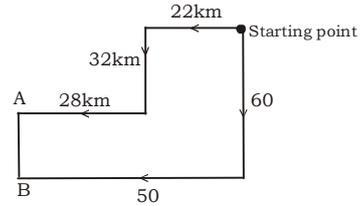


SSC MOCK TEST – 178 (SOLUTION)

1. (C) As, $332 : 11 \rightarrow 3 \times 3 + 2 = 11$
Similarly, $843 : 35 \rightarrow 8 \times 4 + 3 = 35$
2. (C) As, Poet writes a poem based on imagination
Similarly, Historian writes history based on **Facts**.
3. (B) As, CE : 34 \rightarrow $\begin{matrix} C & E \\ 3 & 5 \end{matrix} \rightarrow 3^2 + 5^2 = 34$
Similarly, DH : 80 \rightarrow $\begin{matrix} D & H \\ 4 & 8 \end{matrix} \rightarrow 4^2 + 8^2 = 80$
4. (B) U - 12 \rightarrow U (21) \rightarrow 12
P - 71 \rightarrow P (16) \rightarrow 17
G - 70 \rightarrow G (07) \rightarrow 70
X - 42 \rightarrow X (24) \rightarrow 42
5. (C) $10064 \rightarrow 80 \Rightarrow \sqrt{100} \times \sqrt{64} = 10 \times 8 = 80$
 $14481 \rightarrow 108 \Rightarrow \sqrt{144} \times \sqrt{81} = 12 \times 9 = 108$
 $12149 \rightarrow 66 \Rightarrow \sqrt{121} \times \sqrt{49} = 11 \times 7 \neq 66$
 $32416 \rightarrow 72 \Rightarrow \sqrt{324} \times \sqrt{16} = 18 \times 4 = 72$
6. (D) Except '**whistle**', others are music instruments.
7. (B) **25143**
8. (D) $\begin{matrix} 49 & 57 & 84 & 209 & 552 & 1883 & 4080 \\ \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\ 2^3 & 3^3 & 5^3 & 7^3 & 11^3 & 13^3 & \end{matrix}$
9. (D) $\begin{matrix} D & \xrightarrow{+1} & E & \xrightarrow{-3} & B & \xrightarrow{-1} & A \\ S & \xrightarrow{+1} & T & \xrightarrow{-3} & Q & \xrightarrow{-1} & P \\ L & \xrightarrow{+1} & M & \xrightarrow{-3} & J & \xrightarrow{-1} & I \\ U & \xrightarrow{+1} & V & \xrightarrow{-4} & R & \xrightarrow{+1} & S \end{matrix}$
10. (A) $\begin{matrix} N^- & \text{---} & K^+ & \text{---} & B^+ & \text{---} & P^- \\ & & | & & | & & \\ & & C^- & & T^- & \text{---} & M^+ \end{matrix}$
 \therefore N is **paternal aunt** of T.
11. (A) Required position = $15 - (7+4) + 1$
 \therefore Neha is **fifth** from the right end.
12. (B) **FAULTY**
13. (C) As, E N G L I S H = 74 $\rightarrow 7 \times 4$
 $\begin{matrix} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 5 & +14 & +7 & +12 & +9 & +19 & +8 \\ = & 28 \end{matrix}$
and E N G A G E = 39 $\rightarrow 3 \times 9 = 27$
 $\begin{matrix} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 5 & +14 & +7 & +1 & +7 & +5 \end{matrix}$
Similarly, F A C T O R S = 82 $\rightarrow 8 \times 2$
 $\begin{matrix} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 6 & +1 & +3 & +20 & +15 & +18 & +19 \\ = & 16 \end{matrix}$
14. (D) 18 Ω 78 γ 13 δ 17 α 29
After interchanging signs as per given details,
 $18 \times 78 \div 13 - 17 + 29 = 120$
15. (C) As, $18\Omega 10 = 24 \rightarrow (18 - 10) \times 3 = 24$
and $14\Omega 8 = 18 \rightarrow (14 - 8) \times 3 = 18$
Similarly, $22\Omega 18 = 12 \rightarrow (22 - 18) \times 3 = 12$

16. (B) As, $4^2 - 3^2 - 1^2 = 6$
and $7^2 - 5^2 - 3^2 = 15$
Similarly, $11^2 - 9^2 - 2^2 = 36$
17. (A) As,



Required distance = $60 - 32 = 28\text{km}$
 \therefore B is **28km South** of A.

