SSC MOCK TEST – 215

1. (D) As, watt is the unit of Power.
    Similarly, joule is the unit of work.

2. (A) As,
    N P B G O Q C H
    +1 +1 +1 +1

    Similarly,
    A J O T **B K P U**
    +1 +1 +1 +1

3. (A) As, $850 + 8 + 5 + 0 = 863$
    Similarly
    $430 + 4 + 3 + 0 = $ **437**

4. (B) $(6 \times 4)^2 = 576$
    $(1 \times 7)^3 = $ **343**
    $(2 \times 7)^2 = 196$
    $(3 \times 2)^2 = 36$

5. (C) Except "snake", all others are the family of "Panthera" genus.

6. (D) MN $\Rightarrow$ $13 + 14 = 27$
    NM $\Rightarrow$ $14 + 13 = 27$
    OL $\Rightarrow$ $15 + 12 = 27$
    ET $\Rightarrow$ 5 + 20 = 25

7. (D) Road $\rightarrow$ Roasted $\rightarrow$ Roller $\rightarrow$ Ropped $\rightarrow$ Roster

8. (A) BCF   CDG   DEH   **EFI**
    +1   +1   +1

9. (B) A   K
    $1 + 11 = 12$
    G   V
    $7 + 22 = 29$
    L   F
    $12 + 6 = 18$
    P   O
    16 + 15 = 31

10. (B) a **b** c a / a b **c** a / **a** b c a / a b **c** a / **a** b **c** a

11. (C) **x** y z a / a **z** y **x** / x y **z** a / a z y **x**

12. (D) Fullness

13. (D)

    Required distance = $40 + 50$
    $= 90$ m

14. (B)

    Deepak : Ravi
    Ages $\longrightarrow$ 5 : 6
    Total = $5 + 6 = 11$
    11 units $\rightarrow$ 33
    1 unit $\rightarrow$ 3
    5 units $\rightarrow$ 15
    6 units $\rightarrow$ 18
    Difference = $18 - 15 = 3$

15. (B) As, $4 * 5 \% 3 = (4 \times 5)^3$
    $= 8000$
    And, $2 * 3 \% 2 = (2 \times 3)^2 = 36$
    Similarly, $4 * 3 \% 3 = (4 \times 3)^3 = $ **1728**

16. (D) ATQ,
    Who are you $\rightarrow$ 432   .....(i)
    They is you $\rightarrow$ 485   ......(ii)
    They are dangerous $\rightarrow$ 295 .....(iii)
    From (i) and (ii),
    you $\rightarrow$ 4
    from (ii) and (iii),
    they $\rightarrow$ 5 and,
    Dangerous $\rightarrow$ 9

17. (C) 10 triangles.

18. (B)

    I. ×   II. ✓
    Hence, only conclusion II follows.

19. (C)

    Complex Number
    Integer
    Natural Number

20. (D) $2 \times 3 \times 5 \times 1 + 1 = 31$
    $4 \times 2 \times 3 \times 6 + 1 = 145$
    $2 \times 1 \times 5 \times 7 + 1 = $ **71**

21. (A)

22. (A)

23. (A)

24. (B)

25. (A)
S	T	R	A	W
↓	↓	↓	↓	↓
00,	**78,**	**13,**	**67,**	**23**

26. (B) Mamluk dynasty (Slave dynasty) was established in Northern India by Qutb ud-Din Aibak. He was a turkic slave of Muhammad of Ghor. It was the first of five dynasties of the Delhi Sultanate, which lasted until 1526.

28. (A) Nobel Prize in Physics was awarded to John Bardeen twice, and the Nobel Prize in Chemistry to Frederick Sanger. Marie Curie (Physics and Chemistry) and Linus Pauling (Chemistry and Peace).

UNHCR has been awarded the Nobel Peace Prize twice.

31. (A) National Culture Fund (NCF) was set up as a Trust under the Charitable Endowment Act, 1890 on 28thNovember, 1996

33. (D) Kerala has emerged on top among 20 large states in terms of quality of school education, followed by Rajasthan and Karnataka. Uttar Pradesh was ranked at the bottom position , according to a report released by the Niti Aayog.

37. (A) A minor planet, between Mars and Jupiter, has been named after 'Pandit Jasraj', the doyen of Indian classical vocal music. It was discovered on November 11, 2006.

39. (B) The 2019 Wuhan Open was the 6th edition of women's tennis tournament played on outdoor hard courts between September 22-28, 2019. The tournament was held at the Optics Valley International Tennis Center in Wuhan, China.

Alison Riske was the runner up.

