## SSC MOCK TEST - 193 (SOLUTION)

1. (C) As, Pneumonia is caused by Virus. Similarly, Amoebiasis is caused by Protozoa.
2. (B) As, $\mathrm{H} E \mathrm{~A} D$ D $\mathrm{S} \mathrm{Z} \frac{\mathrm{W}}{}$


Similarly,

3. (B) As, $18^{2}-(1+8)=315$

Similarly, $16^{2}-(1+6)=249$
4. (C) Except Break, others are feelings.
5. (B) Except ACEG, others have one Vowel.
6. (C) $8432 \Rightarrow 8 \times 4=32$
$6848 \Rightarrow 6 \times 8=48$
$7321 \Rightarrow 7 \times 3=21$
$\mathbf{7 8 5 8} \Rightarrow \mathbf{7 \times 8} \neq 58$
7. (A) 1432
8. (B) Let age of $\mathrm{C}=x$ years
age of $B=2 x$ years
and, age of $\mathrm{A}=(2 x+3)$ years
Now, $(2 x+3)+2 x+x=33$
$\Rightarrow 5 x=30$
$\Rightarrow x=6$

$$
\text { So, age of } B=2 x=\mathbf{1 2} \text { years }
$$

9. (C) INTENTION
10. (D)

11. (C)

12. (A) The given series are sequence of prime numbers.
13. (D) $63+9-32 \div 3 \times 9$

After interchanging the signs as per given details,
$63 \div 9 \times 32-3+9$
$=7 \times 32-3+9$
$=224-3+9$
$=230$
14. (B)


Similarly,

15. (C) $3 \times 5 \times 7=105$
$5 \times 7 \times 9=315$
$7 \times 9 \times 11693$
16. (B) $(13+5) \times 2.5=45$
$(8+4) \times 2.5=\mathbf{3 0}$
$(21+7) \times 2.5=70$
17. (C) As, $50 * 16 \Rightarrow \frac{50+16}{2}=33$
$38 * 24 \Rightarrow \frac{38+14}{2}=26$,
and, $67 * 33 \Rightarrow \frac{37+33}{2}=50$
Similarly, $43 * 15 \Rightarrow \frac{43+15}{2}=\mathbf{2 9}$
18. (C)

I. $\times$ II. $\times$

Hence, Neither conclusion I nor conclusion II follows.
19. (C)

$\therefore$ He is now $\mathbf{1 2 k m}$ west with respect to his starting position.
20. (C) Required number of squares $=\mathbf{8}$
21. (A)

