## SSC MOCK TEST - 99 (SOLUTION)

1.(B) As,


Similarly,

2. (B) As, $\frac{\text { AGLP }}{\frac{\text { SYDH }}{\sim}}$

Similarly,

3. (B) Professor works in college. Similarly, Doctor works in Hospital.
4. (B) As, $841=(25+4)^{2}$

Similarly, $1521=(35+4)^{2}$
5. (D) Crane, Parrot and Cuckoos are birds while Cow is an animal
6. (B)



7. (B) 72,84 and 108 are multiple of 12 while 78 is multiple of 13.
8 (B) KP, IR and XC are opposite letters to each other in alphabet while GS are not opposite letter to each other
9. (*)

Banefic $\rightarrow$ Benefic $\rightarrow$ Benefica $\rightarrow$ Beneficial.
10. (A) $\frac{(15 \times 3)+45-25}{(10 \div 2) \div 2+8-33}$

After changing the sign as per the given details,
$\Rightarrow \frac{(15 \div 3) \times 45+25}{(10-2)-2 \times 8+33}=\mathbf{1 0}$
11. (D) As, $106=9^{2}+5^{2}, \quad 56=9^{2}-5^{2}$

$$
272=16^{2}+4^{2}, \quad 240=16^{2}-4^{2}
$$

Similarly,
$841=20^{2}+21^{2}, 41=21^{2}-20^{2}$
12. (D) $604=9^{3}-5^{3} \quad 45=9 \times 5$
$504=8^{3}-2^{3} \quad 16=8 \times 2$
$6734=19^{3}-5^{3} 95=19 \times 5$
13. (A) As, $13-6=7 \Rightarrow 7 \times 6=42$

$$
17-8=9 \Rightarrow 9 \times 6=54
$$

Similarly

$$
27-9=18 \Rightarrow 18 \times 6=\mathbf{1 0 8}
$$

14. (*) Yellow $\rightarrow$ Green

Red $\rightarrow$ Blue
Pink $\rightarrow$ Violet
15. (B) As,

16. (C) MASTER

17 (B) 675528399288195

18. (B)

19. (D) Tree $\rightarrow$ Branch $\rightarrow$ Leaves $\rightarrow$ Flower $\rightarrow$ Fruit
20. (B)

21. (A) Number of days between 10 January, 2016 and 15 September, 2016
$=21+29+31+30+31+30+31+31+15=249$ then, day on $15^{\text {th }}$ September, $2016=\frac{249}{7}$

$$
=35 \frac{4}{7}
$$

$$
=35 \text { weeks }+4 \text { days }=4 \text { days }=\text { Thursday }
$$

22. (B)


I False
II False
23. (C)
24. (A)

25. (C)


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26. (B) The Mudumalai National Park (MNP) is located about 150 kilometres north-west of Coimbatore city in Tamil Nadu. The protected area is home to several endangered and vulnerable species including Indian elephant, Bengal tiger, gaur and Indian leopard. There are at least 266 species of birds in the sanctuary, including critically endangered Indian white-rumped vulture and long-billed vulture.
27. (A) Justice Mukul Mudgal, the Retired judge of Delhi High Court, has been elected as the new Chairman of FIFA Governance committee at the world football governing body's 67th Congress in Manama. The position of the governance chief fell vacant after Miguel Maduro was fired for his role in blocking Russian World Cup official Vitaly Mutko from retaining his seat on ruling council. Prior to this appointment, Justice Mudgal was the deputy chairman of the governance committee.
28. (A) The interim government of India, formed on 2 September 1946 from the newly elected Constituent Assembly of India, had the task of assisting the transition of India and Pakistan from British rule to independence. Initially, headed by the Viceroy of India, it was changed to a council of ministers. Jawaharlal Nehru was the Vice President of the council and he held powers of a Prime Minister.
Some importance members of interim government:

- Viceroy and Governor-General of India: The Viscount Wavell (Britain)
- Vice President of the Executive Council: Jawaharlal Nehru (INC)
- Home Affairs, Information and Broadcasting: Vallabhbhai Patel (INC)
- Defence:Baldev Singh (INC)
- Finance: Liquat Ali Khan (All-India Muslim league)

