## SSC MOCK TEST - 210 (SOLUTION)

1. (B) $\mathrm{T}=20$

$$
\frac{20}{10}=2
$$

$\mathrm{J}=10$
$X=24$
$\frac{24}{8}=3$
$4=8$
2. (A) The relationship is $x: 100 x$.
3. (C) Touch is felt and greet is acknowledged.
4. (C) In all other pairs, second is a part of the first.
5. (D) Here, all except Horse, are wild animals, while horse can be domestic animal.
6. (D) In all other groups, the third and first letters are alternate letters, while the first two letters are consecutive letters of the alphabet.
7. (B) According to Suraj his mother's birthday can be on
$=14$ th, 15 th, 16 th, 17 th, 18 th
But according to his brother birthday can be on
$=18 t h, 19 t h, 20 t h, 21$ th, 22nd
Because both are correct. 18th is common so birthday is on 18th April.
8. (A)

9. (C)
10. (C) wax/wax/wax/wax/wax
11. (B)


Vikash is $\mathbf{1 0 m}$. for from the starting point.
12. (C) $\mathrm{T}_{10}=a r^{n-1}$

$$
=7 \times(2)^{9}
$$

13. (A) Second is required by the first to function.
14. (D)
15. (C)
16. (B)

( $\Delta$ )
( $\Delta$ )
17. (D)




Similarly


18. (A) Together $=0^{\circ}$ angle

By unique formula $\mathrm{H}=6$

$$
\begin{aligned}
& 6:\left(6 \times 5 \pm \frac{0}{66}\right) \times 12 \\
& 6:(30 \pm 0) \times \frac{12}{11} \\
& 6: \frac{360}{11}=6: 32 \frac{8}{11}
\end{aligned}
$$

30. (B) Gaganyaam is an India crewed orbital spacecraft intended to be the basis of the Indian Human Spacefight Programme. The spacecraft is being designed to carry three people, and a planned upgraded version will be equipped with rendezvous and docking capability. It is manufacturer by HAL and ISRO
31. (C) State

Gujrat
TamilNadu
Uttar Pradesh
Kerala
No. of smart cities
7
12
13
2
34. (C) The Bardoli Satyagraha of 1928, in the state of Gujarat, was a major episode of civil disobedience and revolt in the Indian Independence Movement.
36. (B) 1st five-year plan - 1951-1956

7th five year plan - 1985-1990 9th fiver year plan - 1997-2002
Rolling plan $\quad-1978$-1980
37. (B) Second schedule lists the emoluments for holders of constitutional offices such as salaries of President, Vice President, Ministers, Judges and Comptroller and Author-General of India etc.
Third schedule lists the various forms of oath for holders of various constitutional offices.
Fourth schedule enumerates the allocation of Rajya Sabha seats to States or Union Territories
38. (D) Reflection is the change in direction of a wavefron at an interface between two different media.
Refraction is the bending of a wave when it enters a medium where its speed is different.
Diffraction is the slight bending of light as it passes around the edge of an object. The complete reflection of a light ray reaching an interface with a less dense medium when the angle of incidence exceeds the critical angle.
39. (B) The conference, organised by the centre for Escalation of peace (CEP) and titled 'Life and leagacy of guru Padmasambhava' was held on January 29-30. Scholars from both countries discussed the Guru who was born in India and moved towards Bhutan in the 8th century to spread Buddhism and Buddhist teachings all across the Himalayan region.
40. (A) Statutory Liquidity Ratio is the Government term for the reserve requirement that the commercial banks in India are required to maintain in the form of cash, gold reserves RBI approved securities before provinding credit to the customers.
A bank rate is the interest rate at which a nation's central bank lends money to domestics banks.
Reverse repo rate is the rate at which RBI borrows money from the commercial banks.
43. (C) Tenth Amendment Act, 1961, incorporated Dadra and Nagar Haveli as the seventh Union territory of India, by amending the First schedule.
The constitution Act, 1962 incorporated Goa, Daman and Diu as the eighth Union territory of India, by amending the first schedule.
45. (D) 6 Febuary - International Day against Female Genital Mutilation 20 Febuary - World Day of Social Justice 22 Febuary - World Scout Day
47. (A) Men's Singles Anders Antonsen Men's Doubles Marcus Fernaldi

