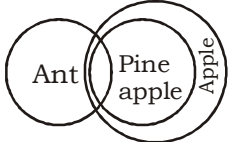# SSC MOCK TEST – 95 (SOLUTION)

1. (B) $24 \Rightarrow 2^4 = 16$ and $32 \Rightarrow 3^2 = \mathbf{9}$

2. (B) $238 \Rightarrow 382$ and $416 \Rightarrow \mathbf{164}$
   abc   bca   abc   bca

3. (A)
   A M N   **A M F**
   next vowel +1 +1   next vowel +1 +1
   ↓ ↓ ↓   ↓ ↓ ↓
   E N O   E N G

4. (D) Cow is **herbivorous** and Bear is omnivorous.

5. (D) $3 + 8 + 5 + 6 = 22$ Divisible by 11
   $2 + 4 + 2 + 3 = 11$ Divisible by 11
   $3 + 6 + 9 + 4 = 22$ Divisible by 11
   $2 + 5 + 1 + 7 = 15$ Not Divisible by 11

6. (C) 64 is the only number for which complete square root and cubic root is possible.
   $\sqrt{36} = 6$, $\sqrt{16} = 4$, $\sqrt[3]{64} = \mathbf{4}$ **and** $\sqrt{64} = \mathbf{8}$,
   $\sqrt{144} = 12$

7. (C) Expect Vijaywada, other cities are in Madhya Pradesh.

8. (C) Except (C), in other options, the first number is divisible by the second number.

9. (B) C O O L

10. (D)

    Ant   Pine apple   Apple
    I. ✘
    II. ✔

11. (C) $18+36 = 54$, $36+ 12= 48$, $12+32=44$,
    $42 + 32 = 74$, $42 + 28 = \mathbf{70}$, $28+ 18 = 46$

12. (A) $12 + 18 + 26 + 24 = 80$
    $15 + \mathbf{35} + 30 = 80$
    $42 + 38 = 80$

13. (B) $\frac{8}{2} = 4$, $\frac{4}{2} = 2$, $\frac{9}{3} = \mathbf{3}$ and $\frac{6}{2} = 3$

14. (C)

15. (B) $\frac{12 \times 6 \div 9}{8 - 4} = \frac{8}{4} = \mathbf{2}$

16. (B) $2 \times 0.5 + 1 = 2$
    $2 \times 1 + 2 = 4$
    $4 \times 2 + 3 = 11$
    $11 \times 4 + 4 = 48$
    $48 \times 8 + 5 = \mathbf{389}$

17. (C) 18   35   69   120   **188**
    +17 +34 +51 +68
    +17 +17 +17

18. (A) 123, 231, 312, 123, **231**, 312

19. (C) Sumit himself is the only child of his father. So, Sumit's wife is Sumita's **mother**.

20. (A) S/S̲T/SS̲T/SST̲T/SSS̲TT

21. (C) C U P B O A R D
    4 1 7 2 5 8 6 3

22. (B) From the given dice, we can conclude that 6, 4,1 and 2 dots appear adjacent to 3 dots. Clearly, there will be **3** dots on the face opposite the face with 5 dots.

23. (B) $(5 \times 2) + 4 – 6 = 8$
    $(4 \times 3) + 8 – 9 = 11$
    $(8 \times 4) + 1 – 7 = 26$
    $(3 \times 6) + 2 – 8 = \mathbf{12}$

24. (C)

25. (D) Total number of triangles = **24**

26. (C) Four great monarchies in the time of the Buddha were Avanti, Magadha, Kosala and Vamsa (or Vatsa).

28. (B) Directive Principles of State Policy aim to create social and economic conditions under which the citizens can lead a good life. They also aim to establish social and economic democracy through a welfare state. The Directive Principles of State Policy is guidelines/principles given to the Central and State governments of India, to be kept in mind while framing laws and policies.

29. (D) Statutory Liquidity Ratio (SLR) is the amount of liquid assets such as precious metals or other approved securities that a financial institution must maintain as reserves. SLR rate is determined and maintained by the Reserve Bank of India (RBI) in order to control the expansion of bank credit.

30. (B) According to Newton's first law, an object that is at rest will stay at rest unless an external force acts upon it and an object that is in motion will not change its velocity unless an external force acts upon it. So this law is known as the law of inertia.

31. (D) Spirit is highly volatile. So when it is exposed, it evaporates rapidly and if released into the environment it produces a cooling effect.

