ansari
3. Prime Minister-Narendra Modi
4. Governors of states of India (Within their respective States)
5. Former Presidents - Pratibha Patil
6. (D) A conjugated protein is a protein that functions in interaction with other (non-polypeptide) chemical groups attached by covalent bonding or weak interactions. Some examples of conjugated proteins are lipoproteins, opsins and chromoproteins. Hemoglobin contains the prosthetic group known as heme.
Each heme group contains an iron ion $\left(\mathrm{Fe}^{2+}\right)$ which forms a co-ordinate bond with an oxygen molecule $\left(\mathrm{O}_{2}\right)$, allowing hemoglobin to transport oxygen through the bloodstream.
7. (A) Those who suffer from astigmatism cannot see objects clearly, when the light from certain parts falls on the retina and the rest falls on either behind the retina or in front of it. This is caused by the irregular curvature of the cornea.
8. (C) There are three main measurements of humidity: absolute, relative and specific.

- Absolute humidity is the water content of air expressed in gram per cubic meter.
- Relative humidity, expressed as a percent, measures the current absolute humidity
Relative to the maximum (highest point) for that temperature.
- Specific humidity is the ratio of the mass of water vapour to the total mass of the moist air parcel.

35. (A) George Robert Stiblitz (April 30, 1904 January 31, 1995) in internationally recognized as one of the fathers of the modern first digital computer. He was a Bell Labs researcher known for his work in the 1930s and 1940s on the realizations of Boolean logic digital circuits using electromechanical relays as the switching element.
36. (D) The Ashta Pradhan was designed to encompass all the primary administrative functions of the state, with each minister being given charge of one role in the administration. Ministerial designations were drawn from the Sanskrit language; the eight ministerials were as follows:

- Pantpradhan of Peshwa- Prime Minister, general administration of the Empire.
- Amatya or Mazumdar- Finance Minister, managing accounts of the Empire.
- Sacheev - Secretary, preparing royal edicts.
- Mantri- Interior, Minister, managing internal affairs especially intelligence and espionage.
- Senapati - Commander-in-Chief, managing the forces and defence of the Empire.
- Sumant - Foreign Minister, to manage relationships with other sovereigns.
- Nyayadhish - Chief Justice, dispensing justice on civil and criminal matters.
- Panditrao - High Priest, managing internal religious matters.

37. (B) The Kuroshio current is a warm ocean current flowing Northwards on the west side of the North Pacific ocean. It is a strong Western boundary current. Generally, the currents flow Northwards, in Northern hemisphere and Southwards in Southern hemisphere are warm ocean currents and the opposite are cold ocean currents.
38. (B) The CAG is mentioned in the Constitution of India under Article 148 - 151. The current CAG of India is Shashi Kant Sharma, who was appointed on 23 May 2013. He is the 12th CAG of India.
39. (C) Alkaloids are a group of naturally occurring chemical compounds that mostly contain basic nitrogen atoms. This group also includes some related