Gideion \& Kevin Sanjaya Sukamujo
Women's Doubles Misaki Matsutomo \& Ayaka Takahashi.
51. (A) $\because$ Ratio of diameters of the cylinders $=3: 2$
$\Rightarrow$ Ratio of radii of the cylinders
= $3: 2$
So, let the radii of the two cylinder are 3 r and 2 r
and, let the heights of the two cylinders are $h_{1}$ and $h_{2}$.
Now,
Volume of first cylinder
= volume of second cylinder
i.e. $\pi(3 r)^{2} h_{1}=\pi(2 r)^{2} h_{2}$
$\Rightarrow \frac{h_{1}}{h_{2}}=\frac{\pi \times r^{2}}{\pi \times 9 r^{2}}=\frac{4}{9} \Rightarrow 4: 9$
52. (C)

$$
\begin{aligned}
& x-y=w+z+6 \\
& x+y=w-z-3 \\
& \hline 2 x=2 w+3 \\
& 2 x-2 w=3 \\
& x-w=\frac{3}{2}=1.5
\end{aligned}
$$

53. (D) Required average price

$$
=\frac{(12 \times 30)+(8 \times 40)}{(12+8)}
$$

$=₹ 34 \mathrm{~kg}$
54. (A)

$\because$ Perimeter of square $=120 \mathrm{~cm}$
$\Rightarrow$ Each side of the square
$=\frac{120}{4} \mathrm{~cm}=30 \mathrm{~cm}$
$\Rightarrow$ Radius of the inscribed greatest possible circle $=\frac{30}{2} \mathrm{~cm}=15 \mathrm{~cm}$
$\Rightarrow$ Area of the circle $=\pi \times(15)^{2} \mathrm{~cm}^{2}$

$$
=\frac{22}{7} \times(15)^{2} \mathrm{~cm}^{2}
$$

55. (A) A.T.Q,


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Required angle $=\frac{180^{\circ}-(\angle \mathrm{E}+\angle \mathrm{F})}{2}$
$=\frac{180^{\circ}-\left(50^{\circ}+60^{\circ}\right)}{2}=35^{\circ}$
56. (D) Volume of cone $=\frac{1}{3} \pi r^{2} h$

After increment,

$$
\left[\begin{array}{l}
\mathrm{r} \xrightarrow{+20 \%} 1.2 \mathrm{r} \\
\mathrm{~h} \xrightarrow{+20 \%} 1.2 \mathrm{~h}
\end{array}\right]
$$

New volume $=\frac{1}{3} \pi(1.2 \mathrm{r})^{2}(1.2 \mathrm{~h})$

$$
=\frac{1}{3} \pi r^{2} h \times 1.728
$$

So, required \% increase

$$
\begin{aligned}
& =\frac{1.728-1}{1} \times 100 \% \\
& =0.728 \times 100 \% \\
& =72.8 \%
\end{aligned}
$$

57. (B) Total distance covered
$=12 \mathrm{~km}+12 \mathrm{~km}$
$=24 \mathrm{~km}$
$\rightarrow$ downward
$\vdash 12 \mathrm{~km}$
$\rightarrow$ upward
Total time taken $=3$ hours
$\Rightarrow$ Average speed $=\frac{24}{3}=8 \mathrm{~km} / \mathrm{hr}$
Now,
$\Rightarrow \frac{2 \times \mathrm{S}_{\text {down }} \times \mathrm{S}_{\mathrm{up}}}{\mathrm{S}_{\text {down }}+\mathrm{S}_{\mathrm{up}}} \Rightarrow \frac{2 \times\left(\mathrm{S}_{\mathrm{B}}+3\right)\left(\mathrm{S}_{\mathrm{B}}-3\right)}{\left(\mathrm{S}_{\mathrm{B}}+3\right)+\left(\mathrm{S}_{\mathrm{B}}-3\right)}$
$\Rightarrow \mathrm{S}_{\mathrm{B}}=9 \mathrm{~km} / \mathrm{hr}$
(We can find out from options also)
58. (B) A.T.Q,

