## SSC MOCK TEST - 203 (SOLUTION)

1. (A) As, Women $\rightarrow 5$ letters $\Rightarrow 25$

Similarly, Men $\rightarrow 3$ letters $\Rightarrow \mathbf{9}$
2. (D) As, ABC


Similarly, NML

3. (B) As, $\begin{array}{cc}36 \times 2 & 36 \div 2 \\ \downarrow & \downarrow \\ & 72 \\ & 18\end{array}$

Similarly, $\begin{array}{cc}24 \times 2 & 24 \div 2 \\ \downarrow & \downarrow \\ 48 & 12\end{array}$
4. (B)
$\underset{+1}{\frac{1}{L}} \frac{2}{2} \frac{3}{1} \quad \underset{+1}{\frac{4}{4}} \frac{\mathbf{5}}{L_{+1}} \frac{\mathbf{7}}{1}$ $\underset{+1}{7} \frac{8}{\underline{L}} \frac{9}{1} \quad \stackrel{5}{L_{+1}} \frac{6}{\underline{L}} \frac{7}{1}$
5. (D)

6. (D) Except Crow, all others are animals.
7. (D) $\mathbf{3 , 6 , 4 , 1 , 2 , 5}$
8. (D) Except 3200, all others are not multiple of 400 .
9. (C) Let the age of son $=2 x$ than age of father $=7 x$ ATQ.,
$\frac{2 x+20}{7 x+20}=\frac{4}{9}$
$\Rightarrow 8 x+180=28 x+80$
$\Rightarrow \quad 10 x=100$
$\Rightarrow x=10$
$\therefore \quad$ Required Sum $=2 \mathrm{x}+7 \mathrm{x}+20$
$=9 \times 10+20=110$ years
10. (A) Except $\mathbf{1 7}$ all others are multiple of 3
11. (D)

12. (B)

13. (D)

14. (D)

31. (A) State Mizoram Meghalaya Manipur

CM
Zoramthanga
Conrad Sangma
N. Biren Singh
32. (B) The breaking apart of nucleus of an atom is called fission not fusion. Fission is a radioactive decay process in which the nucleus of an atom splits into smaller parts.
33. (A) The Banking Regulation Act is applicable in Jammu Kashmir from 1966.
35. (D) State Punjab Uttrakhand Himachal Pradesh
36. (A) Author

Carl Marx Rudyard Kipling Leo Tolstoy

## Famous Fair

Saheedi Jar Mela
Magh Mela
Shivratri Fair

## Book

Communist Manifesto Jungle Book
40. (B) NBMSME was established on 15th May 2007 consisting of 47 members ( 18 Exofficio members and 29 members the tenure of members is for two years)
41. (D) MSP is price fixed by Government of India to protect the producer farmers against excessive fall in price during bumber production years.
42. (D) The Indian Citizenship Amendment Bill was proposed in Lok Sabha on July 19, 2016, amending the Citizenshhip Act of 1955.
46. (D) Brahmo Samaj was founded by Raja Ram Mohan Roy in 1828, in Bengal. Veda Samaj was founded by Keshab Chandra Sen and K. Sridharalu Naidu in 1864, in Madras. Arya Samaj was founded by Dayanand Saraswati in 1875.
Satyashodhak Samaj was founded by Jyoti Rao Phule in 1873
47. (B) In 1903, Pierre Curie received the Nobel Prize in Physics with his wife, Marie Curie and Henri Becquerel. In recognition of the extraordinary services they have rendered by their joint researches on the radiation phenomena. In 1968, Luis Alvarez received the Nobel Prize in Physics for the discovery iridium layer.
48. (B) Country

