## SSC MOCK TEST - 101 (SOLUTION)

1. (D) As,


Similarly,

2. (B) As, $\frac{(26)^{2}}{2}=338$

Similarly, $\frac{(46)^{2}}{2}=\mathbf{1 0 5 8}$
3. (B) An Octagon has double number of sides in comparison to a rectangle. Similarly, Hexagon has double number of sides in comparison to a triangle.
4. (C)

5. (C) Except Cube, others are two dimensional figures.
6. (D) $\mathbf{5 3}$ is a prime number.
7. (D) Euphasusiid $\rightarrow$ Euphemism $\rightarrow$ Euphenics $\rightarrow$ Euphonic.
8. (B) Imagine $\rightarrow$ Write $\rightarrow$ Proofread $\rightarrow$ Print $\rightarrow$ Publish $\begin{array}{llllll}3 & 2 & 5 & 1 & 4\end{array}$
9. (A)

10. $(\mathrm{B})$ Angle $=$ minute $\times \frac{11}{2}-30 \times$ hour

$$
=30 \times \frac{11}{2}-30 \times 5=\mathbf{1 5}^{\circ}
$$

11.(B) The day $=\frac{61}{7}=8$ week +5 days $=5$ days Required day $=$ Monday $+5=$ Saturday
12. (C)

13.(D) MOUTH
14. (D)

15. (B)

| 4 | 23 | 60 | 121 | $\mathbf{2 1 2}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| $2^{3}-4$ | $3^{3}-4$ | $4^{3}-4$ | $5^{3}-4$ | $6^{3}-4$ |

16. (C)

17. (B)


## I False

II True
18. (D) $49=9 \times 5+4$
$60=8 \times 7+4$
$22=2 \times 9+4$
$28=4 \times 6+4$
19. (C) $2184=(8+4+1)^{3}-(8+4+1)$
$2184=(5+6+2)^{3}-(5+6+2)$
$4896=(8+4+5)^{3}-(8+4+5)$
20. (D)
21. (D)
22. (B)
23. (A)
24. (A) ATQ,
$P-20=Q+20$
$P-Q=40$
and,

$$
\begin{equation*}
P+40=2(Q-40) \tag{i}
\end{equation*}
$$

$P-2 Q=-120$ $\qquad$
From equation (i) and (ii)
$P=200$ and $Q=160$
25. (C)
26. (C) A Western Disturbance is an extra tropical storm originating in the Mediterranean region that brings sudden winter rain to the northwestern parts of the Indian subcontinent. It is a non-monsoonal precipitation pattern driven by the westerlies. The moisture in these storms usually originates over the Mediterranean Sea and the Atlantic Ocean.
27. (A) As per recently released 2017 Brand Finance India 100 report, Tata Group is the most valuable brand in India with an estimated brand value of $\$ 13.1$ billion. Airtel has acquired 2nd position followed by LIC, Infosys, SBI and Reliance Industries Ltd. The Brand Finance is a global brand valuation and strategy consultancy firm. It advises branded organizations, or those with valuable intangible assets, on how to maximise their value through effective management of their brand and other intangible assets.
28.(A) "The Department of Atomic Energy" (DAE) directly under the Prime Minister of India with the headquartered in Mumbai. The department is responsible for nuclear technology, including nuclear power and research.
29. (C) The Indian Councils Act 1909, commonly known as the Morley-Minto Reforms was an Act of the Parliament of the United Kingdom that brought about a limited increase in the involvement of Indians in the governance of British India.
30. (C) India's first Aquatic Rainbow Technology Park (ARTP) will be set up in Chennai, Tamil Nadu. The park will have an ultramodern exclusive facility for ornamental fish equipped with multi-species hatchery and live feed culture units. The facility is being developed by Fisheries College and Research Institute (FCRI), Ponneri in Tamil Nadu. The ARTP will have an advanced infrastructure and technical expertise to boost production of high value ornamental fish species for both indigenous and exotic type. It will also develop breeding technologies for high value indigenous ornamental fish species and ensure quality fish seeds in bulk quantities.
31. (D) The Madhav Chitale committee on desiltation of River Ganga has recommended a slew of measures which includes study
to guide de-silting activities, sand registry for de-silting and a technical institute to conduct the sediment budget, flood routing studies and confirm the necessity of the de-silting of section of the river.
34.(D) The visible spectrum is the portion of the electromagnetic spectrum that is visible to the human eye. Electromagnetic radiation in this range of wavelengths is called visible light of simply light. A typical human eye will respond to wavelengths from about 390 nm to 700 nm to 700 nm .
o Microwaves are a form of electromagnetic radiation with wavelengths ranging from one meter to one millimeter.
o Infrared radiation, is electromagnetic radiation (EMR) with longer wavelengths than those of visible spectrum at 700 nanometers (frequency 430 THz ), to $1000000 \mathrm{~nm}(300 \mathrm{GHz})$
o Ultraviolet (UV) is an electromagnetic radiation with wavelength from 10 nm to 400 nm , shorter than that of visible light but longer than X-rays.
37.(A) State of Bolivia is a landlocked country located in western-central South America.
38. (C) Decreasing the money circulation decreases the demand of goods and services. This helps in controlling the inflation. It is mainly effective for demand pull inflation.
39.(D) Oxytocin is a human peptide hormone and neuropeptide that is used as a medication to facilitate childbirth.
40. (C) The tallest tree in the world is a coast redwood (sequoia sempervirens), named Hyperion after a person in Greek mythology. The tree is no less than $115.72 \mathrm{~m}(379.7$ feet $)$ tall This enormous tree was discovered only in August 2006 in a remote part of Redwood National Park, California by naturalists Chris Atkins and Michael Taylor. Their first preliminary measurements were done with professional laser measurement equipment based on goniometry.
41. (C) When a running car stops suddenly, the passengers tend to lean forward due to inertia of motion. Inertia is that property of a body due to which it resists a change in its state of rest or of uniform motion.
42. (A) In consumer theory, substitute goods are products that a consumer perceives as similar or comparable, so that having


