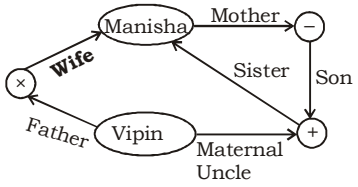
SSC (GD)MOCK TEST – 17 (SOLUTION)

1. (A) As, 122nd Amendment GST bill to introduce the goods and services tax. Similarly, 124th Amendment bill gives 10% reservation to economically backward of general category.
2. (B) As, flower attracts butterfly. Similarly, dirt attracts **flies**.
3. (B) As, ;R O A D T K Y H (+2, –4, –2, +4)

   Similarly, P U B G **R Q Z K** (+2, –4, –2, +4)
4. (C) As, 2 + 8 + 9 $\Rightarrow$ $(19)^2$ = 361
   Similarly, 3 + 5 + 6 $\Rightarrow$ $(18)^2$ = **324**
5. (A) All expert **lotus**, are flowers which grow on land.
6. (C) P L S X (+3, ×2); G O J D (+3, ×2); **D C G I** (+3, ×3); Q P T F (+3, ×2)
7. (D) 24 – 9 = 15 (O)
   16 – 7 = 9 (I)
   11 – 3 = 8 (H)
   21 – 4 = **17 (Q)** $\neq$ **(R)**
8. (D) As, $\frac{13+14+18}{3}$ = 15

   And, $\frac{20+12+19}{3}$ = 17

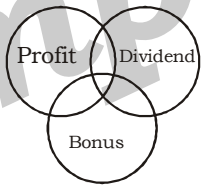
   Similarly, $\frac{17+16+12}{3}$ = **15**
9. (B) As, 14 × 5 + 9 = 79
   and, 18 × 5 + 6 = 96
   Similarly, 21 × 5 + 7 = **112**
10. (C) 9 , 10 , 13 , 19 , **29** , 44 (+1, +1+2, +1+2+3, +1+2+3+4, +1+2+3+4+5)
11. (D) 63 Q 7 P 8 R 5 S 3
    After interchanging the signs as per given details,
    = 63 ÷ 7 – 8 + 5 × 3
    = 9 – 8 + 15 = **16**
12. (D)



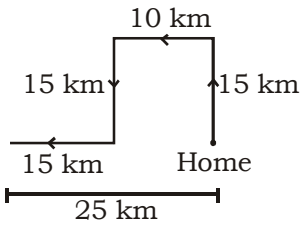
13. (B) As, $(4)^2 \times \sqrt{25} = 80$

    and, $(5)^2 \times \sqrt{36} = 150$

    Similarly, $(6)^2 \times \sqrt{49}$ = **252**
14. (B) A B C D E
    ↓ ↓ ↓ ↓ ↓
    3 2 1 4 5
15. (D)
16. (A)



17. (A) −18 (×½) −9 (×3/2) −13.5 (×½) −6.75 (×3/2) **−10.125** (×½) −5.0625
18. (A) 16 × 4 = 64
    16 × 8 = 128
    8 × 5 = **40**
19. (C)
20. (B)
21. (A)



    Hence, Required distance = **25 km**
22. (D)
23. (A)
24. (A) Total number of triangles = **18**

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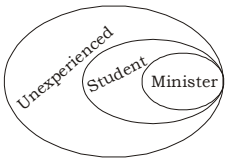
25. (C)



I. ✓

II. ✓

Hence, both conclusion follows.