$$
\begin{align*}
& \sqrt{14}-\sqrt{8}=\frac{6}{\sqrt{14}+\sqrt{8}} \longrightarrow(\mathrm{IV}) \\
& \sqrt{12}-\sqrt{6}=\frac{6}{\sqrt{12}+\sqrt{6}} \longrightarrow(\mathrm{III}) \\
& \sqrt{13}-\sqrt{7}=\frac{6}{\sqrt{13}+\sqrt{7}} \longrightarrow(\mathrm{II}) \\
& \sqrt{11}-\sqrt{5}=\frac{6}{\sqrt{11}+\sqrt{5}} \longrightarrow(\mathrm{I})
\end{align*}
$$

Hence,
$\sqrt{11}-\sqrt{5}>\sqrt{12}-\sqrt{6}>\sqrt{13}-\sqrt{7}>\sqrt{14}-\sqrt{8}$
59. (B) The number of days taken by A, B and C to complete the work while working together
$=\left(\frac{\text { L.C.M. of } 18,24 \& 36}{\frac{\text { L.C.M. }}{18}+\frac{\text { L.C.M. }}{24}+\frac{\text { L.C.M. }}{36}} \times 2\right)$ days
$=\left(\frac{72}{\frac{72}{18}+\frac{72}{24}+\frac{72}{36}} \times 2\right)$ days
$=\left\{\frac{72}{44+3+2}\right\}$ days
$=\frac{72 \times 2}{9}$ days $=16$ days
60. (D) C.P. $\xrightarrow{-5 \%}$ S.P.
(100\%) (95\%) = ₹665
S.P. at 5\% loss i.e. 95\% C.P. = ₹665

So, SP at $12 \%$ profit i.e. $112 \%$ of C.P.
$=₹ \frac{665}{95} \times 112=₹ 784$
61. (B) $\frac{2+\sqrt{3}}{2-\sqrt{3}}=\frac{2+\sqrt{3}}{2-\sqrt{3}} \times \frac{2+\sqrt{3}}{2+\sqrt{3}}=\frac{(2+\sqrt{3})^{2}}{\left(2^{2}+\sqrt{3}\right)^{2}}$
$=\frac{4+3+4 \sqrt{3}}{4-3}=\frac{7+4 \times 1.732}{1}$
$=7+6.928=13.928$
62. (B) $n+\frac{2}{3} n+\frac{1}{2} n+\frac{1}{7} n=97$
or, $n\left(\frac{42+28+21+6}{42}\right)=97$
$\Rightarrow n=\frac{97 \times 42}{97} \Rightarrow n=42$
63. (B)


Circumference of wheel $=\pi d$
$=\left(\frac{22}{7} \times 3\right) \mathrm{m}$
$\Rightarrow$ Distance covered in 1 minute
$=28 \times \frac{22}{7} \times 3 \mathrm{~m}$
So, Time taken by wheel to cover a distance of 5.280 km (or, 5280 m )
$=\frac{5280}{264}$ minutes $=20$ minutes
64. (C)