Costa Rica
Ecuador Greece

## Capital

San Jose
Quito
Athens
49. (B) Force which acts on an object without coming physically in contact with it is called Non-Contact Force Applied Force. Examples: 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.
51. (D) ATQ,
$9^{12}-7^{12}=\left(9^{6}-7^{6}\right)\left(9^{6}+7^{6}\right)$ $=\left(9^{3}-7^{3}\right)\left(9^{3}+7^{3}\right)\left(9^{6}+7^{6}\right)$
$=(9-7)\left(9^{2}+7^{2}+7 \times 9\right)\left(9^{3}+7^{3}\right)\left(9^{6}+7^{6}\right)$
$=2(193)(9+7)\left(9^{2}+7^{2}-9 \times 7\right)\left(9^{6}+7^{6}\right)$
$=2 \times 16 \times 193 \times 67\left(9^{6}+7^{6}\right)$
Hence, $9^{12}-7^{12}$ is exactly divisible by $\mathbf{1 3 4}$
52. (B) ATQ,

The quantity of water $=\frac{600 \times 85}{100}=510 l$
Total quantity of final solution

$$
\begin{aligned}
& =\frac{510}{(100-32)} \times 100 \\
& =750 l
\end{aligned}
$$

Hence, Required quantity $=750-600$

$$
=150 l
$$

53. (B) ATQ,
$x-y=8$
$\Rightarrow \quad x=y+8$------(i)
Then, $x y=42 \times 2$
$\Rightarrow \quad(y+8) y=42 \times 2$
$\Rightarrow y^{2}+8 y-84=0$
$\Rightarrow \quad(y+14)(y-6)=0$
$\Rightarrow$ either $y=-14$ or $y=6$
The number can't be negetive
Hence, The Required number $=14,6$
54. (A) ATQ,

55. (A) ATQ,


Produce AD to $G$ such that $A G|\mid B F$ and GF || CD
then, In $\triangle \mathrm{AGF}$ and $\triangle \mathrm{ABF}$
AF is common side and
$\angle \mathrm{GAF}=\angle \mathrm{BAF}$
then, $\triangle \mathrm{AGF} \cong \triangle \mathrm{ABF}$
now, $A G=A B$

$$
\begin{aligned}
\Rightarrow & A G=C D+D G=10 \\
\Rightarrow & D G=C F=10-6=4 \quad[\therefore A G=B F] \\
& \text { Hence }, C F=4 \mathrm{~cm}
\end{aligned}
$$

56. (B) ATQ,
$\sec ^{2} 50^{\circ}+\operatorname{cosec}^{2} 56^{\circ}-\cot ^{2} 40^{\circ}-\tan ^{2} 34^{\circ}$
$=\sec ^{2} 50^{\circ}+\operatorname{cosec}^{2} 56^{\circ}-\tan ^{2} 50^{\circ}-\cot ^{2} 56^{\circ}$
$=\sec ^{2} 50^{\circ}-\tan ^{2} 50^{\circ}+\operatorname{cosec}^{2} 56^{\circ}-\cot ^{2} 56^{\circ}$
$=1+1=\mathbf{2}$

## Campus

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57. (B) ATQ,


Area of path : Area of lawn
$60 \times 45-50 \times 35: 50 \times 35$
$2700-1750$ : 1750
950 : 1750
19 : 35
58. (A) ATQ,

$$
\begin{aligned}
& \frac{p^{2}+q^{2}}{p q}=\frac{r^{2}+s^{2}}{r s} \\
\Rightarrow & \frac{p}{q}+\frac{q}{p}=\frac{r}{s}+\frac{s}{r} \\
\Rightarrow & \frac{p}{q}=\frac{r}{s} \text { or } \frac{p}{q}=\frac{s}{r} \\
\Rightarrow & \frac{p-q}{p+q}=\frac{r-s}{r+s} \text { or } \frac{p-q}{p+q}=\frac{s-r}{s+r}
\end{aligned}
$$

$$
\text { Hence, }(\mathrm{p}-\mathrm{q}) /(\mathrm{p}+\mathrm{q})=(\mathbf{r}-\mathbf{s}) /(\mathbf{r}+\mathbf{s})
$$

