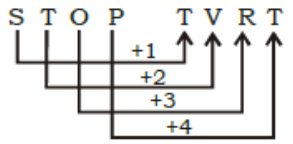
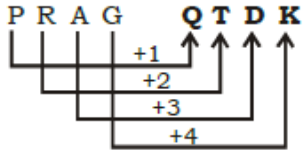
SSC PRE MOCK TEST – 16 (SOLUTION)

1. (B)
Cow's child is known as Calf. Similarly,
Sheep's child is known as **Lamb**.
2. (C)



Similarly,

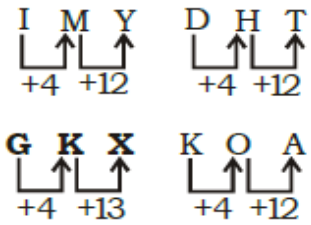


3. (C)

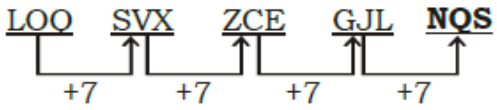
$562 \Rightarrow 5 \times 6 \times 2 \times \frac{3}{2} = 90$

Similarly, $663 \Rightarrow 6 \times 6 \times 3 \times \frac{3}{2} =$ **162**

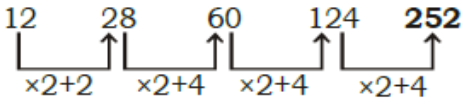
4. (D)
Except **Chess**, all games belongs to physical work.
5. (C)



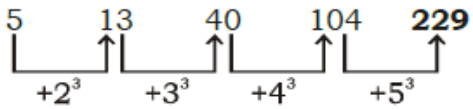
6. (C)
$120 - 1332 \Rightarrow [(11)^2 - 1] - [(11)^3 + 1]$
$168 - 2198 \Rightarrow [(13)^2 - 1] - [(13)^3 + 1]$
$197 - 2744 \Rightarrow [(14)^2 + 1] - [(14)^3]$
$288 - 4914 \Rightarrow [(17)^2 - 1] - [(17)^3 + 1]$
7. (A)
Xanthic → Xenians → Xenous → Xylyls → Xyst.
8. (C)
According to Suman,
the date will be 14^{th} May and 15^{th} May.
but, according to her brother, the date will be 15^{th} May and 16^{th} May
Hence, Required date = **15^{th} May**
9. (C)
M > all other drinks
E > L only and B < R
Hence, correct sequence = M > R > B > E > L
Hence, 2nd most sugar content = **R**
10. (B)
TUNE
11. (A)



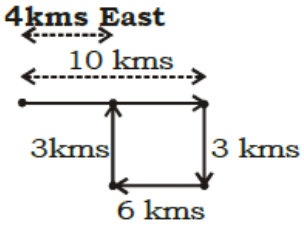
12. (D)



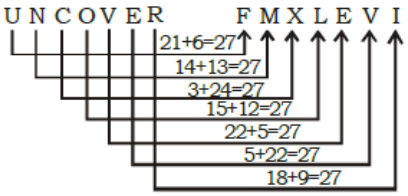
13. (A)



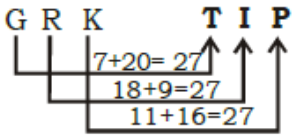
14. (C)



15. (D)
10 + 25 – 800 × 32
Change the symbol, as per given details,
10 × 25 + 800 ÷ 32 = **275**
16. (D)

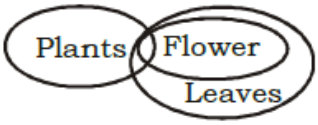


Similarly,



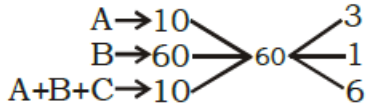
17. (B)
18. (C)

19. (A)



I True
II True

20. (A)
21. (C)
(3 + 3) × 10 = 60
(5 + 3) × 10 = 80
(5 + 8) ×10 = 1**30**
22. (C)
23. (B)
24. (A)
25. (C)
51. (B)
ATQ,
2645 = 55 × 48 + 5
Hence, **55** is correct answer.
52. (C)
ATQ,