22. (B)
23. (D)
24. (A)
25. (B)
27. (D) Phosphorylation is the chemical addition of a Phosphoryl group ( $\mathrm{PO}_{3}{ }^{-}$) to an organic molecule.
Cellular respiration is a set of metabolic reactions and process that take place in the cells of organisms to convert biochemical energy from nutrients into adenosine triphosphate (ATP) and then release waste product.
Pyruvate oxidation is the conversion of pyruvate into acetyle-CoA by the enzyme pyruvate dehydrogenase. It connects glycolyses and the krebs cycle.
28. (C) 7 States/Union Territories have more than $75 \%$ forest cover are- Mizoram, Lakshadweep, Andaman and Nicobar Islands, Arunachal Pradesh, Nagaland, Meghalaya and Mizoram
8 States/Union territories have forest cover between 33\% to 75\% are- Tripura, Goa, Sikkim, Kerala, Uttarakhand, Dadar and Nagar Haveli, Chhattisgarh and Assam.
29. (D) Some more 2018 Arjuna Awardees- Hima das (Athletics), Smriti Mandhana (Cricket), Subhankar Sharma (Golf), Manpreet Singh and Savita (Hockey), Rahi Sarnobat, Ankur Mittal and Shreyasi (Shooting), Manika Batra and G. Sathiyan (Table Tennis) and Rohan Bopanna (Tennis).
30. (D) Ananda bazar Patrika was a Bengali language Patrika started by Tushar Kanti Ghose and his father Siris Kumar Ghose. Dainik Jagran was started by Shri Puran Chandra Gupta in 1942. Malayala Manorama published from Kerala by Malayala Manorama company limited, Headed by Mammen Mathew. It is the second oldest newspaper in Kerala after Deepika.
31. (B) People of Indian-origin aged 45-65 can avail of the benefits under this scheme.
32. (A) Marginal cost is the cost added by producing one additional unit of a product. Fixed costs are business expenses that are not dependent on the level of goods or services produced by business. It include rent, buildings, and machinery etc. Variable costs increase at a constant rate relative to labour and capital. It include wages, utilities and materials used in production etc.
33. (A) The fourth place is Nashik.
36. (B) Lord Curzon served as Governor General and Viceroy of India from 6 January 1899
to 18 November 1905. Police commission, education commission, enactment of Indian University Act, 1904, Land Resolution of 1902, Panjab Land Alienation Act 1900, Partition of Bengal in 1905 were important events during his tenure.
Lord Ripon (1880-84) replaced Vernacular Press Act, appointment of Hunter commission, reduced in Salt duty and formed local self Government.
During Lord Dalhousie (1848-1856) period second Anglo- Sikh war (1849) was fought. He annexed many states by doctrine of lapse. First railway line between Bombay and Thane was opened in 1853 and in the same year Calcutta and Agra were connected by Telegraph. He passed the widow remarriage Act, 1856.
38. (B) Force which acts on an object without coming physically in contact with it, called Non-Contact Force Applied Force, Gravitation Force, Normal Force, Air Resistance Force, Tension Force and String Force. Electrostatic Forces are attractive or repulsive forces between particles that are caused by their electric charge.
40. (C) Reserve bank of India Act, 1934 is the legislative act under which the Reserve Bank of India was formed. This act along with the companies Act, which was amended in 1936, were meant to provide a frame work for the supervision of banking firms in India.
The Securities and Exchange Board of India Act, 1992 enacted for regulation market in India. It was amended in years 1955, 1999 and 2002
41. (D) Finance commission formed on 22 November 1951. Present chairman is N. K. Singh.
43. (A) 20 February - World Day of Social Justice 18 April - World Heritage Day 30 April - Ayushman Bharat Diwas
45. (C) Nagaland - Ntangki National Park, Fakim and PulieBadze Wildlife Sanctuary and Rangapahar Reserve Forest.
Jharkhand - Dalma, Gautama, Hazaribagh, Palkot, Parasnath and Udhana lake Wildlife Sanctuary.
Mizoram - Murlen and Phawngpui National Parks.
Tripura - Rajbari and Clouded Leopard National Parks and Rows, Sepahijala and Trishna Wildlife Sanctuary.

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47. (C) Part III - Fundamental Rights (Articles 126-35)
Part IV - Directive Principles of State Policy (Articles 36-51)
Part V - The Union Government (Article 52-151)
50. (A) In computing, an emulator is hardware or software that enables one computer system to behave like another computer system (called the guest).
51. (B) Slant height $(\mathrm{L})=\sqrt{4^{2}+3^{2}}$

$$
=\sqrt{16+9}=\sqrt{25}=5 \mathrm{~cm}
$$

Area of Slant surface $=4 \times$ Area of Triangle
$=4 \times \frac{1}{2} \times 6 \times 5=60 \mathrm{~cm}^{2}$
Total surface area $=$ Area of base + Area of
Slant Surface $=(6)^{2}+60$

$$
=36+60
$$

$=96 \mathrm{~cm}^{2}$
52. (C) Let the number be $(10 x+y)$

By reversing, it becomes $(10 y+x)$
ATQ,
$(10 y+x)-(10 x+y)=27$
$\Rightarrow 9(y-x)=27 \Rightarrow y-x=3$
So, the possible pairs of $(x, y)$ are $(1,4),(2,5),(3,6),(4,7),(5,8),(6,9)$ Thus, there are 6 possible numbers
i.e. $14,25,36,47,58,69$.
53. (B) 1.02, 6.8 and 0.51
$=\frac{102}{100}, \frac{680}{100}, \frac{51}{100}$
$\mathrm{HCF}=\frac{\mathrm{HCF} \text { of Numerator }}{\text { LCM of Denominator }}$
$=\frac{\operatorname{HCF}(102,680,51)}{\operatorname{LCM}(100,100,100)}=\frac{17}{100}=\mathbf{0 . 1 7}$
54. (A) Cost Price of 1 ball $=\frac{300}{12}=₹ 25$
S.P of 1 ball $=30$

So, Profit $=₹(30-25)=₹ 5$
$\therefore \quad$ Required profit percentage
$=\frac{5}{25} \times 100=20$
55. (D) Let X pupils in the class.

