

**SSC MOCK TEST – 182 (SOLUTION)**

1. (A) As, 8 : 9 Similarly, 64 : **25**.  
 $\begin{matrix} \downarrow & \downarrow \\ 2^3 & 3^2 \\ \downarrow & \downarrow \\ 4^3 & 5^2 \end{matrix}$

2. (B) As, 'Fashion Designer' designs 'Dress'. Similarly, 'Author' composes '**Novel**'.

3. (D) As, C I : B D Similarly, E Y : **DP**  
 $\begin{matrix} \downarrow \downarrow & \downarrow \downarrow & \downarrow \downarrow & \downarrow \downarrow \\ 3 & 3^2 & 2 & 2^2 \\ \downarrow \downarrow & \downarrow \downarrow & \downarrow \downarrow & \downarrow \downarrow \\ 5 & 5^2 & 4 & 4^2 \end{matrix}$

4. (B) Only **27** is a perfect cube.

5. (B)  $\begin{matrix} \text{D G L S} & \text{M P S V} \\ +3 & +5 & +7 & & +3 & +3 & +3 \\ \text{H K P W} & \text{K N S Z} \\ +3 & +5 & +7 & & +3 & +5 & +7 \end{matrix}$

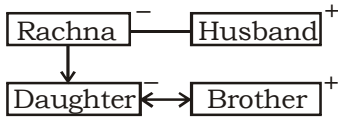
6. (D) Except **fish**, others are amphibians.

7. (D) **54123**

8. (B)  $\begin{matrix} 15, & 32, & 66, & 134, & 270, & 542 \\ \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\ \times 2+2 & \times 2+2 & \times 2+2 & \times 2+2 & \times 2+2 & \times 2+2 \end{matrix}$

9. (A)  $\begin{matrix} & & +5 & & +5 & & \\ & & \downarrow & & \downarrow & & \\ \text{C L} & & \text{H O} & & \text{M V} & & \text{R A} \\ \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\ +5 & & +5 & & +5 & & +5 \end{matrix}$

10. (A) From the relationship graph.



∴ So, the person is the **son** of Rachna.

11. (B) From left end = 4 + 7 = 11<sup>th</sup> position.  
 from right end = (20 - 11) + 1 = **10<sup>th</sup>** position.

12. (C) **ALERT**

13. (B) As, CE = 3 + 5 - 1 = 7  
 and DASH = 4 + 1 + 19 + 8 - 1 = 31  
 Similarly, DANCE = 4 + 1 + 14 + 3 + 5 - 1 = **26**

14. (D) 16 - 4 + 10 × 2 ÷ 15  
 After inter-changing the signs as per given details,  
 $16 \times 4 - 10 \div 2 + 15$   
 $\Rightarrow 64 - 5 + 15 = \mathbf{74}$

15. (C) Number of triangles = 8 + 8 + 8 + 4 = 28 triangles.

16. (D) As,  $7 + \left(\frac{16}{2}\right) = 15$

$$5 + \left(\frac{8}{2}\right) = 9$$

$$\text{Similarly, } 10 + \left(\frac{40}{2}\right) = \mathbf{30}$$

17. (C) Let the present age of A = x  
 ∴ B's present age = x - 9  
 ATQ.,  
 $(x + 3) + [(x - 9) - 4] = 76$   
 $x = 43$   
 B's present age = 43 - 9 = 34

C's present age = 17  
 C's age after 10 years = 17 + 10 = **27 yr.**



18. (D) I. Can't say II. True  
 ∴ Only **II** follows.

19. (D)

20. (B)

21. (A)

22. (B)

23. (A)

24. (D)

25. (B) **S T E A L**  
 $\begin{matrix} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 14, & 31, & 40, & 95, & 59 \end{matrix}$

27. (A) Mark Tully -None stop India  
 Taslima Nasreen -Nirbasan  
 Shashi Tharoor - Pax India: India and the world of the 21<sup>st</sup> century.