51. (B) $a^b = b^a$

Clearly a = 4 and b = 2 as these values satisfy it

So, $4^2 = 2^4 \Rightarrow 16 = 16$

$\therefore a + b = 6$

52. (C) $(392)^{m-1}(392-1)$

$=(392)^{m-1} \times 391$

13 is not the factor of either 392 or 391

53. (D) $\sqrt{43-12\sqrt{7}} + \dfrac{1}{\sqrt{16+6\sqrt{7}}}$

$= \sqrt{(6-\sqrt{7})^2} + \dfrac{1}{\sqrt{(3+\sqrt{7})^2}}$

$= 6 - \sqrt{7} + \dfrac{3-\sqrt{7}}{2}$

$= \dfrac{12-2\sqrt{7}+3-\sqrt{7}}{2} = \dfrac{15-3\sqrt{7}}{2}$

54. (C) $a = 3 + 2\sqrt{2}$ and ab = 1

$\therefore b = \dfrac{1}{3+2\sqrt{2}} = 3 - 2\sqrt{2} = \dfrac{1}{a}$

$\therefore a + \dfrac{1}{a} = 3 + 2\sqrt{2} + 3 - 2\sqrt{2} = 6$

$\Rightarrow a^2 + \dfrac{1}{a^2} = 6^2 - 2 = 34$

$\therefore \dfrac{a^2+3ab+b^2}{a^2-3ab+b^2} = \dfrac{a^2+\frac{1}{a^2}+3}{a^2+\frac{1}{a^2}-3} = \dfrac{34+3}{34-3} = \dfrac{37}{31}$

55. (D) $\dfrac{1}{2^2-1} + \dfrac{1}{4^2-1} + \dfrac{1}{6^2-1} + \ldots\ldots\ldots + \dfrac{1}{20^2-1}$

$= \dfrac{1}{1\times3} + \dfrac{1}{3\times5} + \dfrac{1}{5\times7} + \ldots\ldots\ldots\ldots + \dfrac{1}{19\times21}$

$= \dfrac{1}{2}\left[1 - \dfrac{1}{3} + \dfrac{1}{3} - \dfrac{1}{5} + \dfrac{1}{5} - \dfrac{1}{7} + \ldots\ldots\ldots \dfrac{1}{19} - \dfrac{1}{21}\right]$

$= \dfrac{1}{2}\left[1 - \dfrac{1}{21}\right] = \dfrac{10}{21}$

56. (D) a + b + c = 0

then, $a^3 + b^3 + c^3 = 3abc$

So, $\dfrac{a^2}{bc} + \dfrac{b^2}{ca} + \dfrac{c^2}{ab} = \dfrac{a^3+b^3+c^3}{abc} = \dfrac{3abc}{abc} = 3$

57. (B) since, $\sec^2\theta - \tan^2\theta = 1$

and, $\sec\theta - \tan\theta = x$ (given)

So, $\sec\theta + \tan\theta = \dfrac{1}{x}$

$\Rightarrow 2\sec\theta = x + \dfrac{1}{x}$

$\Rightarrow \cos\theta = \dfrac{2x}{x^2+1}$

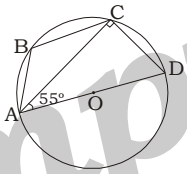
$\therefore \sin\theta = \sqrt{1-\cos^2\rho}$

$= \sqrt{1-\left(\dfrac{2x}{x^2+1}\right)^2}$

$= \sqrt{\dfrac{(x^2+1)^2-4x^2}{(x^2+1)^2}} = \sqrt{\left(\dfrac{1-x^2}{1+x^2}\right)^2}$

$= \dfrac{1-x^2}{1+x^2}$

58. (C)



In ΔACD

$\angle ACD = 90°$ (Angle in semicircle)

$\therefore \angle ADC = 180° - 90° - 55° = 35°$

$\therefore \angle ABC = 180° - 35° = 145°$

59. (C) Let the bolwer takes x wickets before last match

ATQ,

$\dfrac{13.8x+68}{x+10} = 13.3$

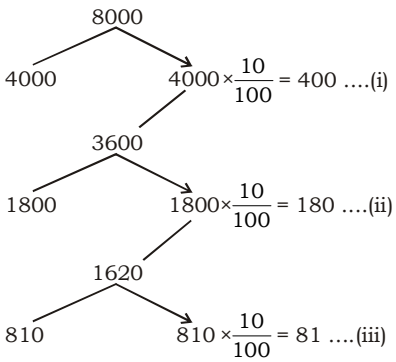
$\Rightarrow 13.8x + 68 = 13.3x + 133$

$\Rightarrow 0.5x = 65$

$\Rightarrow x = 130$

$\therefore$ Required number of wickets = 130 + 10 = 140

60. (B) Let assume initial stock = 8000



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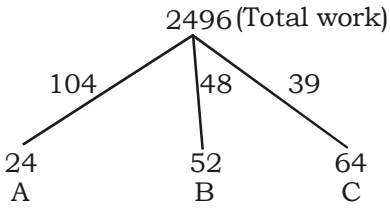
Total rotten = 400 + 680 + 81 = 661
661 unit = 1983