32. (D) ● Ronald Ross invented that Malaria is transmitted by mosquitoes.
    ● Laveron invented Plasmodium.
    ● Mekkulai first gave the term 'Malaria'.

33. (C) Rice is the main kharif crop and groundnut.
    ● Ravi Crops : Crops which are grown during the winter season are called Rabi crops Examples: Wheat, Gram, Pea, Linseed

● Kharif crop : The crops which are grown during the rainy season are called kharif crops. Examples: Paddy, Maize, millet, soyabeen, groundnut and Cotton crops.

34. (A) Bengaluru city police has launched "Pink Hoyslas", police patrol vehicles for women safety. Pink Hoysalas will be stationed at 51 hot spots that have been identified on the basis of the crime pattern in various city areas, especially those related to safety of women and children. The vehicles will also patrol during the night to extend a moral support for women of Bengaluru. Apart from this, an emergency panic alarm app "Suraksha" has also launched for women to send emergency alerts directly to the city police control room in case of threat. The Suraksha app is available from Android and iOS platforms.

35. (A) As per the first bi-monthly monetary policy review for 2017-18 of the Reserve Bank of India (RBI), the repo rate — the main policy rate at which banks borrow from RBI remain unchanged at 6.25%. While, RBI raised the Reverse Repo (RR) rate by 25 bps to 6% and cut the Marginal Standing Facility (MSF) rate and the bank rate by 25 bps to 6.50%. The central bank also allowed banks to invest in Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts in a bid to spur investments in core infrastructure sectors. The Reverse Repo rate is the rate at which banks lend funds to the RBI.

36. (C) The Kushan period is considered the Golden period of Gandhara. Peshawar Valley and Taxila are littered with ruins of stupas and monasteries of this period. Gandharan art flourished and it produced some of the best pieces of Indian sculpture. Many monuments were created to commemorate the Jataka tales. The Gandhara civilization peaked during the reign of the great Kushan King Kanishka (128-151).

37. (B)● Mt. Rainier is a volcanic mountain situated in U.S.A.
   ● Mt. Etna is situated in Europe, Paricutin volcanic mountain present in Mexico.
   ● Taal volcanic mountain is present in Philippines.

38. (D) PN Bhagwati was CJI during July 1985–Dec 1986. During his tenure as CJI, PIL was introduced to the Indian judicial system.

39. (C) Convertibility of rupee implies freely permitting the conversion of rupee to other currencies and vice versa. Currency Convertibility is the ease with which a country's currency can be converted into gold or another currency.

41. (A) The total energy of a revolving electron in any orbit is the sum of its kinetic and potential energies. Energy of an electron at infinite distance from the nucleus is zero. As an electron approaches the nucleus, the electron attraction increases and the energy of electron decreases and thus becomes negative. Thus, it can never be positive.

43. (A) The Union Minister for Information & Broadcasting, M Venkaiah Naidu has recently released a book titled "Gandhi in Champaran" authored by Dinanath Gopal Tendulkar at National Mahatma Gandhi Museum in New Delhi.

44. (A) Badami was also known as Vatapi in Bijapur district of Karnataka. Panamalai or Kanchi in Tamil Nadu was the capital of Pallavas.

45. (A) Indira Gandhi Canal originated from Harike barrage at Sultanpur on Sutlej but Ghaggar is a tributary of river Saraswati, which ends in the Thar Desert.

47. (C) Population density of Arunachal Pradesh is 13, Himachal Pradesh is 109, Meghalaya is 103, and Sikkim is 76. The state of Arunachal Pradesh has the lowest record of population density having just 17 per square kilometer.

50. (A) The Indian Veterinary Research Institute (IVRI) is the India's premier advanced research facility in the field of veterinary medicine and allied branches. At present, a DNA bank exists in Hyderabad. The headquarters of IVRI is located at Bareilly in Uttar Pradesh.