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more of one product makes them desire less of the other product. Formally $X$ and $Y$ are substitutes if, when the price of $X$ rises, the demand for Y rises.
43. (D) Anshu Jamsenpa, the Indian mountaineer from Arunachal Pradesh, has set the world record by becoming the world's first woman to conquer Mount Everest twice within five days. Jamsenpa along with Nepali climber Furi Sherpa scaled the peak at 8:00 am on May 21, 2017. Earlier, she stood a top of world's highest mountain on May 16, 2017. With this, Jamsenpa has also become the first Indian woman to scale Mt Everest for the fifth time. Beside this, Indian climbers Dhankude Kishor Dattatraya and Brij Mohan Sharma also scaled Mt. Everest on May 20, 2017. Brij Mohan Sharma, popularly known as Breeze Sharma has become the first civilian from the Indian Navy to summit Mount Everest. Earlier, Chhurim Sherpa (a Nepali mountaineer) had scaled Mt Everest twice within a week, reaching the roof of the world first on May 12, 2012, then again on May 19.
44 (D) The Article 20 is one of the pillars of fundamental rights guaranteed by the Constitution of India. It mainly deals with protection of certain rights in case of conviction for offences. When an individual as well as corporations are accused of crimes, the provisions of Article 20 safeguard their rights. The striking feature of the Article 20 is that it can't be suspended during an emergency period. Protection of Life and Personal Liberty: No person shall be deprived of his life or personal liberty except according to procedure established by law. Article 21 of the Constitution of India.
45. (C) The River Luni is the only natural water source that drains inside a lake in the desert. It originates in the Pushkar valley of the Aravalli Range, near Ajmer and ends in the marshy lands of Rann of Kutch in Gujarat, after travelling a distance of 530 km .
46. (A) Amniocentesis (also referred to as amniotic fluid test or AFT) is a medical procedure used in prenatal diagnosis of chromosomal abnormalities and fetal
infections, and also for sex determination, in which a small amount of amniotic fluid, which contains fetal tissues, is sampled from the amniotic sac surrounding a developing fetus, and then the fetal DNA is examined for genetic abnormalities.
47. (A) An average adult man weighing 160 pounds contains one and a quarter gallons of blood, or 10 pints. Estimation of blood volume is based on gender, age, weight, amount of lean body mass and even altitude: people who live at higher altitudes possess more blood to provide extra oxygen. People who weigh less generally carry less blood. Body fat percentage is a major factor in blood volume, as fat contains less blood than muscle; thus, if two people have the same weight, the person who has more fat would actually have a lower blood volume even if he appears to be larger.
51.(B) ATQ,

$=\frac{14}{\sqrt{3}} \mathrm{~cm}$
52. (A) Time taken by them to reach M

$$
=\frac{850}{50+35}=10
$$

Then, $\mathrm{PM}: \mathrm{MQ}=35 \times 10: 50 \times 10=\mathbf{7}: \mathbf{1 0}$
53. (B) $31.5 \times 3+25.5 \times 3+x+x+4+x+5=30 \times 9$ $\Rightarrow 3 x+9=270-171$
$\Rightarrow x=30$
Hence, 9 th number $=x+5=\mathbf{3 5}$
54. (B)