Hence, Required days = $\frac{60}{6-3-1}$ = **30 days**
53. (A)
ATQ,
Hence, Required area = $11 \times \sqrt{61^2 - 11^2}$
= 11 × 60
= **660 cm^2**
54. (A)
ATQ,
Required S.P.
= $450 \times \frac{(100+90)}{100} \times \frac{(100-30)}{100}$ = Rs.**598.5**
55. (A)
ATQ,
$\frac{34+x}{114+x} = \frac{52+x}{164+x}$
$\Rightarrow x =$ **11**
OR
from option A $\Rightarrow \frac{34+11}{114+11} = \frac{9}{25} = \frac{52+11}{164+11}$
option B $\Rightarrow \frac{34+12}{114+12} = \frac{23}{63} \neq \frac{52+12}{164+12}$
option C $\Rightarrow \frac{34+9}{114+9} = \frac{43}{123} \neq \frac{52+9}{164+9}$
option D $\Rightarrow \frac{34+16}{114+16} = \frac{5}{13} \neq \frac{52+16}{164+16}$
56. (C)
ATQ,
$\frac{12x+83}{13} = x + 3$
$\Rightarrow x = 44$
Hence, Required average = 44 + 3 = **47**
57. (A)
ATQ,
Total gain = $\frac{\frac{35}{5} - \frac{45}{12}}{\frac{45}{12}} \times 100$
= 86.667% ⌑ **87%**
58. (B)
ATQ,
Required amount = $\frac{1000}{(100+150)} \times 100$
= Rs.**400**
59. (B)
ATQ,
$\frac{60-x}{7} + \frac{x}{5} = 10$
$\Rightarrow x = 25$ kms
Hence, Required distance = **25 kms**
60. (A)
ATQ,
$P\left(\left(1+\frac{8}{100}\right)^2 - 1\right) = 3993.6$ P = Rs.**24000**
61. (D)
ATQ,

$$\frac{17}{3}+\frac{3\left(2x-\frac{5}{3}\right)}{2}=\frac{1}{6}$$

$$\Rightarrow \quad \frac{34}{6}+\frac{18x-15}{6}=\frac{1}{6}$$

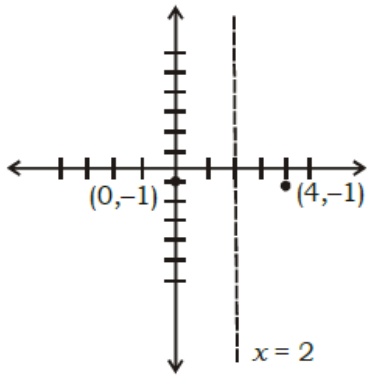
$$\Rightarrow \quad x = \mathbf{-1}$$

62. (C)
ATQ,
$a^3 + b^3 = (a + b)((a + b)^2 - 3ab)$
$= 15((15)^2 - 3 \times 54)$
$= 15 \times 63 = \mathbf{945}$

63. (A)
ATQ,
$$x+\frac{3}{x}=\frac{37}{10}$$
$\Rightarrow 10x^2 + 30 - 37x = 0$
$\Rightarrow (5x - 6)(2x - 5) = 0$
$$\Rightarrow x = \frac{6}{5}, \mathbf{\frac{5}{2}}$$

64. (B)
ATQ,
$a + 3d - a - 7d = 11 - (-9) = 20$
$\Rightarrow d = -5$ and a = 26
Then, $T_{19} = 26 + (19 - 1) \times (-5) = \mathbf{-64}$

65. (C)



So, required points = **(0,–1)**

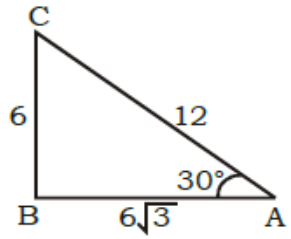
66. (D)
ATQ,
Let the point = (0,*y*)
then, $(0,y) = \left(\frac{5\times1+m_2(-3)}{m+1}, \frac{1\times3+m\times1}{m+1}\right)$
$$\Rightarrow \frac{5-3m}{m+1}=0$$
$$\Rightarrow m=\frac{5}{3}$$
So, required ratio = **5 : 3**

67. (A)
ATQ,
$7x - 11y = 12$
$\Rightarrow 11y = 7x - 12$
$$\Rightarrow y = \frac{7}{11}x-\frac{12}{11}$$
the coefficient of *x* is the slope of line when the coefficient of *y* is 1.
then, Slope of line = $\mathbf{\frac{7}{11}}$

68. (B)
ATQ,
area of $\Delta XYZ = \frac{(6)^2}{(1)^2} \times 15$
$= \mathbf{540\ cm^2}$

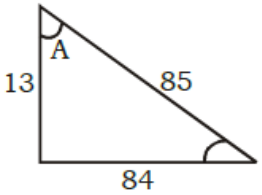
69. (A)
ATQ,
Cot 30° – sec 60° = $\sqrt{3} - 2$

70. (C)
ATQ,



Hence, AB = $\mathbf{6\sqrt{3}}$ **cm**

71. (A)
ATQ,



cot A = $\frac{13}{84}$

$\Rightarrow \sec A = \mathbf{\frac{85}{13}}$

72. (A) **3**

73. (D)

Required number = 100 + 150 + 150 + 250 + 350 = **1000**

74. (D)

Required increment = $\frac{(250-150)}{150} \times 100$

$= \mathbf{66\frac{2}{3}\ \%}$

75. (A)

Total fees = (100 + 150 + 150) × 10000 + (250 + 35 + 300) × 12000)

= **Rs.14800000**

SSC PRE MOCK TEST – 16 (ANSWER)

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