51. (C) A + B → 30 ─────── 4
        B + C → 24 ──── 120 ── 5
        C + A → 20 ─────── 6

1 day work of A + B + C = 7.5 units/day

∴ Efficiency of B = 1.5 units/day

Work remaining after 10 days = 45

Time taken by B to complete the work

$= \dfrac{45}{1.5}$ = **30 days**

52. (B) C.I. when interest compounded yearly

$$= ₹\left[6250\times\left(1+\frac{4}{100}\right)\times\left(1+\frac{\frac{1}{2}\times4}{100}\right)\right]$$

$$= ₹\left(6250\times\frac{26}{25}\times\frac{51}{50}\right)$$

$$= ₹\,6630$$

C.I. when interest is compounded half-yearly

$$= ₹\left[6250\times\left(1+\frac{2}{100}\right)^3\right]$$

$$= ₹\left(6250\times\frac{51}{50}\times\frac{51}{50}\times\frac{51}{50}\right)$$

$$= ₹\,6632.55$$

∴ Difference = ₹ **2.55**

53. (C) Average of runs of first 4 matches = 26
⇒ sum of runs of of first four matches
= 4 × 26 = 104
Average of runs of first 5 matches = 24
⇒ sum of runs of first 5 matches
= 24 × 5 = 120
Score in fifth inning = 120 – 104 = **16**

54. (A) 5% of A + 4% of B = $\frac{2}{3}$ (6% of A + 8% of B)

$$\Rightarrow \frac{5}{100}A+\frac{4}{100}B=\frac{2}{3}\left(\frac{6}{100}A+\frac{8}{100}B\right)$$

$$\Rightarrow 5A+4B=4A+\frac{16}{3}B$$

$$\Rightarrow A=\frac{16\,B}{3}-\frac{4B}{1}$$

$$\Rightarrow A=\frac{4}{3}B=A:B=4:3\Rightarrow\sqrt{A}:B=\textbf{2:3}$$

55. (A) Let the boat's rate upstream be x kms/h and that downstream be y kms/h
Then, distance covered upstream in 8 hrs 48 min = Distance covered downstream in 4 hrs

$$\Rightarrow \left(x\times8\frac{4}{5}\right)=(y\times4)$$

$$\Rightarrow \frac{44}{5}x\frac{y}{x}=4y$$

$$\Rightarrow y=\frac{11}{5}x\Rightarrow\frac{y}{x}=\frac{11}{5}$$

∴ Required Ratio = $\dfrac{\text{Speed of boat}}{\text{Speed of current}}$

$$=\left(\frac{y+x}{2}\right):\left(\frac{y-x}{2}\right)$$

$$=\frac{11+5}{2}:\frac{11-5}{2}=8:3$$

∴ Percentage decrease = $\dfrac{8-3}{8}\times100\%=\textbf{62.5\%}$

56. (D) Total number of votes polled
= (258 + 282 + 460) = 1000
As we can observe that winner received 460 votes
∴ Required percentage

$$=\left(\frac{460}{1000}\times100\right)\%=\textbf{46\%}$$

57. (C) Let the no. of students be 100
∴ No. of students opting both
subjects = 56 + 68 – 100 = 24%

∴ Total no. of students = $\dfrac{100}{24}$ × 36 = **150**

58. (B) 20% = $\dfrac{1}{5}$, 30% = $\dfrac{3}{10}$

Price	After loss
5	4
5	4
10	7
250	112

250 →(×14.8) 3700

112 →(×14.8) **1657.60**(After 3 years)

59. (B) $a+b+c=0$
⇒ $a+b=-c$; $b+c=-a$; $c+a=-b$

$$\therefore \frac{a+b}{c}+\frac{b+c}{a}+\frac{c+a}{b}$$
$$=-1-1-1=-3$$

$$\frac{a}{b+c}+\frac{b}{c+a}+\frac{c}{a+b}$$
$$=-1-1-1=-3$$

∴ Required result = $\sqrt{(-3)\times(-3)}=\sqrt{9}=\pm\,\textbf{3}$

60. (D) Largest four digit number = 9999
LCM of First 9 natural numbers = 2520
2520) 9999 (3
7560
2439
So, Required number = 9999 – 2439 = **7560**

61. (A) $2x-3y=13$
Cubing both sides,
$8x^3-27y^3-3\times2x\times3y(2x-3y)=(13)^3$
⇒ $8x^3-27y^3-18(14)(13)=2197$
⇒ $8x^3-27y^3=2197+3276$
∴ $8x^3-27y^3=\textbf{5473}$

62. (B)
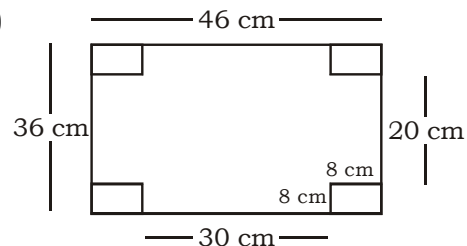
Volume of the box made of the remaining sheet
⇒ 30 × 20 × 8
⇒ **4800 cm³**

