

SSC PRE MOCK TEST – 8(SOLUTION)

1. (B)

As, Nurture and Neglect are antonyms.
Similarly, **Denigrate** and Extol are antonyms.

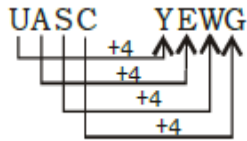
2. (C)

As, $(17)^2 - 17 = 272$

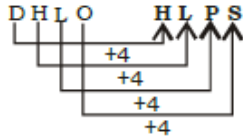
Similarly, $(19)^2 - 17 = 344$

3. (B)

As,



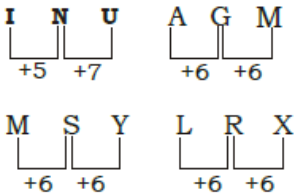
Similarly,



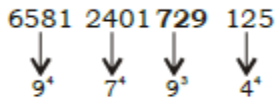
4. (A)

Except **Captain**, all others designation belong to Air force

5. (A)



6. (C)



7. (D)

Aminate → Amindivi → **Amine** → Aminic
→ Aminoacid.

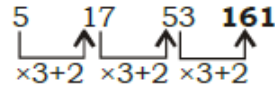
8. (B)

T I D E A T I O B

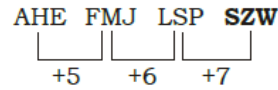
9. (D)

10. (A)

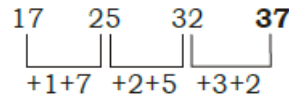
11. (A)



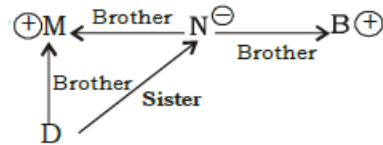
12. (B)



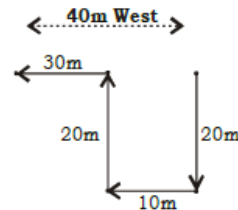
13. (A)



14. (C)



15. (C)



16. (A)

$$3 + 1^3 = 4$$

$$5 + 3^3 = 32$$

$$7 + 6^3 = 223$$

17. (B)

$$(6^2 + 8^2)^{1/2} = 10$$

$$(8^2 + 15^2)^{1/2} = 17$$

$$(20^2 + 21^2)^{1/2} = 29$$

18. (B)

$$(8)^2 + 36 = 100$$

$$(4)^2 + 20 = 36$$

$$(6)^2 + 64 = 100$$

19. (A)

20. (B)

I. False

II. False

21. (B)

22. (A)

23. (A)

24. (A)

25. (C)

51. (C)

ATQ,

$$\begin{aligned} \sqrt{97+56\sqrt{3}} &= \sqrt{49+48+2\times 7\times 4\sqrt{3}} \\ &= \sqrt{(7+4\sqrt{3})^2} = \pm(7+4\sqrt{3})^2 \\ \sqrt{97+56\sqrt{3}} &= 7+4\sqrt{3} \quad \text{or} \\ \sqrt{97+56\sqrt{3}} &= -7-4\sqrt{3} \end{aligned}$$

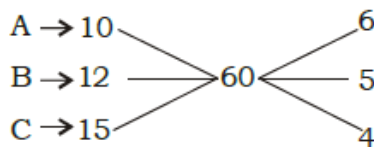
52. (B)

ATQ,

$$\begin{aligned} \sqrt{x} &= \sqrt{9+4\sqrt{5}} = \sqrt{(2+\sqrt{5})^2} \\ \Rightarrow \sqrt{x} &= 2+\sqrt{5} \\ \text{Now, } \sqrt{x} + \frac{1}{\sqrt{x}} &= 2+\sqrt{5} + \frac{(2-\sqrt{5})}{4-5} \\ &= 2+\sqrt{5} + \sqrt{5}-2 = 2\sqrt{5} \end{aligned}$$

53. (B)

ATQ,



$$\text{Time taken by them} = \frac{60+6\times 3}{6+5+4} = 5 \text{ days}$$

54. (B)

If all books are bought at minimum cost price and are sold at maximum selling price, then there will be maximum profit.

$$\begin{aligned} \text{Hence, Maximum profit} &= 375 \times 25 - 200 \times 25 \\ &= 175 \times 25 = \text{Rs. } 4375 \end{aligned}$$

55. (C)

ATQ,

$$\begin{aligned} \text{Cost Price} &= 1428 \times \frac{100}{100-20} \times \frac{100}{(100-12.5)} \\ &= \text{Rs. } 2040 \end{aligned}$$

56. (B)

ATQ,

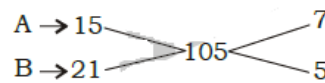
$$236.544 = P \times \left(\frac{8}{100}\right)^2 \left(\frac{308}{100}\right)$$

$$P = 12000$$

Hence, Required amount = **Rs. 12000**

57. (D)

ATQ,



work done by A and B in 2 hours

$$= 7 + 5 = 12$$

So, work done by A and B in such pairs

$$= 12 \times 8$$

$$= 96$$

Remaining work = $105 - 96 = 9$

Remaining done after B = $9 - 5 = 4$

$$\therefore \text{Required days} = 8 \times 2 + 1 + \frac{4}{7} = 17\frac{4}{7} \text{ days}$$

58. (B)

ATQ,

Let the quantity of mixture

$$= \text{LCM of } (11, 11, 13) = 143$$

then, Water : Wine (in large Vessel)

$$91 + 78 + 72 : 52 + 65 + 66$$

$$82 : 61$$

59. (A)