2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
compounds with neutral and even weakly acidic properties. Some synthetic compounds of similar structure are also termed alkaloid. In addition to carbon, hydrogen and nitrogen, alkaloids my also contain oxygen, sulphur and, more rarely, other elements such as chlorine, bromine, and phosphorus.
40. (C) The Second Administrative Reforms Commission (ARC) was constituted on $31^{\text {st }}$ August 2005, as a Commission of Inquiry, under the Chairmanship of Veerappa Moily for preparing a detailed blueprint for revamping the public administrative system.
41. (B) The non-metal, conductors of electricity are Graphite and Selenium (Se). Selenium is a better conductor of electricity in light than in darkness. Its conductivity varies directly with the intensity of light.
42. (A) National Program of Nutritional Support to Primary Education, popularly known as the Mid-Day Meal Scheme (MDM) was started in 1995. The Midday Meal Scheme is covered by the National Food Security Act, 2013.
43. (B) The book "Narendra Modi: The Making of a Legend" has been authored by Bindeshwar Pathak, the Sulabh International founder and a Padma Bhushan recipient. The book is recently launched by RSS Chief Mohan Bhagwat in New Delhi.
44. (C) In the anatomy of the brain of vertebrate, the forebrain or prosencephalon is the rostral-most (forward-most) portion of the brain. The forebrain, the midbrain (mesencephalon), and hindbrain (rhombencephalon) are the three primary portions of the brain during early development of the central nervous system. It controls body temperature, reproductive functions, eating, sleeping, and any display of emotions.
45. (A) By the late 19th century till 1920s, India was one of the largest producers and exporters of cotton yarn and wheat. India was the world's main producer of cotton textiles and had substantial export trade to Britain, via East India Company. The export of Indian wheat developed after the Suez Canal opened
in 1869. By 1890s about $17 \%$ of India's wheat was exported.
46. (B) The Indian National Army was formed by India nationalists in 1942 in SouthEast Asia during second World war with aim to secure Indian independence with Japanese assistance. It was organised to fight against the British in India. It was revived by Subhash Chandra Bose in 1943.
47. (D) Dengue fever is a mosquito-borne disease caused by the dengue virus. Symptoms typically begin three to fourteen days after infection. This may include a high fever, headache, vomiting, muscle and joint pains, and a characteristic skin rash. In a small proportion of cases, the disease develops into the life-threatening dengue hemorrhagic fever, resulting in bleeding, low levels of blood platelet and blood plasma leakage, or into dengue shock syndrome, where dangerously low blood occurs.
48. (B) Bagasse is the fibrous matter that remains after sugarcane or sorghum stalks are crushed to extract their juice. It is dry pulpy residue left after the extraction of juice from sugar cane. The industrial process to convert bagasse into paper was developed in 1937 in a small laboratory in Hacienda Paramonga, a sugar mill in the coast of Peru owned by W.R. Grace Company.
49. (B) The Committee on Estimates consists of 30 members who are elected by the Lok Sabha every year from among its members.
50. (C) Megasthenes was an ancient Greek historian, diplomat and Indian ethnographer and explorer in the Hellenistic period, author of the work Indicia. He was born in Asia Minor and became an ambassador of Seleucus Nicator of the Seleucid dynasty possibly to Chandragupta Maurya in Pataliputra, India.
51. (C) ATQ,
$\sqrt{97+56 \sqrt{3}}=\sqrt{49+48+2 \times 7 \times 4 \sqrt{3}}$
$=\sqrt{\left(7+4 \sqrt{3}^{2}\right.}= \pm\left(7+4 \sqrt{3}^{2}\right.$
$\sqrt{97+56 \sqrt{3}}=7+4 \sqrt{3}$
or
$\sqrt{97+56 \sqrt{3}}=-7-4 \sqrt{3}$
52. (B) ATQ,


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

$$
\begin{aligned}
& \sqrt{x}=\sqrt{9+4 \sqrt{5}}=\sqrt{\left(2+\sqrt{5)^{2}}\right.} \\
\Rightarrow & \sqrt{x}=2+\sqrt{5} \\
& \text { Now, } \sqrt{x}+\frac{1}{\sqrt{x}}=2+\sqrt{5}+\frac{(2-\sqrt{5})}{4-5} \\
= & 2+\sqrt{5}+\sqrt{5}-2=\mathbf{2} \sqrt{5}
\end{aligned}
$$

53. (B) ATQ,


Time taken by them $=\frac{60+5 \times 3}{6+5+4}=\mathbf{5}$ days
54. (B) If all books are bought at minimum cost price and are sold at maximum selling price, then there will be maximum profit.
Hence, Maximum profit $=375 \times 25-200 \times 25$

$$
=175 \times 25=₹ 4375
$$

55. (C) ATQ,

$$
\text { Cost Price }=1428 \times \frac{100}{100-20} \times \frac{100}{(100-12.5)}
$$

= ₹2040
56. (B) ATQ,

$$
\begin{aligned}
& 236.544=P \times\left(\frac{8}{100}\right)^{2}\left(\frac{308}{100}\right) \\
& P=12000
\end{aligned}
$$

