## SSC MOCK TEST - 213

1. (A) Binocular is used to view Shovel is used to scoop.
2. (C) $534+111=645$ $381+111=492$
3. (B) 2 series
4. (D) In all other pairs, first is the name of the scientist who discovered the second.
5. (D) All other pairs consist of odd numbers only.
6. (D) All except are Governor of different states
7. (A) 1. Cadartrally
8. Caddisflies
9. Caddisworms
10. Cadetships
11. Caduicities
12. (C) gfeii/gfeii/gfeii/gfeii
13. (A) L U B T U P / L U B T U LUBTUP
14. (A) 8 km south

15. (D) $1^{3}+1=2$ $2^{3}+2=10$ $3^{3}+3=30$ $4^{3}+4=68$ $5^{3}+5=130$
16. (C) Number of letters in the word in increasing order.

17. (A) As per the pattern, next term will be rStUV.
18. (B)
19. (D)
20. (A) Row: $1(7)^{2} \rightarrow 49$

Row: $2(8)^{3} \rightarrow 512$
Row: $3(11)^{3} \rightarrow 1331$
17. (C) In first figure
$\Rightarrow 4+2+7-(3+1)=9$
In 2 nd figure
$\Rightarrow(3+3+5)-(4+2)=5$
In 3rd figure
$\Rightarrow(6+9+2)-(4+3)=10$
18. (A) $315 \& 3$ \# 9 @ $4 \% 6$
$=315 \div 3-9+4 \times 6$

$$
=105-9+24
$$

$$
=129-9=120
$$

19. (D) Primary Colours

20. (D)

21. (C) Let age of Ram be 'R'

Age of his son be 'S'
Age of his uncle be ' U '
$\therefore \frac{(48+\mathrm{U})}{3}=40 \quad(\mathrm{As} \mathrm{R}+\mathrm{S}=48)$
$\mathrm{U}=120-48=72$
22. (C)
23. (B)
24. (B)
 $\stackrel{+}{\text { Saksham }}$

+ 个Father
 $\stackrel{+}{\text { Father }}$

25. (A) $5,5=T$
$2,3=\mathrm{E}$
$7,8=\mathrm{M}$
$4,4=P$
26. (D) Top 3 States: Haryana (1st), Gujarat (2nd) and Maharashtra (3rd).
Top 3 Districts: Satara (Maharashtra), Rewari (Haryana) and Pedapalli (Telangana). Districts with maximum citizens' participation: Nashik (Maharashtra), Solapur (Maharashtra) and Chittorgarh (Rajasthan).
27. (B) Ustad Bismillah Khan was a Shehnai player. He was awarded with Bharat Ratna (2001), Padma Shri (1961), Padma Bhushan (1968) Padma Vibhushan (1980), Sangeet Vatak Akademi Fellowship (1994) and Sangeet Natak Akademi Award for Hindustani Music (1956).
28. (C) A breathing gas is a mixture of gaseous chemical elements and compounds used for respiration. Air is the most common, and only natural, breathing gas.
Nitrous oxide, commonly known as laughing gas or nitrous, is a chemical compound, an oxide of nitrogen with the formula $\mathrm{N}_{2} \mathrm{O}$. At room temperature, it is a colourless non-flammable gas, with a slight metallic scent and taste
29. (C) The doctrine of paramountcy is the legal principle that reconciles contradicting or conflicting laws in a federalist state, where both the central government, and the provincial or state governments, have the power to create laws in relation to the same matters.
Land doctrine is a technology group that allows a nation to specialize the way its army conducts land warfare.
30. Zakir Husain Khan was the third President of India, from 13 May 1967 until his death on 3 May 1969. He previously served as Governor of Bihar from 1957 to 1962 and as Vice President of India from 1962 to 1967.
Ramaswamy Venkataraman was the eighth President of India
Neelam Sanjiva Reddy was the sixth President of India, serving from 1977 to 1982.