28. (A) **Some important folk dance and state-**  
 Chang Lo - Nagaland  
 Puliattam - Tamil Nadu  
 Deknni - Goa  
 Bedara Vesha - Karnataka

30. (C) Sun is the nearest star to the Earth it is 150 million kilometers away from Earth. Sun has temperature of over 15 million°C.

31. (C) The term of the Lok Sabha can be extended by not more than one year at a time during the proclamation of National emergency under Article 352.

32. (B) Inflation is a condition, when cost of services coupled with goods rise and the entire economy seems to go haywire inflation has never expected inflation government around the worked take appropriate steps to minimize the fill effects in inflation to a certain.

33. (D) Ethylene glycol solutions are market as "permanent antifreeze" and is used as anti-freeze agent for the automobile engine in cold countries where temperature is below zero degree centigrade.

34. (D) Nichrome is a non-magnetic alloy if Nickel, Chromium and Iron, usually used as a resistance wire. A common alloy is 80% nickel and 20% chromium by mass. This alloying provides Nichrome properties like hardness and ductility.

35. (A) Each hand has 27 bones there are 206 bones in a human body.

38. (C) Telagana share it borders with 4 states. (Maharashtra/Karnataka/Chhattisgarh/Andhra Pradesh).

39. (D) The Major Rock Edict XIII of Ashokan Inscription mentions Asoka's victory over Kalinga and names of Greek kings such as Antiochus, Ptolemy, Antigonus, Magas and southern India rulers such as Cholas, Pandyas. It has also mentioned the names of Kamboj, Nabhaks, Bhoja, Andhra etc.

40. (D) Victoria falls is located on the Zambezi River, The fourth largest river in Africa, which is also defining the border between Zambia and Zimbabwe.

41. (D) Article 19- Protection of certain rights regarding freedom of speech etc.  
Article 15- protection of discrimination on ground of religion race, caste, sex or place of birth.  
Article 14- Provide equality before law equal protection within the territory of India.

42. (B) Seller's market is a market which has more buyers than sellers High price result from this excess of demand over supply the opposite of the seller's market is the buyer's market where supply greatly exceeds demand.

51. (A) Let radius of cylinder = r m  
Height of cylinder = (19 - r) m  
Total surface area of cylinder =  $2\pi r(r + h)$

$$1672 = 2 \times \frac{22}{7} \times r(r + 19 - r)$$

$$38 \times 7 = r \times 19$$

$$r = 14\text{m}$$

$\therefore$  Volume of cylinder =  $\pi r^2 h$

$$= \frac{22}{7} \times (14)^2 \times (19 - 14) = \mathbf{3080 \text{ m}^3}$$

52. (B) Speed of boat downstream

$$= \frac{42}{2 + \frac{20}{60}} = \frac{42}{2 + \frac{1}{3}}$$

$$= \frac{42 \times 3}{6 + 1} = \frac{42 \times 3}{7}$$

$$= 18 \text{ km/h.}$$

$\therefore$  Speed of boat upstream =  $18 \times \frac{2}{3} = 12 \text{ km/h.}$

$$\text{Speed of still water} = \frac{18 + 12}{2} = \mathbf{15 \text{ km/h}}$$

53. (C)  $M_1 D_1 = M_2 D_2$   
 $24 M \times 18 = 30 W \times 12$   
 $6 M = 5 W$

$$16 M + 24 W = 16 \times \frac{5W}{6} + 24 W$$

$$= \frac{80W + 144W}{6} = \frac{224W}{6} \quad \dots(i)$$

According to question

$$\frac{224W}{6} \times D = 30 W \times 12$$

$$\mathbf{D = 9 \frac{9}{14} \text{ days}}$$

54. (B) Let cost price of an article = ₹ x  
According to questions

$$(x - 6800) = 2(7850 - x)$$

$$x - 6800 = 15700 - 2x$$

$$3x = 22500$$

$$x = ₹7,500$$

$\therefore$  Required price of an article

$$= 7500 \times \frac{120}{100} = \mathbf{₹9,000}$$

55. (A) A : B : C = (20000 × 6 + 12000 × 6) : (28000 × 6 + 20000 × 6) : (36000 × 6 + 44000 × 6)