59. (C) ATQ,
$\frac{40 \times x}{100}-\frac{(60-x)}{100} \times 10=4$
$\Rightarrow 40 x+10 x-600=400$
$\Rightarrow 50 x=1000 \Rightarrow x=20$
Hence, Cost price of pencil = ₹20
60. (B) ATQ,

Required distance $=\frac{(36+54)}{1} \times \frac{5}{18}=\mathbf{2 5 m}$
61. (A) ATQ,


Draw SB || PQ
area of $\Delta \mathrm{ABT}=\frac{1}{2} \times 12 \times 12=72$
area of $\Delta \mathrm{SRB}=\frac{1}{2} \times 16 \times 16=128$
then, area of SRTA $=128-72=56$
area of SPA $=\frac{1}{2} \times 4 \times 4=8$

Then, Required area $=56+8=\mathbf{6 4} \mathbf{c m}^{2}$
62. (C) $\frac{1}{\mathrm{~N}}=\frac{7+6+2 \sqrt{42}}{1}$
$\Rightarrow \mathrm{N}=\frac{1}{13+2 \sqrt{42}}=\mathbf{1 3}-\mathbf{2} \sqrt{\mathbf{4 2}}$
63. (B) ATQ,

$$
\frac{60}{x+y}+\frac{20}{x-y}=4 \quad\left[\frac{1}{x+y}=u, \frac{1}{x-y}=v\right]
$$

$\Rightarrow 60 u+20 v=4------(i) \quad$ and,
$\frac{40}{x+y}+\frac{40}{x-y}=6$
$\Rightarrow 40 u+40 v=6$
from equation (i) and (ii),
$u=\frac{1}{40}$ and $v=\frac{1}{8}$
then $x+y=40$-----(iii) and $x-y=8$ $\qquad$
-(iv),
from equation (iii) and (iv),
$y=16$ and $x=24$
Hence, the speed of stream $=\mathbf{1 6} \mathbf{~ k m p h}$
64. (B) ATQ,
$1 \xrightarrow{6 \mathrm{yr}} 3 \xrightarrow{6 \mathrm{yr}} 9 \xrightarrow{6 \mathrm{yr}} 27 \xrightarrow{6 \mathrm{yr}} 81$


Hence, Required time $=6+6+6+6+6$
= 30 years
65. (C) ATQ,

$$
B=12 \times \frac{5}{4}=15
$$

Then,


Time taken by $A=\frac{30}{3-2}=\mathbf{3 0}$ days
66. (C) ATQ,
$\left(x^{32}+\frac{1}{x^{32}}\right)\left(x+\frac{1}{x}\right)\left(x^{16}+\frac{1}{x^{16}}\right)\left(x-\frac{1}{x}\right)$
$\left(x^{4}+\frac{1}{x^{4}}\right)$
multiply and divided by $x^{2}+\frac{1}{x^{2}}$
then,