29. (D) Per capita GDP can also be used to measure the productivity of a country's workforce, as it measures the total output of goods and services per each member of the workforce in a given nation. However, many economists state that a better measure of worker productivity may be GDP per hour worked. Per capita income, also known as income per person, is the mean income of the people in an economic unit such as a country or city.
30. (A) The 2017 hunting festival 'Bishu Parv (or Sendra)" of the tribal community has recently observed in a 'bloodless and symbolic' manner without harming the wildlife in the Dalma Wildlife Sanctuary in Jharkhand. The forest department has set up check posts at all entry points to prevent hunters from entering the sanctuary with arms to kill the animals. The wildlife sanctuary has elephants, barking deer, sloth bear and porcupines as the main inhabitants.
31. (D) India's first bio-refinery plant has been inaugurated by the Union Minister for Road Transport and Highway Nitin Gadkari at Rahu in Pune district, Maharashtra. The plant will produce ethanol from variety of biomass. The bio refinery plant is capable of producing one million litre of ethanol per annum by processing a variety of agro-residue like rice and wheat straw, cotton stalk, cane trash, corn cobs with superior product yields. Biofuel is cost effective and pollution free.
32. (A) Endocrinologists have special training in the treatment of diabetes, although their expertise is not limited to diabetes, but to the entire endocrine system. An endocrinologist specializes in hormone secretion and regulation, tissue function and hormonecontrolled metabolic events such as sleep and stress.
33. (D) Sulphur is a versatile element and is used in the pharmaceutical, medical, and industrial industries to make fertilizers, create batteries and produce goods like rubbers and insecticides. Sulphur is pale yellow in colour; it is also odourless and brittle in its solid form. Sulphur comes in three allotropic forms: orthorhombic, monoclinic and amorphous, and depending on its form, it varies in physical properties and suitability for various purposes.
34. (D) Energy is the capacity of a physical system to do work. The common symbol for energy is E. The standard unit is the joule, symbolized by J.
Some importance Units of energy :-

- Orders of magnitude (energy)
- Barrel of oil equivalent Calorie
- Electronvolt
- Gasoline gallon equivalent
- Joule
- Kilowatt hour


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35. (B) Rate of evaporation is very high in these regions the water gets evaporated thus increasing the salt concentration in the remaining water. Crustaceans helps in decreasing Salinity.
36. (D)

- During the Non-Cooperation movement government did not show its negotiable attitude.
- public meeting were banned.
- press had been restricted and many leaders were arrested along with Gandhi.

37. (C) Example of mixed farming production of wheat along with cattle rearing in same farm.
38. (C) In this case, the President neither rejects nor returns the bill, but simply keeps the bill pending for an indefinite period. This is the power of the President not to take any action (either positive or negative). The bill is known as the pocket veto. The President can exercise this veto power as the Constitution does not prescribe any timelimit within which he has to take the decision with respect to a bill presented to him for his assent. In USA, on the other hand, the President has to return the bill for reconsideration within 10 days.

In 1986, President Zail Singh exercised the pocket veto with respect to Indian Post office (Amendment) Bill.
40. (D) The economic survey is compiled by Department of economic of affairs. Ministry of Finance office of economic advisor publishes Wholesale Price Index (WPI), while Central Statistic Organization (CSO) publishes IIP and CPI.
42. (D) Indirect taxes are the main source of India's tax system. The most important commodities from the revenue point of view are sugar, cotton, mill cloth, tobacco, motor spirit, matches and cement.
43. (D) Harpreet Singh from India has won the bronze medal in Greco-Roman 80 kg category at 2017 Asian Wrestling Championships. He edged out Na Junjie of China by 3-2 in the play-off for the bronze medal.
44. (B) Tanjore paintings are panel paintings (done on solid wood planks) and hence were also referred to as 'palagaipadam' in local parlance. Tanjore paintings are known for their surface richness. The themes of most of these paintings are Hindu gods and goddesses and as well as saints.
45. (B) Igneous rocks are created from the cooling of molten magma/lava and begin the rock cycle. They are called primary rocks.
47. (D) Milk contains small amount of VitaminC. Vitamin-C is present in yellow bell paper. Milk is a good source of Calcium, Maganesium, Phosphors, Potassium, Selenium, Protein and Carboydrate.
48. (A) Avogadro's law - Equal volumes of all gases under same temperature and pressure contain equal number of molecules.
49. (C) Assistance provided by the center to five year plan. The Government's support to the Central plan is called the Gross Budgetary support. In the recent year the GBS has been slightly more than $50 \%$ of the total central plan. The share of the GBS in central plan has been rising since 2008-09.
50. (A) Although the Mughal Emperor Shah Jahan first ordered the building of the Taj Mahal in 1632 , it took 20 years or so to build it. Ustad Ahmad Lahouri was likely the architect that oversaw the majority of the work. It took at least 20,000 people to create the massive structure, along with a large number of elephants. Construction of the Taj Mahal cost more than 32 crore rupees, according to Tajmahal.org.uk, which in today's currency is more than $\$ 200$ million dollars for the building and its surroundings.
51.(B) Required average $=46-\frac{63-36}{54}$