8000 unit = $\frac{983}{661} \times 8000 = 24000$

61. (B)



When A work for 6 days and C leaves before 6 days
Then, remaining work = 2496 – 6 × 104 + 6 × 39 = 2106
Number of days taken by (BAC) to complete the work = $\frac{2106}{87}$ = 24.2 days

62. (B)

	Usual	Later
Speed	4	3
Time	3	4

1 unit = 20
∴ 3 unit = 20 min × 3 = 60 min

63. (B) Each interior angle of regular polygon

$= 180 \times \frac{3}{5} = 108°$

Each interior angle of a regular polygon of n side = $\frac{(2n-4)}{n} \times 90°$

$\therefore \left(\frac{2n-4}{n}\right) \times 90° = 108°$

$\Rightarrow n = 5$

64. (B) Let SP of one orange = 1
SP of 100 orange = 100
CP of 100 oranges = 100 – 20 = 80

Profit % = $\frac{20}{80} \times 100 = 25\%$

65. (B) SI = $\frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$

ATQ,

$\frac{x \times m \times a}{100} = \frac{y \times m^2 \times a^2}{100} \Rightarrow \frac{x}{y} = \frac{m^2a^2}{ma}$

$= \frac{ma}{1} = ma : 1$

66. (C)

	Red	Green	
Initial ratio =	1	3	×2
Final ratio =	3	2	×3

Same

New,
Initial – 2 6
Final – 9 6
ATQ,
8 units = 40

$\therefore$ 7 units = $\frac{40}{8} \times 7 = 35$ marbles

67. (D) $2.\overline{47} + 3.\overline{53} + 0.\overline{05}$

Let, $x = 2.\overline{47}$, $y = 3.\overline{53}$ and $z = 0.\overline{05}$

$\Rightarrow 100x = 247.$

$\Rightarrow x = \frac{245}{99}$

Similarly, $y = \frac{350}{99}$ and $z = \frac{5}{99}$

Now,

$= \frac{245 + 350 + 5}{99}$

$= \frac{600}{99} = 6.\overline{06}$

68. (B) a + a = –2(1 + k)
2a = –2(1 + k) $\Rightarrow$ a = –(1 + k)
and, aa = k^2 $\Rightarrow a^2 = k^2$
$= [(-1-k)]^2 = k^2$
$\Rightarrow 1 + k^2 - 2k = k^2$
$\Rightarrow 2k = -1 \Rightarrow k = -\frac{1}{2}$

69. (C) Let the number of children be n
ATQ,
$n(n-1) = 272$
$\Rightarrow n^2 - n - 272 = 0$
$\therefore n = 17$

70. (B) C.P. for Mohit = $150 \times \frac{5}{4} = ₹187.5$

C.P for Aman = $220 \times \frac{10}{11} = ₹200$

Profit percentage for Mohit

$= \left(\frac{200 - 187.5}{187.5}\right) \times 100 = 6.67\%$

71. (C) 10 11 15 22

$\frac{-3}{7}$ $\frac{-4}{7}$ $\frac{-8}{7}$ $\frac{-15}{7}$

LCM (10, 11, 15, 22) –7 = 330n – 7
For required no.
Let n = 30
Required number = 330×30 – 7
= 9900 – 7
= 9893

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72. (A) Corresponding angle for rice and barley = 72° + 36° = 108°