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$$
\begin{aligned}
& =\frac{\left(x^{32}+\frac{1}{x^{32}}\right)\left(x^{2}+\frac{1}{x^{2}}\right)\left(x^{2}-\frac{1}{x^{2}}\right) \times}{x^{2}+\frac{1}{x^{2}}} \\
& =\frac{\left(x^{4}+\frac{1}{x^{4}}\right)\left(x^{8}+\frac{1}{x^{8}}\right)\left(x^{16}+\frac{1}{x^{16}}\right)}{x^{2}+\frac{1}{x^{2}}} \\
& =\frac{\left(x^{32}+\frac{1}{x^{32}}\right)\left(x^{4}-\frac{1}{x^{4}}\right)\left(x^{4}+\frac{1}{x^{4}}\right) \times}{\left.x^{8}+\frac{1}{x^{8}}\right)\left(x^{16}+\frac{1}{x^{16}}\right)} \\
& =\frac{\left(x^{32}+\frac{1}{x^{32}}\right)\left(x^{8}-\frac{1}{x^{8}}\right) \times}{\left.x^{2}+\frac{1}{x^{8}}\right)\left(x^{16}+\frac{1}{x^{16}}\right)} \\
& =\frac{\left(x^{32}+\frac{1}{x^{32}}\right)\left(x^{16}-\frac{1}{x^{16}}\right)\left(x^{16}+\frac{1}{x^{16}}\right)}{x^{2}+\frac{1}{x^{2}}} \\
& \left.=\frac{\left(x^{32}+\frac{1}{x^{32}}\right)\left(x^{32}-\frac{1}{x^{32}}\right)}{\left(x^{64}-\frac{1}{x^{2}}\right.}=\frac{\mathbf{1}}{\boldsymbol{x}^{64}}\right) \\
& = \\
& =\frac{\boldsymbol{x}^{2}+\frac{\mathbf{1}}{\boldsymbol{x}^{2}}}{}
\end{aligned}
$$

67. (B) ATQ,

$\mathrm{QR}=\frac{R S}{2}=5 \sqrt{2}$
$\angle \mathrm{ORQ}=90^{\circ}-30^{\circ}=60^{\circ}$
Then, $\cos 60^{\circ}=\frac{R Q}{O R}=\frac{5 \sqrt{2}}{O R}$
$\Rightarrow \mathrm{OR}=10 \sqrt{2}$ and, $\tan 60^{\circ}=\frac{O Q}{R Q}$
$\Rightarrow \quad 5 \sqrt{2} \times \sqrt{3}=\mathrm{OQ}$
$\Rightarrow \quad \mathrm{OQ}=5 \sqrt{6}$
Then, $\mathrm{PQ}=\mathrm{PO}+\mathrm{OQ}=10 \sqrt{2}+5 \sqrt{6}$
$\triangle \mathrm{PQR}$ is a right angle triangle, because $\angle \mathrm{PQR}=90^{\circ}$
$\Rightarrow \quad \mathrm{PR}^{2}=\mathrm{PQ}^{2}+\mathrm{RQ}^{2}$

$$
\begin{aligned}
& =(10 \sqrt{2}+5 \sqrt{6})+(5 \sqrt{2})^{2} \\
& =200+150+200 \sqrt{3}+50 \\
& =400+200 \sqrt{3}=200(2+\sqrt{3})
\end{aligned}
$$

68. (A) ATQ,


Hence, Required ratio = 4:1
69. (A) ATQ,
$\mathrm{a}=3+2 \sqrt{2}=2+1+2 \times 1 \times \sqrt{2}$
$a=(\sqrt{2}+1)^{2}$
Square root both sides,
$\sqrt{a}=\sqrt{2}+1----$
$\sqrt{a}-\frac{\sqrt{a}}{1}=\sqrt{2}+1-\frac{1}{\sqrt{2}+1}=\sqrt{2}+1-\sqrt{2}+1=\mathbf{2}$
70. (D) ATQ,
$\begin{array}{ll}\text { A } & \\ \frac{7}{13} & \frac{9}{13} \\ \frac{800}{13 \times 100}\end{array}$
$\frac{1}{13} \quad \frac{1}{13}$
1 : 1
Hence, Required ratio $=\mathbf{1 : 1}$
71. (B) ATQ,
$\frac{y_{2}-y_{1}}{x_{2}-x_{1}}=$ slope
$\Rightarrow \quad \frac{1+2}{x-7}=\frac{-3}{10}$
$\Rightarrow 30=-3 x+21 \Rightarrow x=-\mathbf{3}$
72. (D) ATQ,

Maximum Profit $=₹ \mathbf{4 5 0 0}$
73. (B) ATQ,

Total loss $=1500+1000=₹ \mathbf{2 5 0 0}$
74. (C) ATQ,

Max. Profit : Min. Loss
4500 : 1000
9 : 2
Hence, Required ratio = 9:2
75. (C) ATQ,
$x=\frac{2500}{12500} \times 100=20$
$\Rightarrow \quad x=20$
Hence, Required value $=\mathbf{2 0}$