$$
=46-0.5=45.5
$$

52.(A) Area of Shaded zone $=\frac{\sqrt{3}}{4} 6 \times 6-\frac{1}{2} \times \frac{22}{7} \times 3 \times 3$
$=3 \times 3\left(\sqrt{3}-\frac{11}{7}\right)=9(1.732-1.573)$

$$
=9 \times 0.159=\mathbf{1 . 4 3} \mathbf{c m}^{2}
$$

53.(C) A B C

$$
\begin{array}{cccc}
5 x \times 12 & : & 8 x \times 12 & : \\
5 & : & 8 & 8 x \times 3 \\
5 & 2
\end{array}
$$

Hence, ratio of profit among them = 5:8:2
54. (A) ATQ,

$$
\begin{aligned}
& \frac{a^{2}}{b c}+\frac{b^{2}}{a c}+\frac{c^{2}}{a b} \\
= & \frac{a^{2}}{b c} \times \frac{a}{a}+\frac{b^{2}}{a c} \times \frac{b}{b}+\frac{c^{2}}{a b} \times \frac{c}{c} \\
= & \frac{a^{3}}{a b c}+\frac{b^{3}}{a b c}+\frac{c^{3}}{a b c}=\frac{a^{3}+b^{3}+c^{3}}{a b c} \\
= & \frac{3 a b c}{a b c} \\
= & 3
\end{aligned}
$$



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55. (A) Let the distance travelled on bicycle $=x$ Then,
$\Rightarrow \frac{x}{9}+\frac{91-x}{5}=11$
$\Rightarrow 5 x+9(91-x)=11 \times 45$
$\Rightarrow 4 x=324$
$\Rightarrow \quad x=81 \mathrm{~km}$
56. (B) $(2132)^{111}=(2132)^{27 \times 4+3}=(2132)^{4 \times 27} \times(2132)^{3}$
$=6 \times 8=48$
Hence, 8 is the unit's place of (2132) ${ }^{111}$
57. (A) $\tan 23^{\circ} \cdot \tan 63^{\circ} \cdot \tan 67^{\circ} \cdot \tan 27^{\circ} \cdot \tan 0^{\circ}=0$
58. (A) ATQ,

$$
\begin{aligned}
& \frac{x \times 3 \times 3}{100}=360 \\
& x=₹ 4000
\end{aligned}
$$

Compound Interest =


Hence, Compound Interest of the sum $=₹ \mathbf{3 7 0 . 9 0 8}$ 59. (B) ATQ,

$\therefore \triangle \mathrm{ADE} \sqcup \triangle \mathrm{ABC}$

$$
\frac{\text { area } \triangle \mathrm{ABC}}{\text { area } \triangle \mathrm{ADE}}=\frac{3}{1}=\left(\frac{A B}{A D}\right)^{2}
$$

$\Rightarrow \frac{\mathrm{AD}+\mathrm{BD}}{\mathrm{AD}}=\frac{\sqrt{3}}{1}$
$\Rightarrow \frac{\mathrm{BD}}{\mathrm{AD}}=\frac{\sqrt{3}-1}{1}$
Hence, $\mathrm{AD}: \mathrm{BD}=\mathbf{1}: \sqrt{\mathbf{3}} \mathbf{- 1}$
60. (A)

efficiency of $\mathrm{A}+\mathrm{C}=2 \mathrm{~A}+2 \mathrm{~B}+2 \mathrm{C}-(\mathrm{A}+\mathrm{B})-(\mathrm{B}+\mathrm{C})$

$$
=10-4-3=3
$$

$\therefore$ Time taken by A and $\mathrm{C}=\frac{60}{3}$
61.(C) Expenditure of Company $A=\frac{2900000 \times 100}{145}$
62. (A) Income of Company $C=\frac{140 \times 3000000}{100}$
= ₹4200000
63. (B) ATQ,