41. (A) The Dhubri - Phulbari Bridge is a proposed bridge over the Brahmaputra River between Assam and Meghalaya. The bridge, planned to be completed by 2026-27, would be India's longest bridge over water and would span more than 19 km. This is being funded by Japan International Cooperation Agency and it would be executed by NHIDCL.

At present, there are 6 bridges over the Brahmaputra.

45. (B) The International Solar Alliance is an alliance of 121 countries initiated by India, most countries lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn.It was founded in 2015 , at Paris.

48. (B)
Country	**Capital**
Somalia	Mogadishu
Zambia	Lusaka

51. (A)
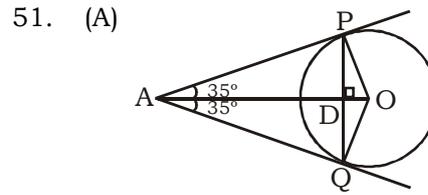
$\because \angle PAQ = 70°$

$\therefore \angle PAO = \dfrac{70}{2} = 35°$

In $\triangle APD$

$\angle APD + \angle PAD + \angle ADP = 180°$

$\angle APD + 35° + 90° = 180°$

$\angle APD = 55°$

$\angle APD = \angle APQ = 55°$

$\angle APQ = 55°$

52. (B) $3x^2 + 2x + 1 = 0$

$\alpha + \beta = -\dfrac{2}{3}$

$\alpha \beta = \dfrac{1}{3}$

Product of roots $= \dfrac{1-\alpha}{1+\alpha} \times \dfrac{1-\beta}{1+\beta} = 3$

Sum of roots $\quad = \dfrac{1-\alpha}{1+\alpha} + \dfrac{1-\beta}{1+\beta} = 2$

Hence, required equation is

$x^2 -$ (sum of the roots) x + product of roots = 0

$x^2 - 2x + 3 = 0$

53. (B) Average of 10 numbers = 50.2

$\therefore$ Sum of 10 numbers = 50.2 × 10 = 502

Actual average $= \dfrac{502 - 16 + (25 - 9)}{10}$

$= \dfrac{402 - 16 + 16}{10} = 50.2$

54. (C) Let the numbers be A and B.

then $\frac{1}{6}$ of A = $\frac{6}{5}$ of B

∴ $\frac{A}{B}$ = 6 × $\frac{6}{5}$ = $\frac{36}{5}$

Now:–
Let A = 36x, B = 5x
A.T.Q,
(A + 20) = (B × 8)
or, (36x + 20) = 5x × 8
∴ x = 5
∴ 2nd number = 5x = 5 × 5 = 25

55. (B) Population of literates = 60% of 3,96000
= 0.60 × 396000
= 237600

No of males literates = 80% of 220000
= 0.8 × 220000
= 176000

No of female literates = 237600 – 176000
= 61600

56. (A) Given that,
If P = 101
Then,

$\sqrt[3]{P(P^2 - 3P + 3) - 1}$

= $\sqrt[3]{P^3 - 3P^2 + 3P - 1}$

= $\sqrt[3]{(P - 1)^3}$ = $\sqrt[3]{(101 - 1)^3}$ = 100

57. (A) In ΔAOC.
∴∠OAC = ∠OCA = 15°
Now, in ∠BOC,
OB = OC
∴ ∠OBC = ∠OCB = 50°
∠ACB = ∠OCB – ∠OCA
⇒ ∠ACB = 50 – 15 = 35°
Now, ∠AOB = 2∠ACB
∴ ∠AOB = 2 × 35° = 70°

58. (C)

SP	7	7
CP	5	9

Required loss% = $\frac{9 - 7}{9}$ × 100 = $22\frac{2}{9}$%

59. (C) $\frac{1}{64^{\sin\theta} \times 256^{\cos\theta}}$ = $\frac{1}{4^{3\sin\theta} \times 4^{4\cos\theta}}$

= $\frac{1}{4^{3\sin\theta + 4\cos\theta}}$

Minimum value of 3 sin θ + cos θ

= $\sqrt{3^2 + 4^2}$

∴ $\frac{1}{4^{\sqrt{3^2+4^2}}}$ = $\frac{1}{4^5}$ = $\frac{1}{1024}$

60. (B) Let R% be the rate of simple interest
A.T.Q.,

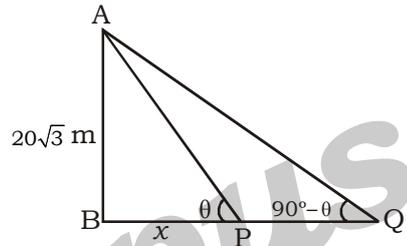$\left(\frac{5000 \times R \times 2}{100}\right)$ + $\left(\frac{3000 \times R \times 4}{100}\right)$ = 2200

