## SSC MOCK TEST - 232 (SOLUTION)

1. (A)


Similarly,

2. (B) ISI is intelligence agency of Pakistan, while the Mossad is of Israel.
3. (A) As, $\mathrm{SO}=19-15=4,4^{2}=16$ Similarly, XG $=24-7=17,17^{2}=\mathbf{2 8 9}$
4. (A) Except, (A) all others cities are situated on the bank of the Ganga river.
5. (D) $1629 \Rightarrow 1+6+2=9$
$3418 \Rightarrow 3+4+1=8$
$2349 \Rightarrow 2+3+4=9$
$1834 \Rightarrow 1+8+3 \neq 4$
6. (C)

7. (A)


Similarly,

8. (A) As, FLOWER $=($ Total alphabet +1$) \times 2$ $\Rightarrow(6+1) \times 2=14$
And, DISTASTE $=(8+1) \times 2=18$
Similarly,
BUREAUCRAT $=(10+1) \times 2=\mathbf{2 2}$
9. (C) $5 \times 2+1=11$
$11 \times 2-1=21$
$21 \times 2+1=43$
$43 \times 2-1=85$
$85 \times 2+1=\mathbf{1 7 1}$
10.
(D)

11. (A)

12. (D) $4 \times 5 \times 8 \Rightarrow 484$
$\mathrm{a} \quad \mathrm{b} \quad \mathrm{b}$ c a $7 \times 3 \times 9 \Rightarrow 397$
a b c b c a
$9 \times 7 \times 3 \quad 739$
a b c b ca
13. (D) The required ratio $=\frac{\frac{2}{3}+\frac{4}{9}}{\frac{1}{3}+\frac{5}{9}}$
$=\frac{10 / 9}{8 / 9}=5: 4$
14. (D)

15. (D)

16. (A)
17. (C)
18. (B) ATQ,
$\Rightarrow 72 \times 9-3 \div 8+2$
After changing sign according to question,
$=72 \div 9 \times 3+8-2$
$=8 \times 3+8-2$
$=24+8-2$
$=\mathbf{3 0}$
19. (C)
20. (B)

I. $\times$ II. $\checkmark$ III. $\times$
21. (C) I-dice $6 \rightarrow 1,4$

II-dice $6 \rightarrow 3,2$
If 1 is at bottom then $\mathbf{3}$ at the top.
22. (C)
23. (B) Clearly, the last bell rang 45 min before $7: 45$ am i.e., $7: 00 \mathrm{am}$. But it happened five minutes before the priest gave the information to the devotee. So, the information was given at $7: 05 \mathrm{am}$.
24. (B) baćd $\underline{\mathbf{c}} \mathrm{c} \mathrm{b} \underline{\mathbf{a}} \mathrm{c} d \mathrm{~b} \underline{\mathbf{c}} \mathrm{~b}$ a $\underline{\mathbf{c}} \mathrm{d} \mathrm{b} \mathrm{c}$
25. (D) Interview - Job - Probation Confirmation - Promotion
31. (A) The Maximum number of questions to be placed on the list of Unstarred question is 230.
32. (A) Bhutia - Sikkim Gond(SC) live in M.P., Maharashtra, Telangna, Andhra Pradesh, Bihar and Odisha.
Chenchu (S,T) live in Andhra Pradesh, Telangana Kanataka and Odisha.
33. (C) Jamini Roy was honoured with Padma Bhushan in 1954. He was one of the most famous pupils of Rabindranath Tagore.
Abanindranath Tagore was the creator of the Indian Society of Oriental Art.
Nandlal Bose was the pupil of Abanindranath Tagore. He was best known for his 'Indian Style' of Painting. He was honoured by Padma Vibhushan in 1954.
34. (A) Askaryan effect is the phenomenon whereby a particle travelling faster than the phase velocity of light in dense dielectric, produces a shower of secondary charged particles which contains a charge anisotropy and thus emits a cone of coherent.
37. (B) Himadri - Great or Inner Himalayas Himachal - Lesser Himalayas Shiwaliks - outer Himalayas
40. (B) The maximum amount to be remitted through RTGS (Real Time Gross Settlement) is 10 lakh.
46. (A) Kaveri tributaries - Shimsha, Hemavati, Arkavati, Kabini, Bhavani, Lokapavani and Amaravati.
47. (C) Dmitri Mendeleev formulated the periodic law and created a forsighted version of the periodic table of elements.
Hans Chirstia Orsted discovered first connection between electricity and magnetism, piperine alkaloid and produced Aluminium in 1825.
Michal Faraday discovered electromagnetic induction (laws of electrolysis).
49. (B) Author