Income of Company C $=100 \%+40 \%=140 \%$ and
Income of Company D $=100 \%+45 \%=145 \%$ then, income of C : income of D

$$
\begin{array}{ccc}
140 \% & : & 145 \% \\
28 & : & 29
\end{array}
$$

64. (C) C.P : S.P : M.P.
$100: 100+28: 100+60$


Discount $=160-128=32$
Discount $\%=\frac{32}{160} \times 100=\mathbf{2 0}$
65. (B) Let the initial quantity of liquid $P$ and $Q=$ $7 x$ and $4 x$ ATQ,
66. (*) $x+\frac{1}{x}=3$ $\qquad$

$$
\Rightarrow \quad x^{2}+\frac{1}{x^{2}}=(3)^{2}-2=7
$$

and, $\left(x-\frac{1}{x}\right)^{2}=7-2=5$
$\Rightarrow \quad x-\frac{1}{x}=\sqrt{5}$
$\Rightarrow x^{3}+\frac{1}{x^{3}}=(3)^{3}-3 \times 3=18$ and
$x^{3}-\frac{1}{x^{3}}=(\sqrt{5})^{3}-3 \sqrt{5}=5 \sqrt{5}+3 \sqrt{5}=8 \sqrt{5}$
$\therefore \quad x^{6}-\frac{1}{x^{6}}=\left(x^{3}+\frac{1}{x^{3}}\right)\left(x^{3}-\frac{1}{x^{3}}\right)=18 \times 8 \sqrt{5}$
$=144 \sqrt{5}$
67. (A)


ATQ,
$\triangle \mathrm{AXY} \sqcup \Delta \mathrm{ABC}$
then, $\frac{\text { area of } \triangle \mathrm{AXY}}{\text { area of } \triangle \mathrm{ABC}}=\left(\frac{\mathrm{AX}}{A B}\right)^{2}$
$\Rightarrow \quad \frac{\text { area of } \triangle \mathrm{AXY}}{16}=\left(\frac{3}{8}\right)^{2}=\frac{9}{64}$

$$
\begin{aligned}
& \frac{7 x-\frac{22}{11 x} \times 7 x}{4 x-\frac{22}{11 x} \times 4 x+15}=\frac{4}{3} \\
& \Rightarrow x=14 \\
& \text { Hence, the quantity of liquid } \mathrm{P}=14 \times 7 \\
& \text { = } 98 \text { litres }
\end{aligned}
$$

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area of $\triangle \mathrm{AXY}=\frac{9}{64} \times 16=2.25 \mathrm{~cm}^{2}$
$\therefore$ area of trapizium $\mathrm{BCYX}=16-\frac{9}{4}=\frac{55}{4} \mathrm{~cm}^{2}$ then, $\frac{\text { area of } \triangle B X Y}{\text { area of } \triangle B Y C}=\frac{\frac{1}{2} \times h \times \mathrm{XY}}{\frac{1}{2} \times \mathrm{h} \times \mathrm{BC}}=\frac{3}{8}$
$\therefore \quad$ area of $\triangle \mathrm{BXY}=\frac{55}{4} \times \frac{3}{11}=\frac{15}{4}=\mathbf{3 . 7 5} \mathbf{~ c m}^{2}$ 68. (A) $5^{16}-1=\left(5^{8}-1\right)\left(5^{8}+1\right)$
$=\left(5^{4}-1\right)\left(5^{4}+1\right)\left(5^{8}+1\right)$
$=\left(5^{2}-1\right)\left(5^{2}+1\right)\left(5^{4}+1\right)\left(5^{8}+1\right)$

$$
=24 \times 26 \times\left(5^{4}+1\right)\left(5^{8}+1\right)
$$

Hence, 23 will not divide $5^{16}-1$.
69. (B) ATQ,
$\sin \theta=1-\sin ^{2} \theta=\cos ^{2} \theta$
then,
$\cos ^{2} \theta+\cos ^{4} \theta=\sin \theta+\sin ^{2} \theta=\mathbf{1}$
70. (A) ATQ,
$168=$ Loss of $13 \%+$ Profit of $11 \%$
$\Rightarrow 24 \%=168$
$\Rightarrow 100 \%=₹ 700$
Hence, the cost price of article $=₹ \mathbf{7 0 0}$
71. (D) Height of Prism $=\frac{1784 \times 2}{54 \times 11}=6.006=\mathbf{6} \mathbf{c m}$
72. (B) $x=1.3232 \overline{32}$
$\Rightarrow 100 x=132.32 \overline{32}=131+1.32 \overline{32}$
$\Rightarrow 100 x=131+x$
$\Rightarrow 99 x=131$
$\Rightarrow x=\frac{131}{99}$
73. (B) Condition for perpendicular lines,