Total increase in marks
$=x \times \frac{1}{4}=\frac{x}{4}$
$\therefore \quad \frac{x}{4}=116-88 \Rightarrow x=\mathbf{1 1 2}$
56. (C) Let ages of Rama and Shyam be $13 x$ and
$9 x$ years. Then, $\frac{13 x+4}{9 x+4}=\frac{15}{11}$
$\Rightarrow 11(13 x+4)=15(9 x+4)$
$\Rightarrow 143 x+44=135 x+60$
$\Rightarrow 8 x=16$
$\Rightarrow \quad x=2$
$\therefore \quad$ Present age of Shyam $=9 x=9 \times 2$

$$
=18 \text { years }
$$

57. (B) Let profit when $\mathrm{SP} ₹ 80=₹ x$

Then, profit when $\mathrm{SP} ₹ 116=₹ 3 x$
ATQ,
$3 x-x=116-80$
$\Rightarrow \quad 2 x=36$
$\Rightarrow \quad x=18$
So, CP = 80-16 = ₹ 64
58. (A) Area of circle $=2464$
$\Rightarrow \pi \mathrm{r}^{2}=2464$
$\Rightarrow \mathrm{r}^{2}=\frac{2464 \times 7}{22} \Rightarrow \mathrm{r}=28 \mathrm{~mm}$
Circumference $=2 \pi \mathrm{r}=2 \times \frac{22}{7} \times 28$

$$
=176 \mathrm{~mm}
$$

Circumference of circle $=$ Perimeter of equilateral $\Delta$.
$\Rightarrow 176=3 \times$ side
$\Rightarrow \quad$ Side $=\frac{176}{3} \mathrm{~mm}$
$\therefore \quad$ Height $=\frac{\sqrt{3}}{2} \times$ side $=\frac{\sqrt{3}}{2} \times \frac{176}{3}$

$$
\frac{88}{\sqrt{3}} \mathrm{~mm}
$$

59. (B)


Let $A B=2 \mathrm{a}=12 \mathrm{~cm}$

$$
\Rightarrow \mathrm{a}=6 \mathrm{~cm}
$$

and, $r=10 \mathrm{~cm}$
We have,

$$
\begin{aligned}
\mathrm{PB}=\mathrm{PA} & =\frac{a r}{\sqrt{r^{2}-a^{2}}} \\
& =\frac{6 \times 10}{\sqrt{10^{2}-6^{2}}}=\frac{60}{8}=\mathbf{7 . 5} \mathbf{c m}
\end{aligned}
$$

60. (D) $\angle \mathrm{ABC}=80^{\circ}$
$\angle \mathrm{AEB}=70^{\circ}$
$\therefore \quad \angle \mathrm{BAE}=180^{\circ}-\left(80^{\circ}+70^{\circ}\right)=180^{\circ}-150^{\circ}=30^{\circ}$
$\angle \mathrm{BCD}+\angle \mathrm{DAB}=180^{\circ}$ (opp. angles of
cyclic quadrilateral ABCD)
$\Rightarrow \quad \angle \mathrm{BCD}+30^{\circ}=180^{\circ}$
$\Rightarrow \quad \angle \mathrm{BCD}=180^{\circ}-3^{\circ}=150^{\circ}$
$\therefore \angle \mathrm{DCE}=180^{\circ}-\angle \mathrm{BCD}=180^{\circ}-150^{\circ}=3 \mathbf{3 0}^{\circ}$
61. (B) Put, $a=4, b=2.5$
$a^{3}+b^{3}=(4)^{3}+(2.5)^{3}=64+15.625$
$=79.625$
62. (A) $x^{2}-\sqrt{2} x=-1$
$\Rightarrow x(x-\sqrt{2})=-1$
$\Rightarrow x-\sqrt{2}=-\frac{1}{x}$

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$\Rightarrow x+\frac{1}{x}=\sqrt{2}$
$\therefore \frac{x^{4}+1}{x^{2}}=x^{2}+\frac{1}{x^{2}}$

$$
\begin{aligned}
& =\left(x+\frac{1}{x}\right)^{2}-2 x \times \frac{1}{x}=(\sqrt{2})^{2}-2 \\
& =2-2=0
\end{aligned}
$$

63. (B) Let the width of rectangle $=x \mathrm{~cm}$

Then, length of rectangle $=(x+4) \mathrm{cm}$
$\because \quad$ Area of rectangle $=l \times b$
$\therefore \quad 221=x(x+4)$
$\Rightarrow x^{2}+4 x=221$
$\Rightarrow x^{2}+4 x-221=0$
$\Rightarrow x^{2}+17 x-13 x-221=0$
$\Rightarrow x(x+17)-13(x+17)=0$
$\Rightarrow \quad x=-17,13$
Width $=x=13 \mathrm{~cm}$
Length $=x+4=13+4=17 \mathrm{~cm}$
$\therefore \quad$ Perimeter $=2(1+\mathrm{b})=2(13+17)$

$$
=2(30)=60 \mathrm{~cm}
$$

64. (B) $37.5 \%=\frac{3}{8}$

Sum Amount


ATQ,
1331 units = ₹ 2662
1 unit = ₹ 2
$\therefore \quad$ Sum $=512 \times 2=₹ \mathbf{1 0 2 4}$
65. (B) A.T.Q,