18° = 300

$1 = \frac{300}{18}$

$108 = \frac{308}{18} \times 108 = 1800$ crore

73. (C) Required ratio = 72 : 36 : 2 : 1

74. (B) 10% of 72° = 7.2°

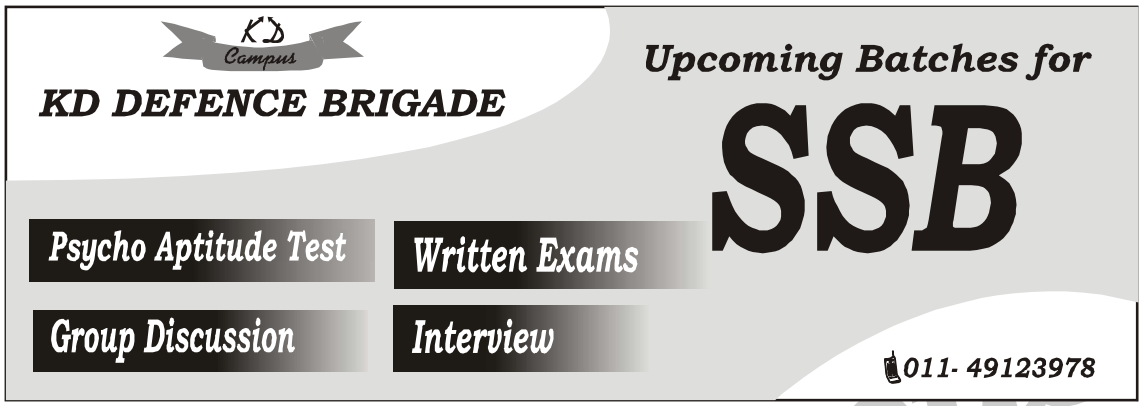
∴ Increase in corresponding angle of wheat = $\frac{2}{3} \times 7.2 = 4.8°$

∴ New corresponding angle for wheat = 72° + 4.8° = 76.8°

75. (A) 100% = 360°

50% = 180°

72° + 72° + 45° = 189° > 180°



Note:- If your opinion differs regarding any answer, please message the mock

Note:- Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the doubts.

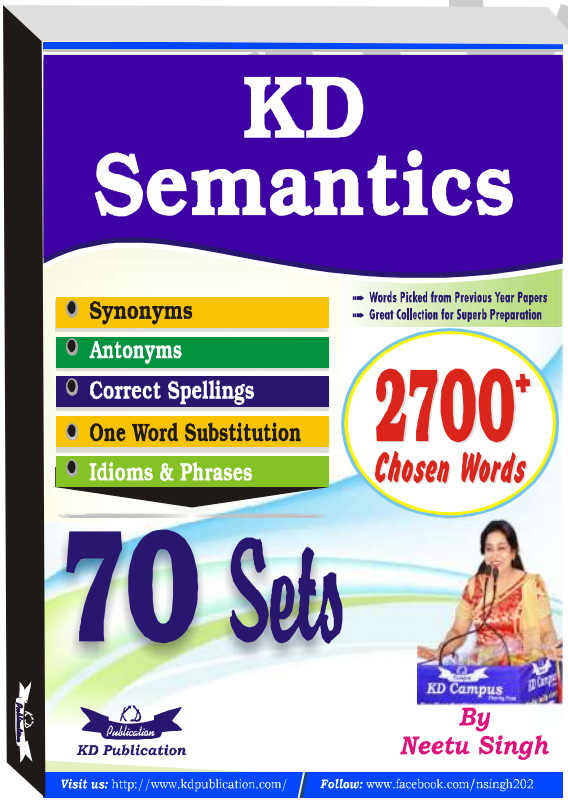
Note:- If you face any problem regarding result or marks scored, please