$$
a_{1} a_{2}+b_{1} b_{2}=0
$$

$$
(\mathrm{K}+3) \times 10+2(2+3 \mathrm{~K})=0
$$

$\Rightarrow 10 \mathrm{~K}+30+4+6 \mathrm{~K}$
$\Rightarrow 16 \mathrm{~K}=-34$
$\Rightarrow K=\frac{-17}{8}$
74. (D) Work in 7 days $=45 \times 7=315$
$\therefore$ Required time $=\frac{810-315}{99}=\mathbf{5}$ days
75. (A) $x=\angle \mathrm{ABD}+\angle \mathrm{CDB}=47^{\circ}+23^{\circ}=\mathbf{7 0}^{\circ}$

$$
[\because \angle \mathrm{CDB}=\angle \mathrm{CAB}]
$$



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## MEANINGS IN ALPHABETICAL ORDER

## Word

Ailment
Analogous
Archipelago
Atheist
Bibliophile
Clergy
Consistent
Extrapolation
Fluctuate
Govern
Humiliate
Hustle
Influence
Instantaneous
Isthmus
Lagoon
Metamorphosis
Misanthropist
Misogynist
Misologist

Peninsula
Prominence
Redundant
Sacrilege
Sadist
Sway
Transition
Transmigration
Unsound
Untenable
Viable

## Meaning in English

a bodily disorder or chronic disease
similar in some way
a group of islands
a person who does not believe in the existence of a god or any gods
a lover of books
the official or sacerdotal class of a non-Christian religion
possessing firmness or coherence
to predict by projecting past experience or known data
to shift back and forth uncertainly
to exercise continuous sovereign authority over
to reduce (someone) to a lower position in one's own eyes or others' eyes
to crowd or push roughly
the power of causing an effect in indirect or intangible ways
occurring or present at a particular instant
a narrow strip of land connecting two larger land areas
a shallow artificial pool or pond
a striking alteration in appearance, character, or circumstances
a person who hates or distrusts humankind
one who hates women
one who distrust or hatred of reason or reasoning
a piece of land extending out into a body of water
the state of being important, well-known, or noticeable no longer needed
violation or misuse of what is regarded as sacred.
a person who derives pleasure, especially sexual gratification from inflicting pain
the ability to exercise influence or authority
passage from one state, stage, subject, or place to another
to pass at death from one body or being to another not healthy or whole not able to be defended
capable of being done or used

Meaning in Hindi
बी मा री
अनु स्प
द्वी पस्मू ह
अनी सरवा दी
पु स तकप्र मी
पु रा’ हित वर्ग
अनु स्प
बहिवे " चन
बदलता रहना
सं चा लित करना
अप्मा नित करना
ढवे $े ~ ल न ा ~$
प्र 9 T f वित क्रना
तर क्ष प
सथा लड मस्मधय
झी ल
का य = तरप
मा नवद्वे णा $\uparrow$
ना री - द्वे णा१
तर्व $\bar{\circ}$ - वितर्व $\overline{\text { रे }}$ न
करने वा ला
प्रा यद्दी प
मु ख्ता
अना वश्क
अर्पवि $T\}$ करप
पपे ड. क
प्र ${ }^{\text {T }}$, ता
परिवर्त न
दे हा तरप
अ不 वस $थ 1$
अअक्ष प $\dagger$ य
सा ध्य

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## SSC MOCK TEST - 99 (ANSWER KEY)

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

76. (B) Add 'it' before 'doesn't' to make the sentence complete in meaning.
77. (A) When two different forms of verbs are needed, we use them separately. So add 'done' after 'have' in the first part of the sentence.
78. (A) General structure:

The whole+common Noun
The whole+of+proper noun
Since 'India' is a proper noun. Hence add 'of' after 'the whole'.
80. (B) 'by dint of '...... 'hard work'
'by virtue of' ......' the power vested in you'.
88. (C) Since the subject is singular, it will take singular verb. So replace 'have' with 'has'.
89. (A) As we know that if a subject and the verb are joined by a relative pronoun, the verb will agree with the antecedent to the relative pronoun. But when we deal with
' the only' we generally use the following structure:
The only + plural noun+ of relative pronoun + singular verb
Hence the correct option is (A).
90. (B) After 'remember' if any verb comes, it is used in gerund form.
91.(D) Parted from someone

Parted with something
92. (C) For past probability past form of modal should be used.

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