Sides are 3,4 and 5 cm
$\Rightarrow$ Triangle ABC is a right angled triangle where $\angle \mathrm{B}=90^{\circ}$
Now, $D, E$ and $F$ are mid points of the sides $A B, B C$ and $C A$ respectively.
Here,
FE || AB and DF || BC
Also,
In $\triangle \mathrm{DEF}, \angle \mathrm{F}=90^{\circ}$
$\Rightarrow \triangle \mathrm{DEF}$ is a right angled triangle.
So, also, from midpoint theorem,
$\mathrm{FE}=\frac{1}{2} \mathrm{AB}=1.5 \mathrm{~cm}$
and, $\mathrm{DE}=\frac{1}{2} \mathrm{BC}=2 \mathrm{~cm}$
So, Area of $\triangle \mathrm{DEF}=\frac{1}{2} \times 2 \times 1.5=\frac{3}{2} \mathrm{~cm}^{2}$
65. (C) Externally $\begin{array}{ccc}\boldsymbol{l} & \boldsymbol{b} & \boldsymbol{h} \\ 3.3 \mathrm{~m} & 2.6 \mathrm{~m} & 1.1 \mathrm{~m}\end{array}$ Volume

Externally $3.3 \mathrm{~m} \quad 2.6 \mathrm{~m} \quad 1.1 \mathrm{~m}$ $330 \mathrm{~cm} 260 \mathrm{~cm} 110 \mathrm{~cm} \quad 9438000 \mathrm{~cm}^{3}$

Internally $320 \mathrm{~cm} 250 \mathrm{~cm} \quad \mathrm{~h} \quad 8000000 \mathrm{~cm}^{3}$
$\Rightarrow$ Internal height $=\frac{8000000 \mathrm{~cm}^{3}}{(320 \times 250) \mathrm{cm}^{2}}$

$$
\begin{aligned}
& =\frac{8000000 \mathrm{~cm}^{3}}{80000 \mathrm{~cm}^{2}} \\
& =100 \mathrm{~cm}
\end{aligned}
$$

$\Rightarrow$ Thickness of the bottom

$$
\begin{aligned}
& =(110-100) \mathrm{cm} \\
& =10 \mathrm{~cm} \\
& =1 \mathrm{dm}
\end{aligned}
$$

66. (A) ATQ,

Rate\% $=5 \%$, Time $=3$ years
Let principal $=(20)^{3}=8000$ units

$(20+20+20+1)$ units $=₹ 122$
61 units $=₹ 122$
1 unit = ₹2
8000 units $=₹ 2 \times 8000=₹ 16000$
$\therefore$ Hence required sum $=₹ 16000$
67. (C) A.T.Q,

In both cases, distance will be same then the ratio of speed is inverse of ratio of the time,
$\frac{\text { Speed }_{1}}{\text { Speed }_{2}}=\frac{V+45}{V-45}=\frac{120}{20}$
$\Rightarrow \frac{\mathrm{V}+45}{\mathrm{~V}-45}=\frac{6}{1}$
$\Rightarrow V+45=(V-45) \times 6$
$\Rightarrow \mathrm{V}=63 \mathrm{~km} / \mathrm{hr}$
68. (B)


Given the volume of frustum,
$=44=14 \pi$
Volume of smaller cone
$=\frac{1}{3} \pi \times 3^{2} \times 9-14 \pi$
$\Rightarrow \frac{1}{3} \pi r^{2} \times 3 r=13 \pi$
$\Rightarrow r^{3}=13 \Rightarrow r=\sqrt[3]{13}$
The radius of upper circular surface of the frustum $\sqrt[3]{13}$
69. (D) $5 . \overline{76}-2 . \overline{3}$
$=5 \frac{76}{99}-2 \frac{3}{9}=\frac{571}{99}-\frac{21}{9}$
$=\frac{571-231}{99}=\frac{340}{99}=3 . \overline{43}$
70. (C) A.T.Q,