$$= (20000 + 12000) : (28000 + 20000) : (36000 + 44000)$$

$$= (20 + 12) : (28 + 20) : (36 + 44)$$

$$= 8 : 12 : 20 = 2 : 3 : 5$$

Let total profit = ₹ x

$$\frac{5}{10} x = 12550$$

$$x = \mathbf{₹25,100}$$

56. (A) When taps P and X are opened,

$$\frac{1}{6} - \frac{1}{X} = \frac{1}{15}$$

$$\frac{1}{X} = \frac{1}{6} - \frac{1}{15} = \frac{15-6}{15 \times 6}$$

$$\frac{1}{X} = \frac{9}{15 \times 6}$$

$$X = 10$$

$\therefore$  Filled part of tank in 1 hour by taps Q

$$\text{and } X = \frac{1}{8} - \frac{1}{10} = \frac{1}{10 \times 8} = \frac{1}{40}$$

$\therefore$  Required time = **40 hours**

57. (C) A : B : C

$$3 : 8 :$$

$$(1 : : 4) \times 3$$

$$\underline{3 : 8 : 12}$$

Let present ages of A, B and C are 3x, 8x and 12x respectively.

According to questions,

$$3x + 8x + 12x - 3 - 3 - 3 = 83$$

$$23x = 83 + 9$$

$$23x = 92$$

$$x = 4$$

$\therefore$  Present age of C = 12x

$$= 12 \times 4 = \mathbf{48 \text{ years}}$$

58. (D) Let of Kim = x km/h

Speed of Om = y km/h

According to question,

$$\frac{400}{x} - \frac{400}{y} = 1$$

$$\frac{1}{x} - \frac{1}{y} = \frac{1}{400} \quad \dots(i)$$

When Kim doubles her speed,

$$\frac{400}{y} - \frac{400}{2x} = \frac{3}{2}$$

$$\frac{1}{y} - \frac{1}{2x} = \frac{1}{400} \times \frac{3}{2} \quad \dots(ii)$$

On solving equations (i) and (ii), **x = 80 km/h**

59. (B) Let first number be  $x$  and second number  $y$ .

$$\therefore x + y = 160\% \text{ of } y = \frac{160y}{100} = \frac{8y}{5}$$

$$\Rightarrow 5x + 5y = 8y$$

$$\therefore 5x = 3y$$

$$\therefore \frac{x}{y} = \frac{3}{5}$$

$$\therefore x : y = 3 : 5$$

60. (D) Number = (LCM of 4, 5, 6) + 3 = 60 + 3 = 63

61. (D)  $\left[ \frac{60}{100 + 60} \times 100 \right] \% = \frac{60 \times 100}{160} \% = \frac{75}{2} \%$

62. (D) LCM of 3, 4, 6, 11, 12 is 132.  
So the alarms will ring together after 132 seconds.

$$\therefore \text{In 1 hour they will ring } \frac{3600}{132} = 27.27 \text{ ie they will ring together 27 times.}$$

63. (C) Let the number be  $x$ ,  $y$  and  $z$ .

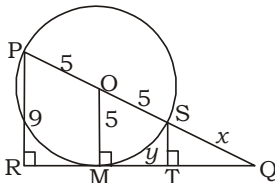
$$\therefore \frac{x+y}{2} = \frac{y+z}{2} + 12$$

$$\Rightarrow \frac{x+y}{2} = \frac{y+z+24}{2}$$

$$\Rightarrow x + y = y + z + 24$$

$$x - z = 24$$

64. (A)