Hence, Required amount $=₹ \mathbf{1 2 0 0 0}$
57. (D) ATQ,

work done by A and B in 2 hours $=7+5=12$
So, work done by A and B in such pairs $=12 \times 8$
$=96$
Remaining work $=105-96=9$
Remaining done after $\mathrm{B}=9-5=4$
$\therefore$ Required days $=8 \times 2+1+\frac{4}{7}=\mathbf{1 7} \frac{\mathbf{4}}{\mathbf{7}}$ days
58. (B) ATQ,

Let the quantity of mixture
$=\quad \mathrm{LCM}$ of $(11,11,13)=143$
then, Water : Wine (in large Vessel)
$91+78+72: \quad 52+65+66$
82 : 61
59. (A) ATQ,

The ratio of time $=\mathrm{A}: \mathrm{B}: \mathrm{C}$

$$
\begin{gathered}
\frac{1}{2}: \frac{1}{4}: \\
=10: \\
=10
\end{gathered} \frac{1}{5}
$$

60. (C) ATQ,

$$
\text { Required distance }=(50+65) \times \frac{5}{18} \times 18
$$

$$
=575 \mathrm{~m}=.575 \mathrm{~km}
$$

61. (B) ATQ,

Let the distance $=\operatorname{LCM}$ of $(60,80$ and 100) $=1200$
then, Time for one-third $=\frac{400}{60}=6 \frac{2}{3} \mathrm{hr}$
Time for one-fourth $=\frac{300}{80}=3 \frac{3}{4} \mathrm{hr}$
Time for remaining $=\frac{1200-400-300}{100}=$
5 hr Hence, Average speed $=\frac{1200}{\frac{20}{3}+\frac{15}{4}+5}$

$$
=\frac{1200 \times 12}{185}=\mathbf{7 7} \frac{\mathbf{3 1}}{\mathbf{3 7}} \mathbf{k m p h}
$$

62. (B) ATQ,
$2 \pi r=176$
$\Rightarrow \quad \mathrm{r}=28 \mathrm{~cm}$
then, $l=\sqrt{96^{2}+28^{2}}=100 \mathrm{~cm}$
Hence, Total surface area $=\frac{22}{7} \times 28 \times 128$
$=11264 \mathrm{~cm}^{2}$
63. (B)


Required length $=22 \times 3+3 \times \frac{120^{\circ}}{360} \times 2 \times \pi \times 11$ $=66+22 \pi$
64. (B) ATQ,
$x+\frac{1}{x}=7$
square on both sides,
$\Rightarrow x^{2}+\frac{1}{x^{2}}=47$
cube on both sides,
$\Rightarrow x^{6}+\frac{1}{x^{6}}=(47)^{3}-3 \times 47$
$=103823-141=\mathbf{1 0 3 6 8 2}$
65. (C) ATQ,
$4 x^{2}+4=12 x$
$\Rightarrow \quad x+\frac{1}{x}=3$
Taking square on both sides,
$\Rightarrow \quad\left(x+\frac{1}{x}\right)^{2}=9$

Taking square on both sides,

$$
\Rightarrow \quad\left(x+\frac{1}{x}\right)^{4}=\mathbf{8 1}
$$

66. (B) $\mathrm{A}: \mathrm{B}$

$$
\begin{array}{clc}
20000 \times x & : & 25000 \times y \\
4 x & : & 5 y
\end{array}
$$

then $\frac{4 x}{5 y}=\frac{1}{2}$

$$
\Rightarrow \quad x: y=5: 8
$$

Hence, Required ratio $=5: 8$
67. (B) $x+x+2+x+4+x+6+x+8+x+10=25 \times 6$

$$
\Rightarrow x=20
$$

$$
\text { Hence, Required average }=\frac{25 \times 6+32}{7}
$$

$$
=26
$$

68. (C) ATQ,

$$
\frac{\cos A+\cos B}{\sin A+\sin B}=\frac{2 \cos \left(\frac{A+B}{2}\right) \cos \left(\frac{A-B}{2}\right)}{2 \sin \left(\frac{A+B}{2}\right) \cos \left(\frac{A-B}{2}\right)}
$$

$$
=\frac{\cos \left(\frac{A+B}{2}\right)}{\sin \frac{A+B}{2}}=\cot \left(\frac{\mathbf{A}+\mathbf{B}}{2}\right)
$$