18. (C) $\text{Cup} \times \text{Pen} \times \text{Robot} \times \text{Car}$
I. True
II. Can't say
III. Cant' say
 \therefore Only I and either II or III follow.
19. (C) **310kg**
20. (A)
21. (C)
22. (C)
23. (D)
24. (C)
25. (D) $\begin{matrix} L & E & A & R & N \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 87 & 69 & 58 & 67 & 88 \end{matrix}$
26. (B) On December 23, 2018 the state Minister for culture and Tamil Development shri K Pandiarjan announced sitting up of the country's first music museum in thiruraiyare, Tamilnadu.
27. (B) Prime Minister Narendra Modi embarked on a one-day visit to the state of Odisha. He inaugurated the Lalitgiri Archaeological Museum. Lalitgiri in Odisha is a famous Buddhist centre of archaeological importance, comprising Stupa, Viharas (monasteries) and image of Lord Buddha.
28. (A) On December 23, 2018, state-owned Punjab National Bank in collabortion with Uttar Pradesh government launched a special card called PNB Rupay Card, for kumbh Mela 2019. It is aimed to create a model for digitization at this edition of kumbh Melfa for convenient and hassle-free transactions for the participating 12 core devoteds.
30. (B) On 23rd December 2018, National Farmer's Day (NFD) was celebrated throughout the country to acknowledge the role of farmers in India's socio-economic development and to mark the birth anniversary of Indian farmer's leader and 5th Prime Minister of India Shri Chaudhary Charan Singh.

31. (D) On December 24, 2018, Ministry of Consumer Affairs, Food and Public Distribution celebrated National Consumer Day 2018 with the theme "Timely Disposal of Consumer Complaints" at Kothari Auditorium, DRDO Bhawan in New Delhi.
32. (D) On December 1, 2018, the President of India, Shri Ram Nath Kovind, inaugurated the four day 13th edition of CII Agro Tech India-2018 in Chandigarh. The theme for the 2018 edition was "Technology in Agriculture: Increasing Farmer's Income". Great Britain was the partner country while the focus countries were Canada and China.
33. (B) The 19th Hornbill Festival 2018 is celebrated from 1st to 10th December 2018 in Nagaland. The Hornbill Festival is one of the most cherished festivals of Nagaland. It is named after Hornbill, one of the most venerated bird species in the state.
34. (D) India's first international indigenous film festival will take place in February next year in Odisha. It will be an initiative of activist film collective 'Video Republic'. The three-stop event will kick off in Bhubaneswar on February 19 and 20, moving on to Puri from February 21 to 23 and will eventually culminate in an interaction with the adivasi communities at Niyamgiri
37. (D) On 28th November 2018, the bilateral KONKAN exercise between the Indian Navy and the Royal Navy of the United Kingdom started off at Goa. KONKAN-2018 will be conducted from 28 Nov to 06 Dec 2018.
38. (B) On November 28, 2018, the nine day long 49th International Film Festival of India (IFFI) 2018 concluded in Panaji, Goa. It showcased 217 films from over 68 countries. The Festival opened with World Premiere of 'The Aspern Papers'. The Closing film of IFFI 2018 was World Premier of 'Sealed Lips'.
39. (C) On November 28, 2018, the President appointed Shri Arvind Saxena as Chairman, Union Public Service Commission (UPSC) till 07. 08.2020, i.e., until he attains the age of 65 years.
42. (D) Accordint to chola inscription-
Vellanvagai – Non-Brahman, land
Brahmadeya – Land gifted to Brahman.
Shalabnoga – land gifted to place of education.
43. (A) The Reserve bank of India (RBI) is India's banking Institution, which controls the monetary policy of the India rupees. It commenced its operations on 1 April 1935 in a accordance with Reserve Bank of India Act 1934, the RBI was nationalised on 1 January 1949.
44. (B) Some important special provision for Indian State, according to Indian constitution.
- Article - 371A → Special provision with respect to the state of Nagaland.
 - Article-371B → Special provision with respect to the state of Assam.
 - Article - 371D → Special provision with respect tot he stated Andhra Pradesh.
 - Article - 371I → Special provision with respect to the stated of Goa.
45. (B) Some Importaint disease of plant and causes-
- Potato - Ring Rot, Brow Rot (Bacterial Disease)
 - Cotton - Black Arm (Bacterial Disease)
 - Sugarcane – Red Rot (Fungal Disease)
 - Wheat – Rust (fungal sisease)
 - Tobacco – Mosaic (Viral Disease)
 - Rice – Blast (Fungal Disease)
46. (D) An Inert gas/nobel gas is a which does not undergo chemical reactions under a set of given conditions. The nobel gases often do not react with many substances and were historically reffered to as the inertgases, the most common inert gases hellium (He), argon (Ar), neon (Ne), Krypton (Kr), Xenon (Xe) and radon (Rn).
47. (B)
- | Disputes Territory | Country |
|--------------------|------------------------|
| • Centa | Spain and Morocco |
| • Glarioso Island | Madagascar and comoros |
| • Doi Lang | Myanmar and Thailand |
48. (B)
- The world outside of the Brontes, Jane Eyre, wuttering Heights - Emily Bronte
 - The Blue Umbrella, the room on roof, A flight of Pipeons Angry River, the Hidden Pool - Ruskin Bond.
 - Pride and Prejudice, Sense and Sensibility, the History of England – I.Jan Austen.
 - A journey from this world to the next, the female husband, the histroy of Amelia – Henery fielding.
49. (A) Important Sculptures of India
- The Kangra fort – Himachal Pradesh
 - Dilwara Temple – Mount Abu Rajasthan
 - Qutub Minar – Delhi
 - Mahishasure Mardini cave – Tamil Nadu.