## Books

Ursula Vernon
Dragon Breath, Harriet the Invincible, Curse

$$
\begin{array}{ll}
\text { Amal El-Mohtar } & \begin{array}{l}
\text { of the Were-Wiener } \\
\text { and Giant Trouble. } \\
\text { The Grace of Kings, } \\
\text { The Djinn Falls in Love } \\
\text { and Other Stories etc. }
\end{array} \\
\text { Diksha Basu } & \begin{array}{l}
\text { The Windfall } \\
\text { Bairaj Khanna } \\
\text { Foreign Policy of India, } \\
\text { Environmental Engi- } \\
\text { neering and Dark Star } \\
\text { etc. }
\end{array}
\end{array}
$$

51. (B) $4 \%=6000$

$$
\begin{aligned}
& 18 \%=\frac{6000}{4} \times 18 \\
& =27000
\end{aligned}
$$

$\therefore$ Advertisement charges $=₹ 27000$
52. (B) $x=\frac{(35-18)}{100} \times 360^{\circ}$

$$
\begin{aligned}
& =\frac{17}{100} \times 360 \\
& =61.2^{\circ}
\end{aligned}
$$

53. (C) Required central angle

$$
=\frac{10}{100} \times 360^{\circ}
$$

$=36^{\circ}$
54. (A) Required ratio $=15: 18$

$$
\Rightarrow 5: 6
$$

55. (D)


Ratio of radii $=4: 5: 7$

$$
\text { Let, } \mathrm{r}_{1}=4 x, \mathrm{r}_{2}=5 x, \mathrm{r}_{3}=7 x
$$

Now, $A_{1}=\pi r_{2}^{2}-\pi r_{1}^{2}$
$\Rightarrow \mathrm{A}_{1}=\pi\left(25 x^{2}-16 x^{2}\right)=9 \pi x^{2}$
and, $\mathrm{A}_{2}=\pi \mathrm{r}_{3}^{2}-\pi \mathrm{r}_{2}^{2}$
$\Rightarrow A_{2}=\pi\left(49 x^{2}-25 x^{2}\right)=24 x^{2}$
The required ratio $=A_{1}: A_{2}$
$=9 \pi x^{2}: 24 \pi x^{2}=3: 8$
56. (B) ATQ,

$$
\begin{aligned}
& \pi \mathrm{R}^{2} \mathrm{H}=\frac{4}{3} \pi \mathrm{r}^{3} \\
& \Rightarrow \pi \times 4 \times 4 \times \mathrm{H}=\frac{4}{3} \pi 3 \times 3 \times 3 \\
& \Rightarrow \mathrm{H}=\frac{9}{4}=2.25 \mathrm{~cm}
\end{aligned}
$$

## Campus

## KD Campus Pvt. Ltd

57. (C) $\mathbf{A} \quad \mathbf{B} \quad \mathbf{~} \mathbf{C}$
$3: 2: 1$
A receive $=\frac{3}{1} \times 1200=₹ 3600$
58. (A) Let the speed of goods train
$=x \mathrm{~km} / \mathrm{h}$
A.T.Q,
$10 \times x=4 \times 80$

$$
\Rightarrow x=32 \mathrm{~km} / \mathrm{h}
$$

59. (C) $\mathrm{A}: \mathrm{B}=8: 9$

Let A's age $=8 x$, B's age $=9 x$
ATQ,
$\frac{8 x+9}{9 x+9}=\frac{19}{21}$
$\Rightarrow 168 x+189=171 x+171$
$\Rightarrow 3 x=18 \Rightarrow x=6$
A's age $=8 \times 6=48$
B's age $=9 \times 6=54$
Here, C is 3 years younger to B .
Then, C's age $=54-3=51$ years
60.(B)


ATQ,
$7 x=112^{\circ}$
$\Rightarrow x=16^{\circ}$
$\therefore \angle B=3 x=3 \times 16=48^{\circ}$
61. (C) Total Amount
$=20,000 \times \frac{110}{100} \times \frac{112}{100}=₹ 24640$
62. (B) $\frac{4}{9}=0.444$;

$$
\begin{aligned}
& \sqrt{\left(\frac{9}{49}\right)}=\frac{3}{7}=0.4285 \\
& \sqrt{0.2025}=0.45 \\
& (0.8) 2=0.64
\end{aligned}
$$

So, the least is $\sqrt{\frac{9}{49}}$.
63. (B) A.T.Q.,
$x^{4}+1=14 x^{2}$
$\Rightarrow x^{2}+\frac{1}{x^{2}}=14, x+\frac{1}{x}=4$
Now, $3 x+\frac{2}{x^{2}}+\frac{3}{x}+2 x^{2}$
$\Rightarrow 3\left(x+\frac{1}{x}\right)+2\left(x^{2}+\frac{1}{x^{2}}\right)$
$\Rightarrow 3 \times 4+2 \times 14$
$\Rightarrow 12+28=40$
64. (C) Put $\mathrm{A}=4$ and $\mathrm{B}=0$