63. (A) $\dfrac{\sin 36°}{\cos 54°} + \dfrac{\sin 54°}{\cos 36°}$

$= \dfrac{\sin 36°}{\cos(90° - 36°)} + \dfrac{\sin(90° - 36°)}{\cos 36°}$

$= \dfrac{\sin 36°}{\sin 36°} + \dfrac{\cos 36°}{\cos 36°} = 1 + 1 = 2$

$\therefore \left(\dfrac{\sin 36°}{\cos 54°} + \dfrac{\sin 54°}{\cos 36°}\right)^2 = \mathbf{4}$

64. (B) Sum of first 50 whole numbers
   $= 0 + 1 + 2 + \text{---------} + 49$

   $= \dfrac{49 \times 50}{2} = 1225$

   $\therefore$ Required Average $= \dfrac{1225}{50} = \mathbf{24.5}$

65. (C) Area of circle = Area of triangle

   $\Rightarrow \pi r^2 = \dfrac{4}{3} \times \dfrac{1}{2} \times 3 \times 4$

   $\Rightarrow \dfrac{22}{7} \times r^2 = 8$

   $\Rightarrow r^2 = \dfrac{56}{22} = 2.54$

   $\Rightarrow r = 1.59$

   $\therefore$ Required radius = **1.59m**

66. (D) $\dfrac{5000 \times 5 \times r}{100} = 1250$

   $\Rightarrow r = 5\%$

   New rate = 5 + 2 = 7%

   New interest $= \dfrac{5000 \times 5 \times 7}{100} = ₹1750$

   $\therefore$ Required difference = 1750 − 1250

   = **₹500**

67. (D) $\dfrac{\tan\theta + \sin\theta}{\tan\theta - \sin\theta}$

   Divide Numerator and denominator by $\tan\theta$

   $= \dfrac{\mathbf{1 + \cos\theta}}{\mathbf{1 - \cos\theta}}$

68. (A) Let the time be y months
   $7 \times 8 : 9 \times y$

   $\Rightarrow \dfrac{7 \times 4}{9 \times y} = \dfrac{8}{9}$

   $\Rightarrow \dfrac{28}{9y} = \dfrac{8}{9}$

   $\therefore y = \dfrac{28}{8} = 3\dfrac{1}{2}$ months

   $\therefore$ Required time = $\mathbf{3\dfrac{1}{2}}$ **months**

69. (A) $\sin^6\theta + \cos^6\theta + 3\sin^2\theta\cos^2\theta$
    $= [(\sin^2\theta)^3 + (\cos^2\theta)^3] + 3\sin^2\theta\cos^2\theta$
    $= (\sin^2\theta + \cos^2\theta)^3 - 3\sin^2\theta\cos^2\theta(\sin^2\theta\cos^2\theta)$
    $\qquad\qquad\qquad\qquad + 3\sin^2\theta\cos^2\theta$
    $= (1)^3 - 3\sin^2\theta\cos^2\theta(1) + 3\sin^2\theta\cos^2\theta = 1$

    $\therefore \sqrt{\sin^6\theta + \cos^6\theta + 3\sin^2\theta\cos^2\theta} = \sqrt{1} = \mathbf{1}$

70. (B) ATQ,

   $3x + \dfrac{1}{2x} = 3$

   On multiplying both sides by $\dfrac{2}{3}$,

   $2x + \dfrac{1}{3x} = 2$

   Cubing both sides,

   $8x^3 + \dfrac{1}{27x^3} + 3 \times 2x \times \dfrac{1}{3x}\left(2x + \dfrac{1}{3x}\right) = 8$

   $\Rightarrow 8x^3 + \dfrac{1}{27x^3} = 8 - 4 = \mathbf{4}$

71. (B) $1 + \dfrac{1}{2} = \dfrac{3}{2}, \ 2 \times \dfrac{2}{3} = \dfrac{4}{3}, \ 3 + \dfrac{4}{3} = \dfrac{13}{3}$

   $4 \times \dfrac{3}{13} = \dfrac{12}{13}, \ 5 + \dfrac{12}{13} = \dfrac{77}{13}, \ 6 \times \dfrac{13}{77} = \dfrac{78}{77}$