55. (D) $m+n=a \cos ^{3} \theta+3 a \cos \theta \sin ^{2} \theta+a \sin ^{3} \theta+$ 3a $\cos ^{2} \theta \sin \theta$
$=\mathrm{a}(\cos \theta+\sin \theta)^{3}$
Also,
$\mathrm{m}-\mathrm{n}=\mathrm{a} \cos ^{3} \theta+3 \mathrm{a} \cos \theta \sin ^{2} \theta-a \sin ^{3} \theta-$ 3a $\cos ^{2} \theta \sin \theta$
$=\mathrm{a}(\cos \theta-\sin \theta)^{3}$

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Then, $(\mathrm{m}+\mathrm{n})^{2 / 3}+(\mathrm{m}-\mathrm{n})^{2 / 3}=\left[\mathrm{a}(\cos \theta+\sin \theta)^{3}\right]^{2 / 3}$
$+\left[a(\cos \theta-\sin \theta)^{3}\right]^{2 / 3}$
$=\mathrm{a}^{2 / 3}\left[(\cos \theta+\sin \theta)^{2}+(\cos \theta-\sin \theta)^{2}\right]$
$=a^{2 / 3}\left[2\left(\cos ^{2} \theta+\sin ^{2} \theta\right)\right.$
$=\mathbf{2} \mathbf{a}^{2 / 3}$
56. (B) $\mathrm{P}=\frac{22464}{100} \times \frac{10000}{144} \times \frac{100}{312}=₹ \mathbf{5 0 0 0}$
57. (A)


11
7
Hence, Required ratio = 11:7
58. (C) $x\left(x^{2}-3 x+3\right)$
$=x^{3}-3 x^{2}+3 x-1+1$
$=(x-1)^{3}+1$
$=(101-1)^{3}+1=1000001$
59. (D) Exterior angle $=180^{\circ}-128 \frac{4^{\circ}}{7}=\frac{360^{\circ}}{7}$

Then, Number of sides $=\frac{360^{\circ}}{360^{\circ} / 7}=\mathbf{7}$
$\therefore$ Required polygon is a Heptagon.
60. (B) Profit percent $=\frac{\left(250-\frac{304 \times 100}{152}\right) \times 100}{\frac{304 \times 100}{152}}$ $=25$
61.(B) Central angle $=\frac{360^{\circ}}{100} \times \frac{125}{10}=45^{\circ}$
62. (B) Difference $=\frac{\left(25-12 \frac{1}{2}\right) \times 15000000}{100}$
$=₹ 1875000$
63. (A) Expenditure on Baskeball

$$
\begin{aligned}
& =\frac{12.5 \times 12000000}{100} \\
& =₹ \mathbf{1 5 0 0 0 0 0}
\end{aligned}
$$

64. (A) Average speed $=\frac{180}{\frac{120}{80}+\frac{60}{40}}=\mathbf{6 0} \mathbf{~ k m} / \mathbf{h}$
65. (B) Jitender : Khusiram : Anuj $55000 \times 12: 65000 \times 10: 40000 \times 5$ 66 : 65 : 20
Anuj's share $=\frac{151000 \times 20}{151}=₹ \mathbf{2 0 0 0 0}$
66. (C)

$\mathrm{C}+\mathrm{A} \rightarrow 10$
Time taken by $B=\frac{60}{\frac{4+5+6}{2}-6}$

$$
=\frac{60}{3} \times 2=40 \text { days }
$$

67. (A) ATQ,
$\Rightarrow 450+x=900-2 x$
$\Rightarrow 3 x=450$
$\Rightarrow x=₹ 150$
Hence, C.P = ₹ 600
New S.P. $=\frac{600 \times 125}{100}=₹ \mathbf{7 5 0}$
68. (B) ATQ,

$$
\begin{aligned}
& \frac{x}{\sin \theta}=\frac{y}{\cos \theta} \\
& \tan \theta=\frac{x}{y}=\frac{\text { Perpendicular }}{\text { Base }}
\end{aligned}
$$

Then, $\sin \theta-\cos \theta=\frac{x}{\sqrt{x^{2}+y^{2}}}-\frac{y}{\sqrt{x^{2}+y^{2}}}$

$$
\Rightarrow \quad=\frac{\mathbf{x}-\mathbf{y}}{\sqrt{\mathbf{x}^{2}+\mathbf{y}^{2}}}
$$