Rajendra Prasad was the first President of India, in office from 1950 to 1962
35 (C) The 33rd edition of India-Indonesia coordinated patrol (IND-INDO CORPAT) was inaugurated at Port Blair, Andaman \& Nicobar Islands. The IND-INDO CORPAT 2019 is held from 19 Mar to 04 Apr 2019.
37. (D) The stamen is a male reproductive organ of a flower. It produces the pollen. The stamen has two parts: anther and stalk. The stalk is also called a filament.
The sepal is a leaf-shaped structure found in flowering plants, or angiosperms. It is found on the outermost part of the flower, and like a petal, a sepal is considered to be a modified leaf
Petals are modified leaves that surround the reproductive parts of flowers
39. (A) 23 January - Netaji Subhash Chandra Bose Jayanti
46. (A) Tughlaq Dynasty reigen started in 1320 in Delhi Ghazi Malik assumed the thone under the title of Ghiyath al-din Tughlaq. The dynasty ended in 1413.
The Sayyid dnasty was the fourth dynasty of the Delhi Sultanate, with four
rulers ruiling from 1414 to 1451 . It was founded by Khizr Khan.
The Lodi dynasty was an Afghan dynasty that ruled the Delhi sultanate from 1451 to 1526 . It was founded by Bahlul Khan Lodi. It was the last dynasty of Delhi Sultanate.
47. (A) Press Trust of India is the largest news agency in India, headquartered in New Delhi. It was founded on 27 August 1947 Chairman - Vijay Kumar Chopra CEO - Venky Venkatesh
48. (A) ANGAN (Augumenting Nature By Green Affordable New-Habitat) was Inaugurated by Shri Raj Pal, Economic Advisor, Ministry of Power and Shri Abhay Bakre, DG, BEE. 16 Countries Participated in this conference.
49. (A) Face off - Ice hockey Kickoff - Football Off side - Cricket Bodyline - Cricket
50. (B) 42nd Amendment Act 1976, was enacted during the emergency ( 25 June 1975 21 March 1977).

- 44th Amendment Act - 1978 (Protect Fundamental Rights)
- 74th Amendment Act - 1992 (The Nagar Palika Act)
- 73th Amendment Act - 1992 (The Panchayats)

51. (B)
B) $\sqrt[3]{\frac{0.000729}{0.085184}}=\sqrt[3]{\frac{729}{85184}}=\sqrt[3]{\frac{9 \times 9 \times 9}{44 \times 44 \times 44}}$
$=\frac{9}{44}$
52. (A) LCM of 3, 4, 5, 6 and $8=120$

Now, by option (a) 14400 is a least five digits perfect square number which is divisible by 120 .
53. (B) A.T.Q.,

| A | $:$ | $B$ |
| :---: | :---: | :---: |
| 20,000 | $:$ | 35,000 |
| 4 | $:$ | 7 |

After joining C,
$\mathrm{A}, \mathrm{B}$ and C share profit equally

| A | $:$ | B | $:$ |
| ---: | :--- | :--- | :--- |
| $\frac{11}{3}$ | $:$ | $\frac{11}{3}$ | $:$ |
| Now, | $\frac{11}{3}$ |  |  |
|  | A | $:$ | B |
| 4 | $:$ | 7 |  |
|  | $\frac{11}{3}$ | $:$ | $\frac{11}{3}$ |$: \frac{11}{3}$