In  $\Delta PQR \sim \Delta OQM$

$$\frac{PR}{OM} = \frac{PQ}{OQ}$$

$$\Rightarrow \frac{9}{5} = \frac{10+x}{5+x}$$

$$\Rightarrow 45 + 9x = 50 + 5x$$

$$\Rightarrow 4x = 5$$

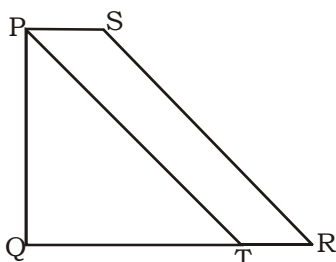
$$\Rightarrow x = \frac{5}{4}$$

Similarly  $\Delta OMQ \sim \Delta STQ$

$$\frac{OM}{ST} = \frac{OQ}{SQ} \Rightarrow \frac{5}{y} = \frac{5+x}{x}$$

$$\Rightarrow \frac{5}{y} = \frac{5}{x} + 1 \Rightarrow \frac{5}{y} = 4 + 1 \Rightarrow y = 1 \text{ cm}$$

65. (B)



$$\text{Area of } \Delta PQT = \frac{1}{2} \times QT \times PQ = 128$$

$$\Rightarrow PQ^2 = 256 \quad [\text{as } PQ = QT]$$

$$\Rightarrow PQ = QT = 16 \text{ cm}$$

$$\therefore PS = \frac{1}{4} PQ = 4 \text{ cm}$$

$$\text{Area of trapezium SPQR} = \frac{1}{2} (SP + QR) \times PQ$$

$$= \frac{1}{2} (4 + 20) \times 16 = 192 \text{ cm}^2$$

$$\therefore \text{Area of SPTR} = 192 \text{ cm}^2 - 128 \text{ cm}^2 = 64 \text{ cm}^2$$

66. (C) Difference of CI and SI for 3 years

$$= \frac{p \times r^2 \times (300 + r)}{100 \times 100 \times 100}$$

Difference of CI and SI for 2 years

$$= \frac{p \times r^2}{100 \times 100}$$

$$\frac{p \times r^2 \times (300 + r)}{100 \times 100 \times 100} = \frac{57}{18} \Rightarrow \frac{300 + r}{100} = \frac{57}{18}$$

$$\Rightarrow \frac{r}{100} = \frac{3}{18} \Rightarrow r = \frac{1}{6} \times 100$$

$$\Rightarrow r = 16 \frac{2}{3} \%$$

67. (B)  $2 \left( \frac{l+b}{b} \right) = \frac{5}{1}$

$$\frac{l}{b} + 1 = \frac{5}{2} \Rightarrow \frac{l}{b} = \frac{3}{2}$$

$$\text{Area} = 3x \times 2x = 216$$

$$x = 6,$$

$$\text{So, length} = 3 \times 6 = 18 \text{ cm}$$

68. (D) Let the side of rhombus be  $a$  cm

$$\text{Area of rhombus} = \frac{1}{2} d_1 \times d_2 = 840$$

$$\Rightarrow 2d_1 d_2 = 4 \times 840 \quad \dots (i)$$

As we know,

$$4a^2 = d_1^2 + d_2^2 \quad \dots (ii)$$

Using eq. (i) and eq. (ii)

$$(d_1 + d_2)^2 = d_1^2 + d_2^2 + 2d_1 d_2 = 4 \times (37)^2 + 4 \times 840$$

$$(d_1 + d_2)^2 = 8836$$

$$\therefore d_1 + d_2 = 94 \text{ cm}$$

69. (A) If  $p \sec \theta - q \tan \theta = a$

$$p \tan \theta - q \sec \theta = b$$

$$\text{Then, } p^2 - q^2 = a^2 - b^2$$

$$\therefore p^2 - q^2 = (17)^2 - (15)^2 = 289 - 225 = 64$$

$$p^2 - q^2 + 6 = 64 + 6 = 70$$

70. (A)  $\sin\theta \sin(60 - \theta) \sin(60 + \theta) = \frac{1}{4} \sin 3\theta$

$$1 - \sin 10^\circ \cdot \sin 50^\circ \cdot \sin 70^\circ = 1 - \frac{1}{4} \sin 3 \times 10$$