$\mathrm{AP}: \mathrm{PD}=1: 3$
Then, length of $P Q=\frac{A P \times D C+P D \times A B}{A P+P D}$
$=\frac{1 \times 20+3 \times 12}{1+3}=14 \mathrm{~cm}$
71. (D) From both the conditions, we have relation $2.5 \mathrm{~km} / \mathrm{hr} \times(t+6) \mathrm{min}$
$=3.5 \mathrm{~km} / \mathrm{hr} \times(t-6) \mathrm{min}$
(where $t=$ actual time in minutes)
$\Rightarrow \frac{t+6}{t-6}=\frac{3.2}{2.5} \Rightarrow t=36$ minutes
So,
Required distance
$=2.5 \mathrm{~km} / \mathrm{hr} \times \frac{(36+6)}{60} \mathrm{hr}$
[or, $\left.=3.5 \mathrm{~km} / \mathrm{hr} \times \frac{(36-6)}{60} \mathrm{hr}\right]$
$=1 \frac{3}{4} \mathrm{~km}$
72. (B) Difference in votes of candidates $=(100 \%-46 \%)-46 \%$ of the total votes polled
$=8 \%$ of the total votes polled
$=3680$ votes
So,
Total votes polled (i.e. 100\%)
$=\frac{3680}{8} \times 100=46000$
73. (D) Total no. of late arrivals of trains
$=114+31+5$
$=150$
74. (C) Total no. of late departures of trains $=82+5+3$
$=90$
75. (B) Required punctuality $=\frac{1250+1400}{1400+1490} \times 100$

$$
\begin{aligned}
& =\frac{2650}{2890} \times 100 \% \\
& =91.7 \%
\end{aligned}
$$

## MEANINGS IN ALPHABETICAL ORDER

## Word

Ableism
Boisterous
Clamorous
Commiserate
Emaciate
Ferocious
Fissiparous
Haggard
Iconoclast

Insane
Ostentation
Primitive
Ridicule
Swanky

## Meaning in English

discrimination in favour of able-bodied people very noisy and active in a lively way making a loud and confused noise to express sadness or sympathy for someone to waste away physically very fierce or violent tending to break up into parts having a hungry, tired, or worried look a person who destroys religious images or opposes their veneration not normal or healthy in mind an unnecessary display of wealth knowledge etc. belonging to an early stage of development to make fun of in a cruel or harsh way using one's wealth, knowledge or achievements to try to impress others

Voluminous

## Meaning in Hindi

प्क्ष प त करना अपं ग के खि ला प का ला हलपू प
का ला हलपू प‘
स्हा नु ${ }^{2} T_{a}$ तिप्र क्ट करना
दु बला हा' ना
उ ग
ता' ड. ने की का पि पु करना
दु बला - प्तला, थ ${ }^{\top}$ का हा रा
मू ति ता' ड. ने वा ला

विक्षि प्त
दिखा वा

उ पहा सकरना
तड. क- श T ड. कवा ला

बहु तबड.

## SSC MOCK TEST - 210 (ANSWER KEY)

| 1. | (B) | 26. | (D) | 51. | (A) | 76. | (A) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2. | (A) | 27. | (C) | 52. | (C) | 77. | (B) |  |
| 3. | (C) | 28. | (C) | 53. | (D) | 78. | (C) |  |
| 4. | (C) | 29. | (C) | 54. | (A) | 79. | (C) |  |
| 5. | (D) | 30. | (B) | 55. | (A) | 80. | (A) |  |
| 6. | (D) | 31. | (B) | 56. | (D) | 81. | (C) |  |
| 7. | (B) | 32. | (C) | 57. | (B) | 82. | (A) |  |

76. (A) Change 'have give' into 'gave'. 'Last week' in the sentence indicates that the sentence should be in the past indifinite tense.
77. (B) Write 'of' in place of 'in'. Manifestation of is the correct structure.
78. (C) Replace 'when' with 'than'. 'No sooner ... than' is the correct pair of conjunction.
79. (C) 'To' is the correct option. 'Hindrance' takes preposition 'to'. 'Hindrance to means a person or thing that makes a situation difficult.
80. (A) 'Are looking forward to' is the correct option. 'Look forward' takes preposition 'to'. 'Look forward to' means 'await eagerly'.
81. (D) No improvement


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