51. (B) Effective discount = $40 + 10 - \frac{40 \times 10}{100}$
= 46%

52. (C) Required amount = $\frac{8}{28} \times 127820$
= ₹ 36520

53. (B)

Days	180	Efficiency
P - 30	/	6
Q - 12		15
R - 18		10
Total work done in a day		31

A.T.Q.,
First three day work = $(15 + 10) \times 3$
= 75 units
Remaining work = $(180 - 75) = 105$ units.
No. of days to finish remaining work
= $\frac{105}{31} = 3 \frac{12}{31}$

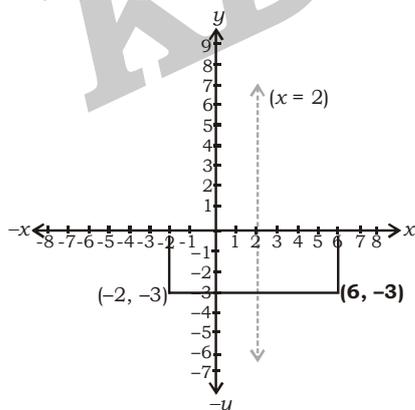
∴ Required number of Days = $3 + 3 \frac{12}{31}$
= $6 \frac{12}{31}$ days

54. (A) Required value = $\frac{5}{2} \times \frac{16}{100} \times \frac{275}{100} \times \frac{7}{3} \times 600 = 1540$

55. (D) Rate = $\frac{36}{3} = 12\%$
C.I. for 2 years

= $8000 \left[\left(1 + \frac{12}{100} \right)^2 - 1 \right]$
= ₹ 2035.2

56. (B)



∴ Required point is **(6, -3)**

57. (B) Let slope of line l_1 and perpendicular line l_2 be m_1 and m_2 respectively.
A.T.Q.,

$m_1 = \frac{3-6}{2-(-4)} = \frac{-1}{2}$ (∵ Slope = $\frac{y_2 - y_1}{x_2 - x_1}$)