54. (C) ATQ.,

Selling price of an umbrella $=₹ 30$ profit percentage $=20 \%$
$\therefore$ Cost price of an umbrella $=\frac{30 \times 100}{120}$
= ₹25
During the clearance sale, selling price
of an umbrella $=\frac{30 \times 90}{100}=₹ 27$
$\therefore$ Required profit percentage
$=\frac{27-25}{25} \times 100=8 \%$
55. (D) Let the marks of A, B and C are $10 x$, $12 x$ and $15 x$ respectively.
$\therefore$ Maximum marks of $\mathrm{C}=15 \times 6=90$
and maximum marks of $\mathrm{B}=12 \times 6=72$
Hence, the marks of B cannot be in the range of (80-90)
56. (D) Let the numbers of men, women and children are $3 y, 2 y$ and $y$ and their wages are $5 x, 3 x$ and $2 x$ respectively.
Given, $3 y=90 \Rightarrow y=30$
Number of women $=60$ and
Number of children $=30$
$\therefore$ Now, ATQ,
Total daily wages $=₹ 10350$
$\Rightarrow 90 \times 5 x+60 \times 3 x+30 \times 2 x=10350$
$\Rightarrow(450+180+60)=10350$
$\Rightarrow x=\frac{13350}{390}=15$
$\therefore$ Daily wages of a man $=15 \times 5=$ ₹ 75
57. (B) Let total number of men $=x$
and total number of women $=y$
$\therefore$ Number of married men $=\frac{45 x}{100}$
and number of married women $=\frac{25 y}{100}$
ATQ,
$\frac{45 x}{100}=\frac{25 y}{100} \Rightarrow y=\frac{9 x}{5}$
Also,
Total number of married adults =
$\frac{45 x}{100}+\frac{25 y}{100}$
$=\frac{9 x}{20}+\frac{9 x}{20}$
[from eq.
$=\frac{9 x}{10}$
and total population of city $=x+y$
$=x+\frac{9 x}{5}$
[From eq. ...(ii)
$=\frac{14 x}{5}$
$\therefore$ Required percentage $=\frac{\frac{9 x}{10}}{\frac{14 x}{5}} \times 100$
= 32.14\%
58. (D) Let the amount be $₹ x$ and the rate of interest $=r \%$ p.a.
ATQ,
Amount after Ist year = ₹ 1200
$\Rightarrow x\left(1+\frac{r}{100}\right)=1200$
Also, amount after IIIrd year $=1587$
$\Rightarrow x\left(1+\frac{r}{100}\right)^{3}=1587$
On dividing eq. (ii) by eq. (i), we get
$\left(1+\frac{r}{100}\right)^{2}=\frac{1587}{1200}$
$\Rightarrow 1+\frac{r}{100}=\frac{23}{20}$
$\Rightarrow \frac{r}{100}=\frac{3}{20}$
$r=15 \%$
(C) Alcohol Water
$\begin{array}{lrr}5 & 9 & \times 1 \\ 2 & 5 & \times 2\end{array}$
Now, New ratio is-
Alchol Water
$1\left(\begin{array}{cc}5 & 9 \\ 4 & 10\end{array}\right.$
Here, mixture to be taken out $=\frac{1}{5}$
Now, $\frac{1}{5}$ unit $=5$ litres
Then, total quantity $=1$ unit
$=5 \times 5=25$ litres
60. (B) $2^{32}-(2+1)\left(2^{2}+1\right)\left(2^{4}+1\right)\left(2^{8}+1\right)\left(2^{16}+1\right)$
$=2^{32}-(2-1)(2+1)\left(2^{2}+1\right)\left(2^{4}+1\right)\left(2^{8}+1\right)\left(2^{16}+1\right)$
$=2^{32}-\left(2^{2}-1\right)\left(2^{2}+1\right)\left(2^{4}+1\right)\left(2^{8}+1\right)\left(2^{16}+1\right)$
$=2^{32}-\left(2^{4}-1\right)\left(2^{4}+1\right)\left(2^{8}+1\right)\left(2^{16}+1\right)$
$=2^{32}-\left(2^{8}-2\right)\left(2^{8}+1\right)\left(2^{16}+1\right)$
$=2^{32}-\left(16^{16}-1\right)\left(2^{16}+1\right)$
$=2^{32}-\left(2^{32}-1\right)=1$
61. (D) A.T.Q,
$x^{2}-\sqrt{3} x-1=0$
$\Rightarrow x-\frac{1}{x}=\sqrt{3}$
We know that,
$\left(x+\frac{1}{x}\right)^{2}-\left(x-\frac{1}{x}\right)^{2}=4$

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Then,
$x+\frac{1}{x}=\sqrt{7}$
Multiply equation (i) and (ii), we get
$x^{2}-\frac{1}{x^{2}}=\sqrt{21}$
Taking cube both sides, we get
$x^{6}-\frac{1}{x^{6}}-3\left(x^{2}-\frac{1}{x^{2}}\right)=21 \sqrt{21}$
$\Rightarrow x^{6}-\frac{1}{x^{6}}=24 \sqrt{21}$
62. (A) $\frac{\sin \mathrm{A}-\sin \mathrm{C}}{\cos \mathrm{C}-\cos \mathrm{A}}=\cot \mathrm{B}$
$\frac{2 \cos \frac{A+C}{2} \cdot \sin \frac{A-C}{2}}{2 \sin \frac{A+C}{2} \cdot \sin \frac{A-C}{2}}$
$\cot \left(\frac{A+C}{2}\right)=\cot B$
$\frac{A+C}{2}=B$
Then A, B, C, are in A P.
63. (B) Let the coordinates of A and B be $(x, 0)$ and $(0, y)$ respectively.