69. (B) ATQ,

$$
\begin{aligned}
& \frac{a}{b}=\frac{4}{5} \\
\Rightarrow \quad & \frac{a^{3}}{b^{3}}=\frac{64}{125}
\end{aligned}
$$

and, $\frac{b}{c}=\frac{7}{6}$
$\frac{b^{3}}{c^{3}}=\frac{343}{216}$
So, $a^{3}: b^{3}: c^{3}$
$\begin{array}{r}64 \quad 125 \\ 343: 216 \\ \hline 343 \\ \hline\end{array}$
$21952: 42875: 27000$

## Alternate:-



Then, $\mathrm{a}^{3}$ :
21952: 42875:27000
70. (A)



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Volume of cone $=\frac{1}{3} \times \pi \times 4 \times 4 \times 3$

$$
=16 \pi \mathrm{~cm}^{3}
$$

71.(B) Sine rule of triangle

$$
=\frac{a}{\sin A}=\frac{b}{\sin B}=\frac{C}{\sin C}=\mathrm{K}
$$

Then, $\mathrm{a}=\mathrm{K} \sin \mathrm{A}, \mathrm{b}=\mathrm{K} \sin \mathrm{B}, \mathrm{C}=\mathrm{K} \sin \mathrm{C}$
So, $\frac{\cos A}{K \sin A}=\frac{\cos B}{K \sin B}=\frac{\cos C}{K \sin C}$
$\Rightarrow \cot \mathrm{A}=\cot \mathrm{B}=\cot \mathrm{C}$
$\Rightarrow \mathrm{A}=\mathrm{B}=\mathrm{C}$
Hence, the triangle is an equilateral triangle
72. (A) $\frac{(0.57)^{3}+(0.43)^{3}}{(0.57)^{3}+(0.43)^{3}-(0.57)(0.43)}$

$$
\begin{aligned}
& =\frac{(0.57+0.43)\left[(0.57)^{2}+(0.43)^{2}-(0.57)+(0.43)\right]}{(0.57)^{3}+(0.43)^{3}-(0.57)(0.43)} \\
& =\mathbf{1} \quad\left[\because \mathrm{a}^{3}-\mathrm{b}^{3}=(\mathrm{a}-\mathrm{b})\left(\mathrm{a}^{2}+\mathrm{b}^{2}-\mathrm{ab}\right)\right]
\end{aligned}
$$

73. (A)


Hence, Time taken by $A=\frac{60}{4-(3-2)}$

$$
=20 \text { days }
$$

74. (D)


$$
\angle \mathrm{BIC}=180^{\circ}-\frac{\angle A B C}{2}-\frac{\angle B C A}{2}
$$

$$
=180^{\circ}-40^{\circ}-30^{\circ}=\mathbf{1 1 0}^{\circ}
$$

75. (C) Difference $=2 \times \frac{22}{7} \times 14-14 \times 2$

$$
=88-28=\mathbf{6 0} \mathbf{c m}
$$



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## MEANINGS IN ALPHABETICAL ORDER

Word
Cataclysm
Catacomb
Catalysis
Catechism
Clandestine
Compensation
Conceal
Coup d'etat
Eliminate
Emphatically
Fait accompli
Forcefully
Joie de vivre
Mimic
Nutjob
Penalty
Predominantly
Profound
Pungent
Pusillanimous
Ransom
Recalcitrant
Rejection
Revelation
Sarcophagus
Scold
Scald
Sepulchre
Sine qua non
Tribute
Vitriolic
Wanton
Wounded

## Meaning in English

a momentous and violent event marked by overwhelming upheaval and demolition an underground place where people are buried
A change in the rate of a chemical reaction induced by a catalyst
a series of questions and answers used in giving religious instruction secret something that is given to make up for damage to keep secret a sudden, violent and illegal seizure of power from a government
completely remove or get rid of something expressing something forcibly and clearly
something that has been done and cannot be changed
in a strong and assertive manner
keen or buoyant enjoyment of life
to imitate closely
a mentally unbalanced person
punishment for breaking a rule
for the most part, mainly
too much
having a strong, sharp taste or smell
lacking courage and determination
money that is paid in order to free someone who has been captured obstinately defiant of authority the act of not accepting, or considering something अए वी करप
a secret fact that is made known
a stone coffin
rebuke someone angrily
to burn with hot water a place of burial something absolutely essential something said to show respect or gratitude filled with bitter criticism or malice. hard to control, undisciplined injured or hurt by a wound