Required Time $=\frac{120+180}{(50-41) \times \frac{5}{18}}$
$=\frac{300}{9 \times \frac{5}{18}}=\frac{300 \times 2}{5}=120 \mathrm{sec}$.
$=2$ minutes.
66. (D) $\operatorname{Sin}^{2} 6^{\circ}+\operatorname{Sin}^{2} 12^{\circ}+$ $\qquad$
$=\operatorname{Sin}^{2} 6^{\circ}+\operatorname{Sin}^{2} 12^{\circ}+-----+\operatorname{Sin}^{2} 84^{\circ}+1$
$\left[\therefore \operatorname{Sin} 90^{\circ}=1\right]$
No. of terms $(n)=\left(\frac{84-6}{6}\right)+1=14$
Value of 14 terms $=\frac{14}{2}=7$

$$
\left[\therefore \operatorname{Sin}^{2} 6^{\circ}+\operatorname{Sin}^{2} 84^{\circ}=1\right]
$$

$\therefore$ Total value $=7+1=\mathbf{8}$
67. (B)


Let $A B$ be the observer and $C D$ be the tower.
$\mathrm{BE}=\mathrm{AC}=20 \sqrt{3} \mathrm{~m}$
In $\triangle \mathrm{BDE}$,

$$
\frac{\mathrm{DE}}{\mathrm{BE}}=\tan 60^{\circ}=\sqrt{3}
$$

$\Rightarrow \quad \mathrm{DE}=\mathrm{BE} \times \sqrt{3}=20 \sqrt{3} \times \sqrt{3}=60 \mathrm{~m}$
$\therefore \quad \mathrm{CD}=\mathrm{CE}+\mathrm{DE}=(5+60)=\mathbf{6 5} \mathbf{~ m}$
68. (A) Work done by A in 30 days $=75 \%$
$\therefore \quad$ Work done by A in 1 day $=\frac{75}{30}$

$$
=2.5 \%
$$

Work done by A and B in 2 days

$$
=(100-75) \%=25 \%
$$

$\therefore \quad$ In these 2 days, work done by $\mathrm{A}=2.5 \times 2=5 \%$ So, remaining work ( $25-5=20 \%$ ) will be done by $B$ in 2 days
$\because \quad$ B does $20 \%$ work in 2 days.
$\therefore$ It will complete $100 \%$ work in 10 days.
69. (B)


Given, $\mathrm{AB}|\mid \mathrm{DE}$

$$
A C \| B D
$$

$\mathrm{BE} \perp \mathrm{DE}$
From line Properties,

$$
60^{\circ}+\angle \mathrm{BDC}=180^{\circ}
$$

$\Rightarrow \angle \mathrm{BDC}=180^{\circ}-60^{\circ}=120^{\circ}$
Now, $\angle \mathrm{BDE}=180^{\circ}-\left(40^{\circ}+120^{\circ}\right)=20^{\circ}$

$$
\left.\angle \mathrm{BDE}=\angle \mathrm{ABD}=20^{\circ} \text { [Alternate angles }\right]
$$

$\therefore$ In quadrilateral, sum of all angles $=360^{\circ}$
So, $\angle \mathrm{A}+20^{\circ}+60^{\circ}+120^{\circ}=360^{\circ}$
$\Rightarrow \angle \mathrm{A}=360^{\circ}-200^{\circ}=\mathbf{1 6 0}^{\circ}$
70. (C) $(\operatorname{Sec} A+\tan A)(1-\operatorname{Sin} A)$

$$
\begin{aligned}
& =\left(\frac{1}{\cos A}+\frac{\sin A}{\cos A}\right)(1-\sin A) \\
& =\left(\frac{1+\sin A}{\cos A}\right)(1-\sin A) \\
& =\frac{1-\sin ^{2} A}{\cos A}=\frac{\cos ^{2} A}{\cos A}=\operatorname{Cos} A
\end{aligned}
$$

71. (B)

$\triangle \mathrm{ABC}$ is a right angled triangle at C.
$\angle \mathrm{CAB}=45^{\circ}$
$\therefore \quad \angle \mathrm{ABC}=45^{\circ}$