   $7 + \dfrac{78}{77} = \dfrac{\mathbf{617}}{\mathbf{77}}$

72. (B) Let C = x
   Then, B = x + 5000 and
   A = x + 5000 + 4000
   = x + 9000
   So, $x + x + 5000 + x + 9000 = 50000$
   $\Rightarrow 3x = 36000$
   $\Rightarrow x = 12000$
   A : B : C = 21000 : 17000 : 12000
   = 21 : 17 : 12

   $\therefore$ A's share = ₹ $\left(18000 \times \dfrac{17}{50}\right)$ = **₹ 6120**

73. (A) Required ratio $= \dfrac{2.50}{0.75} = \dfrac{10}{3} = \mathbf{10 : 3}$

74. (B) Total loss = 1 + 0.75 = **1.75 lacs**

75. (C) Total loss = 1 + 075 = **1.75 lacs.**
   Total profit = 1.5 + 2 + 2.5 + 1.25 = 7.25 lacs.
   ATQ,

   $7.25 \times \dfrac{x}{100} = 1.75$

   $\Rightarrow x = \dfrac{1.75 \times 100}{7.25} = \dfrac{700}{29} = 23\dfrac{23}{29}$

   So, $x = \mathbf{24.13}$

MEANINGS IN ALPHABETICAL ORDER

WORDS	MEANING IN ENGLISH	MEANING IN HINDI
Amiable	friendly, sociable, and congenial	मिलनसार
Anthology	a collection of writings (as stories and poems)	साहित्यिक संग्रह
Archetype	an original which has been imitated, a prototype.	नकल, प्रतिकृति
Assault	a violently or sudden attack	हमला
Beanpole	a tall thin person	लम्बा दुबला व्यक्ति
Compassion	pity for and a desire to help someone	करूणा
Danseuse	a female ballet dancer	बैले नर्तकी
Devious	showing a skilful use of underhand tactics to achieve goals.	कुटिल
Doughboy	a fat puffy boy or man, Extremely fat that his skin looks like dough	मोटा लड़का
Dwindle	diminish gradually in size, amount or strength	क्षीण हो जाना
Epiphany	a manifestation of a divine or supernatural being	अलौकिक वस्तु का आभास
Nefarious	flagrantly wicked or impious, evil	अति दुष्ट
Omnipresent	present at all places at all times	सर्वव्यापक
Oncology	the study and treatment of cancer and tumours	कर्करोग विज्ञान
Pathology	the study of diseases and of the changes that they cause	रोग विज्ञान
Pedology	the scientific study of the life and development of children	बाल चिकित्सा
Punk	a worthless person	निकम्मा
Quintessential	the essence of a thing in its purest and most concentrated form	सारतत्व रूप से
Recluse	a person who lives a solitary life and tends to avoid other people	एकांतवासी
Runt	a very small or weak person	कमजोर
Sarcastic	marked by or given to using irony in order to convey contempt	व्यंग्यात्मक
Scurrilous	using or given to coarse language	अभद्र
Speculative	based on guesses about what might be true rather than on facts	कल्पित
Surreptitious	acting or doing something clandestinely/secretly	गुप्त
Ubiquitous	existing or being everywhere at the same time	सर्वव्यापी
Unique	Being the only one of its kind, unlike anything	अद्वितीय
Villainous	having the character of a villain, depraved	दुष्ट

SSC MOCK TEST - 95 (ANSWER KEY)

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

76. (B) 'Verdict' is a singular noun hence will take singular verb 'was'.

77. (C) When two subjects are joined by 'as well as' the verb is in accordance with the first subject. Here the first subject (My neighbour) is singular, so the verb must also be singular. Hence replace 'discuss' with 'discusses'

78. (C) Replace preposition 'about' with 'of'.
Dream of (= imagine, want); Ex: He dreamt of becoming a teacher.
Dream about (= imagine while sleeping); Ex: Last night I dreamt about my friend.

81. (C) ' To have a chip on one's shoulder' means 'the act of holding a grudge or grievance that readily provokes disputes'.

82. (A) Phrasal verb 'hand in' means 'to submit'.

89. (D) Idiom 'give voice to something' means ' to express a feeling or opinion in words'.

90. (A) The sentence is constructed in past tense hence replace 'have' with 'had'.

91. (A) The increase of 'foreign exchange reserve' is a continuous process and has been happening over years. Hence present perfect continuous tense should come.
Also correct form of adverb is 'substantially'.

92. (D) Here 'advice' is a noun.

93. (C) Verb 'alarmed' takes fix preposition 'at' with it.

Note:- Whatsapp with Mock Test No. and Question No. at 9560866063 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