Hence, $A^{4}+B^{4}=4^{4}+0=256$
65. (C) Let the sum be ₹ $x$ after 2 years amount will be ₹5280 and then after 2 years amount will be ₹7920
$\Rightarrow \frac{5280}{x}=\frac{7920}{5280}$
$\Rightarrow x=\frac{(5280 \times 5280)}{7920}=₹ 3520$
66. (A) A.T.Q.,

$$
5-2 \sin ^{2} \theta-7 \cos \theta=0,\left(0^{\circ}<\theta<90^{\circ}\right)
$$

Put $\theta=60^{\circ}$ in above equation and we find that it satisfy the give equation.
Now, $\cot \theta+\cos \theta$
$\Rightarrow \cot 60^{\circ}+\cos 60^{\circ}$
$\Rightarrow \frac{1}{2}+\frac{1}{\sqrt{3}}=\frac{\sqrt{3}+2}{2 \sqrt{3}}$
67. (D)

A.T.Q.,
$\mathrm{PA}=12 \mathrm{~cm}, \mathrm{BR}=\frac{\mathrm{PA}}{3}, \mathrm{AB}=\frac{\mathrm{PA}}{2}=\frac{12}{2}=6$ cm and $\mathrm{QR}=\mathrm{PA}-2=10 \mathrm{~cm}$ $\angle \mathrm{PBA}=\angle \mathrm{PQR}, \angle \mathrm{APB}=\angle \mathrm{QPR}$ (common) and $\angle \mathrm{PAB}=\angle \mathrm{PRQ}$
Hence, $\triangle \mathrm{PBA} \sim \triangle \mathrm{PQR}$
$\frac{12}{P R}=\frac{6}{10} \Rightarrow \mathrm{PR}=20 \mathrm{~cm}$
$\Rightarrow \mathrm{PR}=\mathrm{PB}+\mathrm{BR}$
$\Rightarrow \mathrm{PB}=16 \mathrm{~cm}$
68. (C)

A.T.Q.,

We know that
$\angle \mathrm{ROQ}=2 \angle \mathrm{RPQ}$
$\Rightarrow \mathrm{RPQ}=\frac{70^{\circ}}{2}=35$
Similarly,
$\Rightarrow \angle \mathrm{POS}=2 \angle \mathrm{PRS}$
$\Rightarrow \angle \mathrm{PRS}=\frac{100^{\circ}}{2}=50^{\circ}$
In $\triangle \mathrm{PRA}$
As we know,
$\Rightarrow \angle \mathrm{RAQ}=\angle \mathrm{PRS}+\angle \mathrm{RPQ}=50^{\circ}+35^{\circ}=$ $85^{\circ}$
69. (D)

70. (D) Let $\mathrm{A}=100, \mathrm{~B}=100 \times \frac{100}{125}=80$
$C=(100+80) \times \frac{35}{100}=63$
The required percent
$=\frac{100-63}{100} \times 100=37 \%$
71. (B) $\frac{\cos \theta}{1-\sin \theta}+\frac{\cos \theta}{1+\sin \theta}=4$
$\Rightarrow \cos \theta\left[\frac{1+\sin \theta+1-\sin \theta}{(1-\sin \theta)(1+\sin \theta)}\right]=4$
$\Rightarrow \cos \theta\left[\frac{2}{1-\sin ^{2} \theta}\right]=4$
$\Rightarrow \frac{2 \cos \theta}{\cos ^{2} \theta}=4$
$\Rightarrow \cos \theta=\frac{1}{2} \Rightarrow \theta=60^{\circ}$
Now, $\tan \theta+\operatorname{cosec} \theta$
$\Rightarrow \tan 60^{\circ}+\operatorname{cosec} 60^{\circ}$
$\Rightarrow \sqrt{3}+\frac{2}{\sqrt{3}}=\frac{5}{\sqrt{3}}=\frac{5 \sqrt{3}}{3}$
72. (B) Let three numbers $=x, y$ and $z$ ATQ.,
$\frac{x+y}{2}+z=168 \Rightarrow x+y+2 z=336$
$\frac{y+z}{2}+x=174 \Rightarrow y+z+2 x=348$
and $\frac{z+x}{2}+y=180 \Rightarrow z+x+2 y=360$
On solving the equations
$4(x+y+z)=336+348+360$
$\Rightarrow x+y+z=\frac{1044}{4}=261$
The required average $=\frac{261}{3}=87$
73. (D) A, B can fill a tank and C can empty the filled up tank