## MEANINGS IN ALPHABETICAL ORDER

## Word

Abhorrent
Ablaze
Abstruse

Agony
Brittle
Commensurate

Concession

Conflicts
Desiccate
Dirge
Ecstasy
Efflorescence
Embarrassment
Esoteric

Exaggerate

Frisk
Frivolous
Furious
Gambol
Jangle
Loiter
Masochist

Pathetic
Penitence

Reticence
Shallow

Slacken

Negotiations a formal discussion between people who are trying to reach an agreement, an act of negotiating
Obscure difficult to understand, likely to be understood by only a few people
Parasol a light umbrella that you use to protect yourself from the sun

## Meaning in English

causing or deserving strong dislike
in the process of burning, on fire
difficult for one of ordinary knowledge or intelligence to understand
extreme mental or physical pain
easily broken or cracked
equal or similar to something in size, amount, or degree
the act of giving up something or doing something in order to reach agreement
a struggle for power, property, etc.
to dry up or cause to dry up
a slow song that expresses sadness or sorrow
a state of very great happiness, extreme delight the period or state of flowering
the state of feeling foolish in front of others only taught to or understood by members of a special group : hard to understand
to think of or describe something as larger or greater than it really is
to move around in a lively or playful way
not important, not deserving serious attention very angry
to run or jump in a lively way
to make a harsh ringing sound
to delay an activity with idle stops and pauses
a person who derives sexual gratification from being subjected to physical pain causing feelings of sadness and sympathy a feeling of deep sadness because you have done something wrong
the quality or state of being silent
having a small distance to the bottom from the surface or highest point
to become slower or less active, to slow down

## Meaning in Hindi

हि ना नॉ ना
प्र ज वर्वल
जट ल

सं ता प
\& T गु र
आ नु प तिक

छू ट

झगड. ना
सू ख
विला प
उ ल ला स
पू 万 लना
पर्मि दगी
गू

बड . T - चढ़. T कर कहना

उ छल- वू 万 द करना
तु चछ
क्रा' धि
खु ఫी के साथ उ छल- वू
हा नहा ना ना
ट T ल- मा` ट T ल करना
का मु क
सै दे बा जी

अर पष्ट

छा ता

द्यी य
पछ ता वा
माँ न, क्म बा लने वा ला
छि छ ला

सु ₹ त्य पि थिए लहा' ना

## SSC MOCK TEST - 203 (ANSWER KEY)

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


76. (C) Change 'from' into 'of'.
77. (C) Change 'doubts' into 'doubt'. 'A number of people is plural hence plural verb is required.
78. (C) Change 'stretch' into 'stretched'. The sentence is in Past Tense.
79. (D) 'had eaten' is the correct option. If two actions take place in the past, one after the other, the $I^{\text {st }}$ action will be in Past Perfect Tense and the $2^{\text {nd }}$ action will be in Simple Past Tense.
80. (C) 'objected' is the correct option. Preposition 'to' in the sentence indicates that 'objected' will be the appropriate word here.
81. (B) 'negotiations' is the correct option. Negotiations are brought to a conclusion and not conflicts, quarrels and concession.
88. (C) 'Why he was' is the correct option. In reported speech if the question is of 'Wh family' no conjunction is used.
92. (C) 'Grieveance' is incorrectly spelt word. 'Grievance' is the correct word. Grievance means a feeling of having been treated unfairly.
93. (A) 'Manoevre' is incorrectly spelt word. 'Manoeuvre' is the correct word. Manoeuvre means to move skillfully or carefully.

Note:- If your opinion differs regarding any answer, please message the mock test and question number to $\mathbf{8 8 6 0 3 3 0 0 0 3}$

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.