Now, using midpoint formula,
we get,
$\frac{x+0}{2}=4 \Rightarrow x=8$
and, $\frac{y+0}{2}=6 \Rightarrow y=12$
Then, area of $\Delta \mathrm{OAB}=\frac{1}{2} \times x \times y$
$=\frac{1}{2} \times 8 \times 12=48$ sq. units
64. (A)

$\angle B A D=180^{\circ}-60^{\circ}-35^{\circ}=85^{\circ}$
$\triangle \mathrm{ADB}$ मे ${ }^{\circ}$,
$\angle \mathrm{BAD}+\angle \mathrm{ADB}+\angle \mathrm{ABD}=180^{\circ}$
$85^{\circ}+x^{\circ}+20^{\circ}=180^{\circ}$
$x=75^{\circ}$
$\angle \mathrm{EAY}=\angle \mathrm{EBQ}=60^{\circ}$
$\angle \mathrm{EBQ}=20^{\circ}+y^{\circ}=60^{\circ}$
$y^{\circ}=40^{\circ}$
65. (B) In $\triangle \mathrm{ABD}$

$2 a=90^{\circ} \Rightarrow a=45^{\circ}$
In $\triangle \mathrm{ADG}$
$A D=A G$ and $D F=F G$
$F$ is midpoint of GD
$\Rightarrow \mathrm{AF} \perp \mathrm{DG}$
$b=90^{\circ}$
In $\triangle \mathrm{ADC}$
$\sin \mathrm{C}=\frac{\mathrm{AD}}{\mathrm{AC}}=\frac{x}{2 x}=\frac{1}{2}$
$\mathrm{C}=30^{\circ}$
$a+b+c=45^{\circ}+90^{\circ}+30^{\circ}=165^{\circ}$
66. (A) A.T.Q.,

Sum of AP $=\frac{n}{2}[2 a+(n-1) d]$
(where $a=$ first term $d=$ Common diff.) Sum of internal angle of polygon $=(n-2) 180^{\circ}$
$\frac{n}{2}\left[2 \times 120^{\circ}+(n-1) \times 5^{\circ}\right]=(n-2) \times 480^{\circ}$
$\Rightarrow \frac{n}{2} \times 5\left[48^{\circ}+n-1\right]=(n-2) \times 180^{\circ}$
$\Rightarrow n^{2}-25 n+144=0$
$\Rightarrow(n-16)(n-9)=0$

$$
n=9 \text { or } 16
$$

67. (B) $\angle \mathrm{AOC}=135^{\circ}$
$\angle \mathrm{COB}=180^{\circ}-135^{\circ}$
$\angle \mathrm{COB}=45^{\circ}$
$\angle \mathrm{CDB}=22 \frac{1^{\circ}}{2}$
[CB is a common chord]
68. (B)


AB = Tower
$\mathrm{QP}=10$ metres
In $\triangle \mathrm{QBP}$

$$
\begin{equation*}
\tan 30^{\circ}=\frac{\mathrm{QP}}{\mathrm{~PB}} \tag{i}
\end{equation*}
$$

$\frac{1}{\sqrt{3}}=\frac{\mathrm{QP}}{\mathrm{PB}} \Rightarrow \mathrm{AB}: \mathrm{BP}=\sqrt{3}: 1$
In $\triangle \mathrm{ABP}$

$$
\begin{equation*}
\tan 60^{\circ}=\frac{\mathrm{AB}}{\mathrm{BP}} \tag{ii}
\end{equation*}
$$

$\sqrt{3}=\frac{\mathrm{AB}}{\mathrm{BP}} \Rightarrow \mathrm{AB}: \mathrm{BP}=\sqrt{3}: 1$
$\mathrm{CB}=\mathrm{QP}$ and $\mathrm{CQ}=\mathrm{BP}$
Now,


## SSC MOCK TEST - 213 (ANSWER KEY)

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


76. (D) The given sentence is correct as it is. Apostrophe after students indicates that the test results of multiple students are being considered.
77. (B) The error lies in the second part of the sentence. There are two errors in this segment. For should be replaced by to since one is answerable for something but to someone. For the same reason, with should be replaced by for.
78. (A) The error is in the first part. 'Have' should be replaced by 'has' since the subject is singular.
79. (D) Get by - manage with difficulty to live or accomplish something.
Get off - escape a punishment; be acquitted.
Get through - succeed,
Get over - recover, overcome.
80. (D) The correct phrase is to cry over spilled/ spilt milk. It means being upset over something that has already happened and cannot be changed.
88. (C) The phrase 'between the cup and lip' needs to be replaced with 'between the cup and the lip'. It means a situation where things did not happen at the last minute the way they were expected to due to unforeseen reasons.
89. (C) If some action has started in the past and is still continuing, then present perfect continuous tense should be used instead of present continuous tense. So, the phrase 'am waiting' needs to be replaced with 'have been waiting'.

## 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.