⇒ 100 R + 120 R = 2200
⇒ R = 10%
= Rate of simple interest = 10%

61. (B)

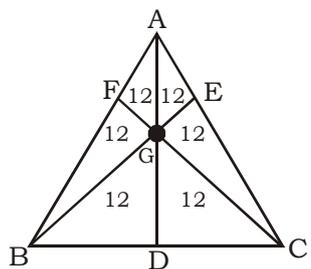We have, $\frac{20\sqrt{3}}{x}$ = $\frac{x + 10}{20\sqrt{3}}$

⇒ x^2 + 10x – 1200 = 0
⇒ (x – 30)(x + 40) = 0
⇒ x = 30   (ignore -ve value)
∴ Distance of P from the building = 30 m

62. (B)

Total area of ΔABC = 72 cm²
= The area of quadrilateral BDGF
= 12 + 12 = 24 cm²

63. (D) Volume of the block = (10 × 15 × 1) cm³
= 150 cm³.
Volume of the cone carved out

= $\frac{1}{3}$ × $\frac{22}{7}$ × 3 × 3 × 14 cm³ = 132 cm³

∴ Wood wasted = (150 – 132) × $\frac{100}{150}$ % = 12%

64. (B) $(1- \sin^2\alpha)(1 - \cos^2\alpha)(1+ \cot^2\beta)(1 + \tan^2\beta)$

$= \cos^2\alpha \cdot \sin^2\alpha \cdot \csc^2\beta \sec^2\beta$

$[\alpha + \beta = 90° \Rightarrow \beta = 90° - \alpha,$

$\sec \beta = \sec (90° - \alpha)]$

$\csc \beta = \csc (90° - \alpha)$

$= (\cos^2\alpha \cdot \csc^2\alpha)(\sin^2\alpha \cdot \sec^2\alpha)$

$= (\cos^2\alpha \cdot \sec^2\alpha)(\sin^2\alpha \cdot \csc^2\alpha) = 1$

65. (C) Let the installment be x

$\therefore \dfrac{x}{\left(1+\dfrac{10}{100}\right)} + \dfrac{x}{\left(1+\dfrac{10}{100}\right)^2} = ₹2100$

$\Rightarrow \dfrac{10x}{11} + \dfrac{100x}{121}\,x = ₹2100$

$\Rightarrow \dfrac{10x}{11}\left(1+\dfrac{10}{11}\right) = ₹2100$

$\Rightarrow \dfrac{10x}{11} \times \dfrac{21}{11} = ₹2100$

$\Rightarrow x = \dfrac{2100 \times 11 \times 11}{21 \times 10}$

$\Rightarrow x = ₹1210$

Required installment = ₹1210

66. (C) Surface area =

(2×Area of base)+(Perimeter of base × height)

$= 2 \times 25 + 24 \times 8$

$= 50 + 192$

$= 242 \text{ m}^2$

67. (B) Let the original volume of cylinder be 100

$\Rightarrow$ Volume after change

$= 100 \times \dfrac{150}{100} \times \dfrac{150}{100} \times \dfrac{40}{100} = 90$

$= \dfrac{100 - 90}{100} \times 100 = 10\%$

68. (B) A.T.Q,

$\dfrac{K}{6} = \dfrac{M}{4} = \dfrac{2}{5}R$

$\Rightarrow K : M : R$

$= 6 : 4 : \dfrac{5}{2}$

$= 12 : 8 : 5$

$\Rightarrow$ Komal's share

$= \dfrac{12}{(12 + 8 + 5)} \times 2250 = ₹ 1080$

69. (D) In the race between Sonu and Monu. Distance travelled by Sonu and Monu in same time = 600 metres and (600 – 60) metres = 600 metres and 540 metres

$\Rightarrow$ In the same time,

Ratio of distance travelled by Sonu and Monu = 10 : 9

Similarly,

In the same time

Ratio of distance travelled by Monu and Bablu = 500 : (500 – 25)

$= 500 : 475$

$= 20 : 19$

So, In the same time,

Ratio of distance travelled by Sonu, Monu and Bablu.

$= 10 \times 20 : 9 \times 20 : 9 \times 19$

$= 200 : 180 : 171$

$\Rightarrow$ When Sonu travels 200m, Bablu will travel 171 m.