$$= 1 - \frac{1}{4} \sin 30^\circ$$

$$= 1 - \frac{1}{4} \times \frac{1}{2} = \frac{7}{8}$$

71. (B)  $x = 3 + \sqrt{3}, y = 3 - \sqrt{3}$

$$(x + y) = 6$$

$$x^2 + y^2 = (3 + \sqrt{3})^2 + (3 - \sqrt{3})^2$$

$$= 12 + 6\sqrt{3} + 12 - 6\sqrt{3}$$

$$x^2 + y^2 = 24$$

$$x^3 + y^3 = (x + y)(x^2 + y^2 - xy) = 6(24 - 6) = 6 \times 18$$

$$\Rightarrow \frac{x^3 + y^3}{x^2 + y^2} = \frac{6 \times 18}{24} = \frac{9}{2}$$

72. (A) Required average

$$= \frac{3297 + 2523 + 2860 + 2660 + 2770 + 2665 + 2899}{7}$$

$$= \frac{19674}{7}$$

$$= \$ 2810.57 \text{ million}$$

$$= \mathbf{\$ 2810.6 \text{ million}}$$

73. (B) Required average value

$$= \frac{3034 + 3210 + 3106 + 3200 + 2984}{5}$$

$$= \frac{15534}{5}$$

$$= \mathbf{\$ 3106.8 \text{ million}}$$

74. (D) Required % =  $\frac{(2860 - 2523)}{2523} \times 100\%$

$$= \frac{337}{2523} \times 100\%$$

$$= \mathbf{13.35\%}$$

75. (B) Required percentage =  $\left(\frac{3210 - 3200}{3210}\right) \times 100$

$$= \frac{10}{3210} \times 100 = \mathbf{0.31\% \text{ decrease}}$$

## MEANINGS IN ALPHABETICAL ORDER

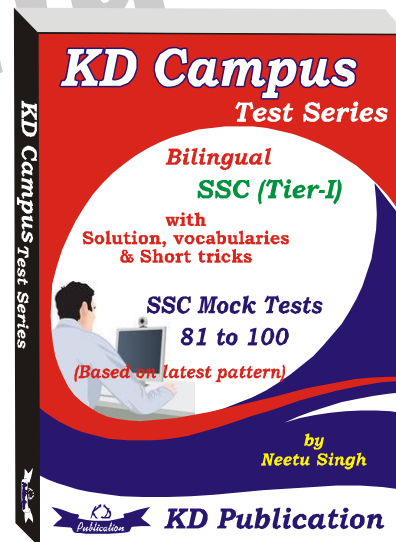
Word	Meaning in English	Meaning in Hindi
Ample	enough or more than enough	प्रचुर
Meagre	lacking in quantity or quality	अल्प
Jitter	feelings of extreme nervousness	घबराना
Assuage	make less intense	शांत करना
Berate	criticize someone angrily	जोर से डाटना
Censure	to disapprove something	निन्दा करना
Horde	a large group of people	भीड़
Ascetic	practicing strict self-denial as a measure of personal and especially spiritual discipline	तपस्वी
Torrent	a strong and fast-moving stream of water or other liquid	जल प्रवाह
Cynic	a person who believes that people are motivated purely by self-interest	दोषर्दी
Chauffeur	a person employed to drive a private or hired car	डाइवर
Perpetual	never ending or changing	लगातार
Egotism	the fact of being excessively conceited or absorbed in oneself	अहंकार
Hermit	a person living in solitude as a religious discipline	एकांतवासी
Vogue	the prevailing fashion or style at a particular time	प्रचलन
Unveil	show or announce publicly for the first time	अनावरण

**SSC MOCK TEST - 182 (ANSWER KEY)**

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



76. (B) Use **may** in place of **can**. We use 'may' when we want to show that there are chances that something is going to happen.
77. (B) Use '**His**' in place of '**Their**'. Pronoun for Jim Mattis is 'His'.
78. (A) Use 'complimented' in place of 'complemented'. Compliment is the proper word.



**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.**

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