Required slope $\Rightarrow m_1 \cdot m_2 = -1$

$\Rightarrow -\frac{1}{2} \cdot m_2 = -1$

$\Rightarrow m_2 = 2$

58. (D) $\Delta ABC \sim \Delta PQR$ (Given)

$\frac{RQ}{BC} = \frac{\text{Perimeter of } \Delta PQR}{\text{Perimeter of } \Delta ABC}$

$\Rightarrow \frac{RQ}{55} = \frac{4}{11}$

$\Rightarrow RQ = 20\text{cm.}$

59. (A) Profit = SP - CP

$\Rightarrow 3 = 23 - CP$

$\Rightarrow CP = 20$

∴ Required percentage = $\frac{3}{20} \times 100 = 15\%$

60. (C) Time taken by P, Q and R to complete one revolution is $\frac{24}{6}$, $\frac{24}{3}$ and $\frac{24}{8}$ hours

respectively.

∴ Required time to meet = LCM of (4, 8, 9) = **72 hours.**

61. (A) A.T.Q.,

$a + \frac{1}{a} = 9$

$\Rightarrow a - 9 = \frac{-1}{a}$... (i)

Now, $(a - 9)^{13} = -\frac{1}{a^{13}}$... (ii)

Putting equation (i) in equation (ii), we get.

$\left(-\frac{1}{a} \right)^{13} + \frac{1}{a^{13}} = 0$

62. (C) Let the number be x

A.T.Q.,

$x - \frac{9}{4x} = \frac{35}{4}$

$\Rightarrow 4x^2 - 9 = 35x$

$\Rightarrow 4x^2 - 35x - 9 = 0$

$\Rightarrow x = -\frac{1}{4}, 9$

∴ Required number is **9**

63. (B)

	Iron	Copper	Zinc		Iron	Copper	Zinc
Alloy I	5	:	7 = 12	} 84	7 → 35	:	49
Alloy II	3	:	4 = 14		6 → 18	:	42 : 24
Required ratio = 53 : 42 : 73							

64. (C) Let the third proportional be x.

then, $\frac{8}{28} = \frac{28}{x} \Rightarrow x = \frac{28 \times 28}{8} = 98$

65. (A) When the distance is same then average

speed = $\frac{2 \cdot (V_1 \times V_2)}{(V_1 + V_2)} = \frac{2(28 \times 42)}{(28 + 42)}$

= **33.6 km/hr.**

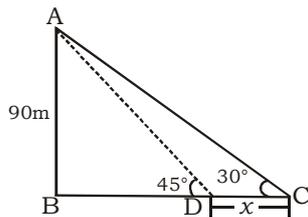
66. (C) $[(\cos^3 2\theta + 3 \cos 2\theta) \div (\cos^6 \theta - \sin^6 \theta)]$
Put $\theta = 90^\circ$

$$\left[\frac{\cos^3 2(90^\circ) + 3 \cos 2(90^\circ)}{\{\cos^6(90^\circ) - \sin^6(90^\circ)\}} \right]$$

$$\Rightarrow \left[\frac{\cos^3(180^\circ) + 3 \cos 180^\circ}{0 - (1)^6} \right]$$

$$\Rightarrow \left[\frac{(-1)^3 + 3(-1)}{-(1)^6} \right] = 4$$

67. (B)



$$\tan 30^\circ = \frac{AB}{BC} \Rightarrow \frac{1}{\sqrt{3}} = \frac{AB}{BC}$$

$$\Rightarrow BC = 90\sqrt{3} \text{ m}$$

and $\tan 45^\circ = \frac{AB}{BD} \Rightarrow 1 = \frac{90}{BD} \Rightarrow BD = 90 \text{ m}$.

\therefore Required distance 'x' = $90\sqrt{3} - 90$
= $90(\sqrt{3} - 1) \text{ m}$.