69. (A)


DE || BC
because $D$ and $E$ are the mid point of $A B$
and AC
then, $\angle \mathrm{ABC}=180^{\circ}-45^{\circ}-55^{\circ}=80^{\circ}=\angle \mathrm{ADE}$
then, $\angle \mathrm{BDE}=180^{\circ}-80^{\circ}=\mathbf{1 0 0}^{\circ}$
70. (B) ATQ,


Circum- radius $=\frac{\mathrm{AB}}{2}=\frac{\sqrt{60^{2}+11^{2}}}{2}$

$$
=\frac{61}{2}=\mathbf{3 0 . 5 c m}
$$

71. (B) ATQ,

$$
\frac{\frac{\sin ^{2} A}{\cos ^{2} A}-\sin ^{2} A}{\sec ^{2} A}=\frac{\sin ^{2} A\left(\sec ^{2} A-1\right)}{\sec ^{2} A}
$$

$$
=\frac{\sin ^{2} A \tan ^{2} A}{\sec ^{2} A}=\sin ^{4} \mathbf{A}
$$

72. (C) ATQ,
$\angle \mathrm{ABC}=\angle \mathrm{CBO}+\angle \mathrm{OBA}=40^{\circ}+35^{\circ}=75^{\circ}$
then, $\angle \mathrm{AOC}=2 \angle \mathrm{ABC}=2 \times 75^{\circ}=\mathbf{1 5 0}^{\circ}$
73. (A) ATQ,

$$
\text { Required percent }=\frac{250}{750} \times 100=\mathbf{3 3 . 3 3} \%
$$

74. (D) ATQ,

Total number $=250+300+200+400+$ $350+250+350+250+150$

$$
=2500
$$

75. (C) ATQ,

Total Hockey's players $=200+250+150$

$$
=600
$$

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

## MEANINGS IN ALPHABETICAL ORDER

Word

## Aground

Anoint

Bilk
Comprise
Con
Dispute
Douse
Dupe
Ferret
Immense
Immense
Inundate
Mere

Ordain
Rake
Strand
Unadorned
Void

Meaning in English
On or onto the ground
To officially or formally choose (someone) to do or to be something

To cheat of something valuable
To be made up of something
To study or examine closely
Disagreement
Pour a liquid over, drench
to deceive or cheat easily
To search about
Extremely large or great
Marked by greatness especially in size or degree Flood, deluge, overflow

Used to say that something is small,
unimportant
Make (someone) a priest or minister
Scratch or rummage through something
To leave without help
without decoration, plain, unembellished
Not valid, null

Meaning in Hindi
जी न पर
अभि T णा' क करना, चु ना व करन

ठ गना
से बना हु आ हा' ना
ध्य नपू र्व कअध्यम करना
विवा द करना
बु झा ना
ध T ख T दे ना
ख ${ }^{\prime}$ जाT
बहु तअध्कि
बहु तबड. T, विश T ल
बा ढ. ला ना
मा ラ $T$

नियु क त करना
ढू " ढना
बिना मदद के छा' ड. दे ना
स दा , सू जा रहित
निरस त करना

## Available in both Hindi \& English SSC (CGL-2016) Tier-I All sets



2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
SSC MOCK TEST - 115 (ANSWER KEY)

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

90. (C) The comparison should be always between same things. Here we are comparing 'population' of Mumbai with the population of USA, thus add 'that of before any city of the USA. Omit 'in'
91. (C) Change 'a big sister' into 'the elder sister'.
92. (C) 'Allegations' are always 'levelled against someone'.
$\square$
$\square$