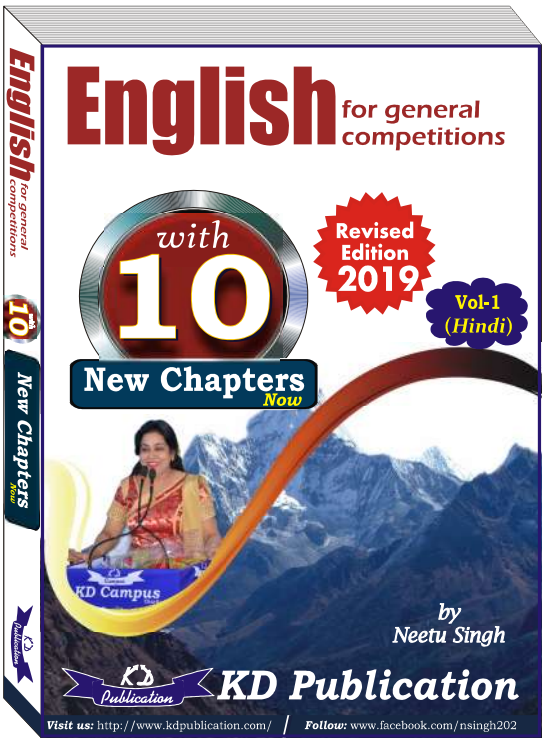
76 (A) Reflexive pronoun for 'revenues' is 'themselves'. 'Itself' is wrong.
77 (B) Preposition 'from' in 'return from talks' is wrong. 'Return to talks' is the correct expression.
78 (A) Use of 'effect' is not right. 'Affect' will be the correct word.
98 (B) Use of 'whom' is correct. 'Who' is wrong.
99 (A) Use of 'anyone' will be the right choice

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Dissipate	to slowly become less until it disappears	नष्ट हो जाना
Denounce	Publicly declare to be wrong or evil	आरोप लगाना
Succour	Assistance and support in times of hardship	परेशानी में सहायता करना
Consummate	showing great skill and flair	उत्कृष्ट
Reminiscent	tending to remind one of something	अतीत का स्मरण दिलानेवाला
Engross	absord all the attention or interest of	मगन
Besmirch	to damage someone's reputation	मलिन करना
Benevolence	Kindness	परोपकार
Caucus	A closed political meeting	गुट बैठक
Polymath	A person of wide knowledge or learning	बहुलक, बहुश्रुत
Philology	the study of literature and of disciplines related to literature	भाषाशास्त्र
Narcissist	A person who has an excessive interest in or admiration of themselves	आत्मरतिक
Flotilla	A small fleet of ships or boats	जहाजों का बेड़ा
Dactylology	The use of the fingers and hands to communicate and convey ideas	संकेतभाषा
Polyandry	A women who has more than one husband	बहुपतित्व

Campus





SSC (GD) MOCK TEST - 17 (ANSWER KEY)

Answer key

1. (A)	11. (D)	21. (A)	31. (B)	41. (B)	51. (B)	61. (B)	71. (C)	
2. (B)	12. (D)	22. (D)	32. (A)	42. (C)	52. (C)	62. (B)	72. (A)	
3. (B)	13. (B)	23. (A)	33. (D)	43. (A)	53. (D)	63. (B)	73. (C)	
4. (C)	14. (B)	24. (A)	34. (C)	44. (B)	54. (C)	64. (B)	74. (B)	
5. (A)	15. (D)	25. (C)	35. (B)	45. (C)	55. (D)	65. (B)	75. (A)	
6. (C)	16. (A)	26. (D)	36. (A)	46. (B)	56. (D)	66. (C)		
7. (D)	17. (A)	27. (A)	37. (B)	47. (D)	57. (B)	67. (D)		
8. (D)	18. (A)	28. (B)	38. (D)	48. (B)	58. (C)	68. (B)		
9. (B)	19. (C)	29. (A)	39. (C)	49. (B)	59. (C)	69. (C)		
10. (C)	20. (B)	30. (C)	40. (D)	50. (B)	60. (B)	70. (B)		

Hindi

76. (C)	86. (C)	96. (C)	
77. (B)	87. (B)	97. (B)	
78. (A)	88. (D)	98. (C)	
79. (C)	89. (C)	99. (C)	
80. (C)	90. (C)	100.(B)	
81. (D)	91. (C)		
82. (C)	92. (C)		
83. (C)	93. (D)		
84. (D)	94. (A)		
85. (C)	95. (B)		

English

76. (A)	86. (B)	96. (D)
77. (C)	87. (D)	97. (A)
78. (B)	88. (C)	98. (B)
79. (A)	89. (A)	99. (A)
80. (A)	90. (B)	100.(D)
81. (C)	91. (B)	
82. (B)	92. (D)	
83. (D)	93. (D)	
84. (C)	94. (C)	
85. (A)	95. (B)