Meaning in Hindi
प्र लय
कब्र $\mathrm{T}^{`}$ का तहख T ना
उ तपर रण
ध fर्म कउ पदे प्र दे ने में उ पय
गये प्र सा' $\bar{\tau} T$ री
गु पत
मु अ वजा, क्ष तिपू रि
गु पत रख ना
आ कर्मिक $T$ स्म परवर्त न
हट $T$ ना, दू र करना
सुस्पष्ट तथT T प्र $4 T$ वश T ली
निर्वि वा दितका य
बलुपु र्व क
जे वन का अ न= द
नक्ल करना
विक्षि पत
जु मा ${ }^{`}$ ना
प्र ध न स्वसे, मु ख्प:
अ य धिक
ती क्ष्प
का यर, कमजों र दिलवा ला
पि रा" ती
हठी, आ ज्ञा न मानने वा ला

प्र कट १ क्रप
फ थारकी बनी हु ई कब्र
ड $\mathrm{T}^{\circ}$ ट ना
गरम प नी से जना ना
कब्र
अनिवा य
श्रद्वां जल
कट, आ ला' चना से $\% ~ T$ रा
अनियं डि $T$ त
हा $T$ यल

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## SSC MOCK TEST - 101 (ANSWER KEY)

| 1. (D) | 26. | (C) | 51. |  | 76. | (*) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. (B) | 27. | (A) | 52. |  | 77. | (C) |
| 3. (B) | 28. | (A) | 53. |  | 78. | (D) |
| 4. (C) | 29. | (C) | 54. |  | 79. | (B) |
| 5. (C) | 30. | (C) | 55. |  | 80. | (A) |
| 6. (D) | 31. | (D) |  |  | 81. | (A) |
| 7. (D) | 32. | (C) | 57. |  | 82. | (C) |
| 8. (B) | 33. | (C) | 58. | (C) | 83. | (C) |
| 9. (A) | 34. | (D) | 59. |  | 84. | (B) |
| 10. (B) | 35. | (C) | 60. |  | 85. | (C) |
| 11. (B) | 36. | (A) | 61. |  | 86. | (C) |
| 12. (C) | 37. | (A) | 62. |  | 87. | (A) |
| 13. (D) | 38. | (C) | 63. |  | 88. | (B) |
| 14. (D) | 39. | (D) | 64. |  | 89. | (A) |
| 15. (B) | 40. | (C) | 65. |  | 90. | (B) |
| 16. (C) | 41. | (C) | 66. |  | 91. | (C) |
| 17. (B) | 42. | (A) |  |  | 92. | (C) |
| 18. (D) | 43. | (D) | 68. | (B) | 93. | (C) |
| 19. (C) | 44. | (D) |  |  | 94. | (A) |
| 20. (D) | 45. | (A) |  |  | 95. | (B) |
| 21. (D) | 46. | (A) |  |  | 96. | (A) |
| 22. (B) | 47. | (A) |  |  | 97. | (D) |
| 23. (A) | 48. | (A) |  |  | 98. | (C) |
| 24. (A) | 49. | (C) |  |  | 99. | (C) |
| 25. (C) | 50. | (C) | 75. |  | 100. | (A) |

76. (*) 'Did' will come after 'past'. The sentence is not interrogative so the verb will come after the subject not before it. Change 'what they are' into 'what they have'
77. (C) There is no logical reason to object to the one-word form 'alright'. Nevertheless, many scholars of English dislike it and regard it as incorrect, so it's best to avoid using 'alright' in formal writing. \# SSC also follows two-word format that is 'all right'. So replace 'alright' with 'all right'.
78. (B) 'Join in something' means 'to do activity with other people
90.(B) 'Set aside something' means 'to reserve something for some purpose'.
91.(C) 'Africa' and 'Europe' are two different continents so we cannot use preposition 'in' for it. Thus replace 'in' with 'to'.

## Correction of Mock test-100

39. (C)
40. (*) ATQ,

$$
\begin{aligned}
& \cos \theta+\sec \theta=2 \\
= & \cos \theta+\frac{1}{\cos \theta}=2 \\
= & \cos ^{2} \theta+1-2 \cos \theta=0 \\
& \text { then, } \cos \theta=1 \\
\Rightarrow & \theta=0^{\circ} \\
& \text { So, } \sin 0^{\circ}-\operatorname{cosec} 0^{\circ}=\infty
\end{aligned}
$$

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