A and C open together for 2 hours $=$ $\frac{2}{10} \times 2=\frac{4}{10}=\frac{2}{5}$
Now, A is closed and B and C is open together $=\frac{-3}{10}$
$\frac{2}{5}$ filled up tank can empty by B and C together in $=\frac{10}{3} \times \frac{2}{5}=\frac{4}{3} \mathrm{hr}$
$=1 \mathrm{hr}: 20 \mathrm{~min}$
Tank empty at $12: 20$ PM.
74. (B) Abhi bought two article for ₹ 624

Let, CP of $\mathrm{I}^{\text {st }}$ article $=x$
CP of $\mathrm{II}^{\text {nd }}$ article $=624-x$
ATQ,
$x \times \frac{86}{100}=(624-x) \times \frac{114}{110}$
$\Rightarrow 200 x=114 \times 624$
$\Rightarrow x=355.68$
CP of $\mathrm{I}^{\text {st }}$ article $=355.68$
CP of $\mathrm{II}^{\text {nd }}$ article $=624-355.68$

$$
=268.32
$$

The required difference
$=355.68-268.32=87.36$
75. (C) Volume of pipe $=\pi \times h\left(R^{2}-r^{2}\right)$
$=\frac{22}{7} \times 756\left[(2.5)^{2}-(1.5)^{2}\right]$
$=22 \times 108 \times 4=9504 \mathrm{~cm}^{3}$
given that $1 \mathrm{~cm}^{3}=7.5$ gram

Weight of pipe $=7.5 \times 9504$ gram
$=71280$ gram
$=\frac{71280}{1000} \mathrm{~kg}=71.28 \mathrm{~kg}$

## MEANINGS IN ALPHABETICAL ORDER

## Word

Accusation
Bonanza
Contagious
Complicated
Continuum

Effective
Eloquently
Evolution
Excluded
Executive
Fluently
Hierarchy

Inertia
Legislature Incorporated

Lay down
Liquidity
Sluggishness
Shiver

Oscillate
Supplementary
Scarce
Monument

## Meaning in English

claim that someone has done something illegal or wrong sudden increase in wealth, good fortune, or profit spread (disease) from one person to another, by direct contact consisting of many interconnecting parts or element, complex a coherent whole characterized as a collection, sequence, or progression.

Successful in producing result in a fluent or persuasive manner continuous branching and diversification from common trunks deny (someone) access to a place, group or privilege having the powers to put plans or actions into affect an ability to express oneself freely or articulately a system in which members of an organization or society are ranked according to their relative status tendency to remain unchanged a body of persons having the power to legislate united in one
to give up arms
the availability of liquid assets (cash) to a market or company lethargy
shake slightly and uncontrollably as a result of being cold, frightened, or excited move or swing back and forth in a regular rhythm completing or enhancing something insufficient structure erected to commomorate a notable person or event

Meaning in Hindi
आ रा प
सहृ द्धि
सं क्रा मक
उ लझा हु आ
अबा धक्रम

प्र $-T T$ वी
वा कष्टु ता से $\% T$ रा
क्रमा गत उ = नति
बे हा र करना

ध रा प्र वा ह
अनु क्रम

ज्ड. ₹ व
विद्य न मं ड ल
सम मलित
ड T ल दे ना (हथिт य र)
नकदी उ प्लाकि ध
सु स ती
का प्मा

दा' लन करना
पू रक
अल प
₹ मा रक

## SSC MOCK TEST - 232 (ANSWER KEY)

| 1. | (A) | 26. | (D) | 51. | (B) | 76. | (A) |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2. | (B) | 27. | (D) | 52. | (B) | 77. | (B) |  |  |
| 3. | (A) | 28. | (D) | 53. | (C) | 78. | (B) |  |  |
| 4. | (A) | 29. | (D) | 54. | (A) | 79. | (B) |  |  |

76. (A) Use 'had been' in place of 'would have been'.
Structure of Past Conditional sentences: If + sub + had $+V_{3}$, sub + would + have $+V_{3}$.
77. (B) Use 'returns' in place of 'returned'. We need a noun here. Returns is a noun.
78. (B) Put in -interrupt in conversation or discussion.
Put out - to extinguish. Put on - pretended, assumed Put off - to postpone.
79. (B) Carry through - to bear one's needs. Carry out - to complete or fulfil. Carry off - to suceed in difficult task. Carry on - to continue.
80. (D) I the sentence starts with 'Hardly', 'Scarcely', 'No sooner', 'Neither' etc, the formation will be-
$\left(\mathrm{Had}+\mathrm{S}+\mathrm{V}_{3}\right.$ or $\left.\mathrm{Did}+\mathrm{S}+\mathrm{V}_{1}\right)$
'Scarcely' is always followed by 'when'.
81. (C) Between __ two. Among __ for more than three.


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.