ATQ,

The ratio of time = A : B : C

$$\begin{aligned} \frac{1}{2} : \frac{1}{4} : \frac{1}{5} \\ = 10 : 5 : 4 \end{aligned}$$

60. (C)

ATQ,

$$\begin{aligned} \text{Required distance} &= (50 + 65) \times \frac{5}{18} \times 18 \\ &= 575\text{m} = .575 \text{ km} \end{aligned}$$

61. (C)

ATQ,

	A	B
efficient	13	10
time	10	13
	20	26

Hence, Required days = **20 days**

62. (B)

ATQ,

$$\text{Required distance} = \frac{(36+54)}{1} \times \frac{5}{18} = \mathbf{25m}$$

63. (B)

ATQ,

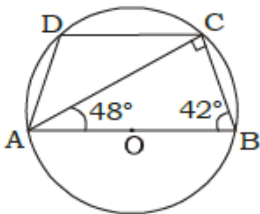
$$\text{Time taken by B} = \frac{24}{15-3} \times 15 = 30 \text{ days}$$

then,
$$\begin{array}{l} A \rightarrow 15 \\ B \rightarrow 30 \end{array} \left\{ \begin{array}{l} 2 \\ 1 \end{array} \right. \rightarrow 30$$

$$\text{Hence, time taken by A} = \frac{30}{2-1} = \mathbf{30 \text{ days}}$$

64. (B)

ATQ,

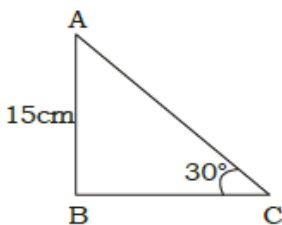


$$\angle ABC = 90^\circ - 48^\circ = 42^\circ$$

$$\text{then, } \angle ADC = 180^\circ - 42^\circ = \mathbf{138^\circ}$$

65. (C)

ATQ,

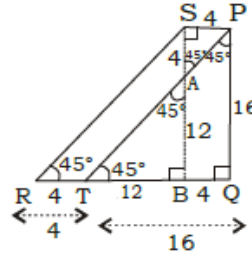


$$\tan 30^\circ = \frac{AB}{BC}$$

$$\Rightarrow BC = 15 \times \sqrt{3} = \mathbf{15\sqrt{3} \text{ cm}}$$

66. (A)

ATQ,



Draw $SB \parallel PQ$

$$\text{area of } \Delta ABT = \frac{1}{2} \times 12 \times 12 = 72$$

$$\text{area of } \Delta SRB = \frac{1}{2} \times 16 \times 16 = 128$$

$$\text{then, area of } SRTA = 128 - 72 = 56$$

$$\text{area of } SPA = \frac{1}{2} \times 4 \times 4 = 8$$

$$\text{Then, Required area} = 56 + 8 = \mathbf{64cm^2}$$

67. (C)

ATQ,

$$\sin(4x - y) = 1 = \sin 90^\circ$$

$$\Rightarrow 4x - y = 90^\circ \text{ ----- (i) and}$$

$$\cos(2x + y) = \frac{1}{2} = \cos 60^\circ$$

$$\Rightarrow 2x + y = 60^\circ \text{ ----- (ii)}$$

from equation (i) and (ii),

$$x = 25^\circ \quad y = 10^\circ$$

$$\text{then, } \tan(25^\circ + 2 \times 10^\circ) = \tan 45^\circ = \mathbf{1}$$

68. (B)

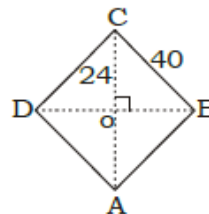
ATQ,

$$OB^2 = 40^2 - 24^2$$

$$\Rightarrow OB = 32\text{cm}$$

$$\Rightarrow DB = 32 \times 2 = 64\text{cm}$$

$$\text{then, Area of rhombus} = \frac{48 \times 64}{2} = \mathbf{1536cm}$$



69. (C)

ATQ,

$$\frac{\text{height}}{\text{base}} = \tan \theta$$

$$\Rightarrow \frac{57}{19\sqrt{3}} = \tan \theta$$

$$\Rightarrow \sqrt{3} = \tan \theta = \tan 60^\circ$$

$$\Rightarrow \theta = 60^\circ$$

Hence, Angle of elevation = **60°**

70. (A)

ATQ,

$$\frac{4}{3} \times \frac{22}{7} \times 14 \times 14 \times 14 = \frac{1}{3} \times \frac{22}{7} \times \left(\frac{14}{2}\right) \times \left(\frac{14}{2}\right) \times h$$

$$\Rightarrow h = 224$$

Hence, height of cone = **224cm**

71. (C)

ATQ,

$$\text{Cost price} = \frac{400}{12-4} = \text{Rs. } 50$$

72. (B)

ATQ,

Let the cost price = 100

then, selling price = 100 + 230 = 330

ATQ,

new cost price = 150

then, profit = 330 - 150 = 180

$$\Rightarrow \text{Required profit} = \frac{180}{150} \times 100 = \mathbf{120\%}$$

73. (B)

ATQ,

$$\text{Required percent} = \frac{(750-500)}{500} \times 100 = \mathbf{50}$$

74. (D)

ATQ,

$$\begin{aligned} \text{Required percent} &= \frac{(600-500)}{600} \times 100 \\ &= \mathbf{16.66} \end{aligned}$$

75. (A)

ATQ,

$$\begin{aligned} \text{Required Number} &= \frac{(410+490+300)}{3} \\ &= \frac{1200}{3} = \mathbf{400} \end{aligned}$$

SSC PRE MOCK TEST - 8(ANSWER)

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