$\Rightarrow$ In 400 metres race between Sonu and Bablu. Required number of metres by which Sonu will win the race,

$= 400m - 342 m = 58 m$

70. (A) Let x = length of the faster train (in metres),

So, 36 seconds $= \dfrac{x}{(40 - 20)\text{kmph}}$

$\Rightarrow x = 36 \text{ second} \times 20 \times \dfrac{5}{18}\text{m / sec}$

$= 200$ metres

Hence, percent decrease = 100 – 90 = 10%

71. (A) Let time taken by B in completing the work = x days

$\therefore$ Time taken by A $(x - 10)$ days

$\therefore \dfrac{1}{x} + \dfrac{1}{x-10} = \dfrac{1}{12}$

$$\Rightarrow \frac{x - 10 + x}{x(x - 10)} = \frac{1}{12}$$

$\Rightarrow 24x - 120 = x^2 - 10x$

$\Rightarrow x^2 - 34x + 120 = 0$

$\Rightarrow x^2 - 30x - 4x + 120 = 0$

$\Rightarrow x(x - 30) - 4(x - 30) = 0$

$\Rightarrow (x - 4)(x - 30) = 0$

$\Rightarrow x - 30$ because $x \neq 4$

$\Rightarrow x = 30$

Hence, B will be finish entire work in 30 days.

72. (A) Percentage of money spent on tennis =

$$\left(\frac{45}{360} \times 100\right)\% = 12\frac{1}{2}\%$$

73. (D) Degree value of expenditure on hockey = 63°

Degree value of expenditure on golf = 36°

∴ Required percentage

$$= \frac{63 - 36}{36} \times 100\% = 75\%$$

74. (A) Amount spent on basketball exceeds that on tennis by

$$= ₹\left(\frac{50 - 45}{360} \times 18000000\right) = ₹250000$$

75. (C) In degrees value of the expenditure

On football = 54°

On cricket = 81°

∴ Required percentage

$$= \frac{81 - 54}{81} \times 100$$

$$= \frac{27}{81} \times 100\% = 33\frac{1}{3}\%$$

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Accused	one charged with an offence	अभियुक्त
Acquitted	to declare innocent of a crime or of wrongdoing	मुक्त करना
Convict	having been convicted	दोषी ठहराना
Devious	willing to lie and trick people in order to get what is wanted	चालाक
Endemic	common in a particular area or field	स्थानिक
Exonerate	to relieve especially of a charge, obligation, or hardship	मुक्त करना
Forbearance	a refraining from the enforcement of something (as a debt, etc.) that is due	अंकुश रखना (कुछ करने से)
Indefatigable	incapable of being fatigued	अथक
Intolerance	the quality or state of being unable or unwilling to put up with	असहिष्णुता
Nefarious	evil or immoral	कुटिल
Reticent	not willing to tell people about things	मौन रहने वाला
Sporadic	occurring occasionally, singly, or in scattered instances	छिटपुट
Surreptitious	done, made, or acquired by stealth	चोरी से किया हुआ
Temporal	of or relating to time as distinguished from space	लौकिक
Unabashed	not embarrassed or ashamed about openly expressing strong feelings or opinions	बिना लज्जा के स्वीकार करना
Villainous	being or having the character of a villain	शरारतपूर्ण

SSC MOCK TEST - 215 (ANSWER KEY)

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

76. (B) Replace 'grave' with 'graver'. Since problems are being compared in the given sentence we will use the comparative form of 'grave' that is 'graver'.

77. (B) Replace 'have' with 'had'. Since two events are mentioned and both occurred in the past, the one that happened first will be expressed in past perfect tense.

78. (C) Every, each, either, neither are always followed by a singular parts of speech. Every being singular takes singular adjective. Therefore 'their ideas' should be replaced with' his idea'.

79. (A) Precedent means prior arrangement; no other option is suitable. Opportunity means a favourable juncture of circumstances. Chance is a synonym for opportunity. It also means something that happens without intention. Chance is followed by 'of'.

80. (D) Unreliable, someone we cannot count on or depend on is called unreliable, therefore option (D) follows. Unjust means characterized by injustice. Unbearable means not tolerable. Inefficient means someone who cannot bring the desired result.

81. (D) Reprimanded means a severe and formal scolding, while reproached means to express disappointment. Since we are talking about the Principal, option (D) is more suitable. Abuse means subject to harmful or improper treatment. Accused is charged with a criminal offence.

86. (A) On the fly means doing something without due preparedness or thought.

87. (D) 'A pearl of wisdom' means a succinct, insightful saying, piece of advice, or moral precept.

88. (C) 'Regret for' needs to be replaced with 'regret' to make the sentence grammatically correct. This is because 'regret' is followed by gerund if it is for some part incident.

Thus, the correct formation would be, 'I regret using objectionable words against a man so mighty'.

89. (B) 'The more interesting' needs to be replaced with 'the most interesting'. This is because, when making comparison between more than twoz things, the superlative degree is used and not the comparative degree

Thus, the correct formation would be, 'This book is the most interesting of the 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.

Note:- If you face any problem regarding result or marks scored, please contact 9313111777