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So, $\mathrm{AC}=\mathrm{BC}=7 \mathrm{~cm}$
$\therefore \quad \mathrm{AB}=7 \times \sqrt{2}$

$$
=7 \sqrt{2} \mathrm{~cm}
$$

$\mathrm{AB}($ diameter $)=7 \sqrt{2} \mathrm{~cm}$
$\therefore \quad$ Radius $(\mathrm{AO})=\frac{7}{\sqrt{2}} \mathrm{~cm}$
Area of circle $=\pi \mathrm{r}^{2}=\frac{22}{7} \times \frac{7}{\sqrt{2}} \times \frac{7}{\sqrt{2}}$
$=77 \mathrm{~cm}^{2}$
72. (C) ATQ,

We have,
$\frac{\text { Area of } \triangle \mathrm{PQR}}{\text { Area of } \triangle \mathrm{LMN}}=\frac{(R P)^{2}}{(N L)^{2}}$
$\Rightarrow \quad \frac{81}{324}=\frac{R P^{2}}{(28)^{2}}$
$\therefore \quad \mathrm{RP}=\frac{\sqrt{81}}{\sqrt{324}} \times 28=\mathbf{1 4} \mathbf{~ c m}$
73. (B) Population of $\mathrm{E}=\frac{30^{\circ}}{360^{\circ}}=\frac{1}{12}$ part

Population of $\mathrm{F}=\frac{11.11}{100}=\frac{1}{9}$ part
Population of A and F together
$=\frac{1}{12}+\frac{1}{9}=\frac{7}{36}$ Part
$\therefore$ Total population of A and F
$=\frac{7}{36} \times 1152=\mathbf{2 2 4}$
74. (B) $\because 25 \%=\frac{1}{4} \times 360^{\circ}=90^{\circ}$

Poulation of $(\mathrm{A}+\mathrm{B})$
$=\left(60^{\circ}+75^{\circ}\right)=135^{\circ}$
Population of (C + D)
$=65^{\circ}+90^{\circ}=155^{\circ}$
$\therefore$ Required Ratio of Population
$=135^{\circ}: 155^{\circ}$
$=27: 31$
75. (D) $\because \frac{11.11}{100}=\frac{1}{9}$ part

Required number of children
$=\frac{1}{9} \times 1152=\mathbf{1 2 8}$

## MEANINGS IN ALPHABETICAL ORDER

Word
Degeneration
Forlorn
Inflation

Joyful
Procrastination
Recurring
Obligate
Serendipity
Ominous
Convenient
Benevolence
Benign
Cosmopolitan
Insular
Nefarious
Ornithologist
Parochial
Rigorous
Wicked

Meaning in English
intellectual or moral decline tending toward dissolution of character or integrity pitifully sad and abandoned or lonely. a general increase in prices and fall in the purchasing value of money experiencing or showing joy the action of delaying or postponing something occurring again to bind legally or morally accidential discovery suggesting that something bad is going to happen in the future
fitting in well with a person's needs, an act of kindness activities and plans showing kindness and gentleness belonging to all the world detached, standing alone, isolated flagrantly wicked or impious a person who studies or is an expert on birds. Having a limited or narrow outlook or scope. very strict and demanding morally very bad

Meaning in Hindi
अध प्तन
निरा प और अके ला
महं गा ई

अ नं दित
विलं ब
बा र- बा रहा' ने वा ला
बा ध करना
अकर्म मा त से कु छ ख $\mathrm{T}^{\prime}$ जक्रना
अप्र कु न
सु विध जाक
उ दा रता, कृप
दय लु
सर्म $\overline{>} T$ वा से
अके ला
अति प पी
प्रा १ विज्ञा नी
सं की प ${ }^{\circ}$
कठ $\dagger^{\prime}$ र, कठठ न
दु षट

SSC MOCK TEST - 193 (ANSWER KEY)

76. (C) 'Advice' being an uncountable noun will take 'much' before it. So replace 'many good advices' with 'much good advice' or 'many good pieces of advice'.
77. (C) Replace 'has' with 'has been' or 'is'. The sentence is in Passive Voice.
78. (C) Here we are using, 'aesthetic' as an 'adjective' to describe 'appeal' (noun). Thus replace 'aesthetics' with 'aesthetic'.
80. (A) Everything is singular hence singular verb is used.
Thus 'has been' is correct.
81. (A) 'Cut down' means 'to reduce'.
88. (B) After 'no' singular countable noun or uncountable noun is used.
89. (B) 'Africa' is not in Europe so we cannot use preposition 'in' for it. Replace 'in' with 'to'.


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.