68. (A) $x + y + z = 1, xyz = 2, \frac{1}{x} + \frac{1}{y} + \frac{1}{z} = 1 \Rightarrow xy$

$$+ yz + zx = 2$$

$$\therefore x^3 + y^3 + z^3 - 3xyz = (x + y + z) [x^2 + y^2 + z^2 - (xy + yz + zx)]$$

$$\Rightarrow x^3 + y^3 + z^3 - 3(2) = (1) (x^2 + y^2 + z^2 - 2)$$

$$\Rightarrow x^3 + y^3 + z^3 = x^2 + y^2 + z^2 + 4 \quad \dots(i)$$

Now, as we know

$$(x + y + z)^2 = x^2 + y^2 + z^2 + 2(xy + yz + zx)$$

$$\Rightarrow 1^2 = x^2 + y^2 + z^2 + 2(2)$$

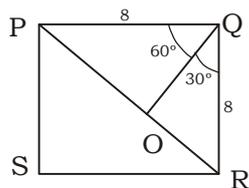
$$\Rightarrow -3 = x^2 + y^2 + z^2 \quad \dots(ii)$$

Put equation (ii) in equation (i),

$$\Rightarrow x^3 + y^3 + z^3 = -3 + 4 = 1$$

$\therefore x^3 + y^3 + z^3 = 1$

69. (D) ATQ,



$$\frac{1}{2} \times 8 \times OQ \times \sin 60^\circ + \frac{1}{2} \times 8 \times OQ \times \sin 30^\circ = \frac{1}{2} \times 8 \times 8$$

$$\Rightarrow OQ \left(\frac{\sqrt{3}}{2} + \frac{1}{2} \right) = 8$$

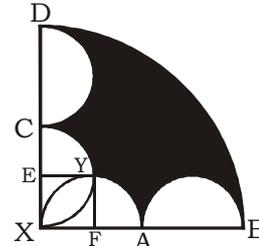
$$\Rightarrow OQ = \frac{8 \times 2}{\sqrt{3} + 1} \times \frac{\sqrt{3} - 1}{\sqrt{3} - 1} = 8(\sqrt{3} - 1)$$

Area of ΔPOQ

$$= \frac{1}{2} \times 8 \times 8 (\sqrt{3} - 1) \times \frac{\sqrt{3}}{2}$$

$$= 16(3 - \sqrt{3}) \text{ cm}^2$$

70. (D)



Here, $XA = 7 \text{ cm}$

\therefore Now, In ΔXFY

Area of sector XFY - Area of ΔXFY

$$= \frac{1}{4} \times \frac{22}{7} \times \frac{7}{2} \times \frac{7}{2} - \frac{1}{2} \times \frac{7}{2} \times \frac{7}{2}$$

and, common Area = $\frac{28}{8} \times 2$
= 7 cm^2

\therefore Required Area

$$= \frac{1}{4} \times \frac{22}{7} \times 14 \times 14 - 4 \times \frac{1}{2} \times \frac{22}{7} \times \frac{7}{2} \times \frac{7}{2} + 7$$

$$= 154 - 77 + 7 = 84 \text{ cm}^2$$

71. (B) $x + y = 8 \quad \dots(i)$
 $x - y = 2 \quad \dots(ii)$

$\therefore x = 5, y = 3$

Required value = $32 \times 5 \times 3 (5^3 - 3^3)$
= 55680

72. (D) Average marks obtained by all students in the subject B

$$= \frac{52 + 66 + 68 + 55 + 70 + 72}{6} = \frac{383}{6}$$

Hence, the required average percent

$$\frac{383}{6}$$

$$\text{marks} = \frac{6}{80} \times 100 = \frac{383 \times 100}{6 \times 80}$$

$\approx 79.79\% \approx 80\%$

73. (C) The required percent marks

$$= \frac{42 + 66 + 85 + 92 + 105 + 100}{75 + 80 + 120 + 125 + 150 + 150} \times 100$$

$$= \frac{490}{700} \times 100 = 70\%$$

74. (D) The required average marks

$$= \frac{40 + 42 + 36 + 45 + 60 + 54}{6} = \frac{277}{6} = 46 \frac{1}{6}$$

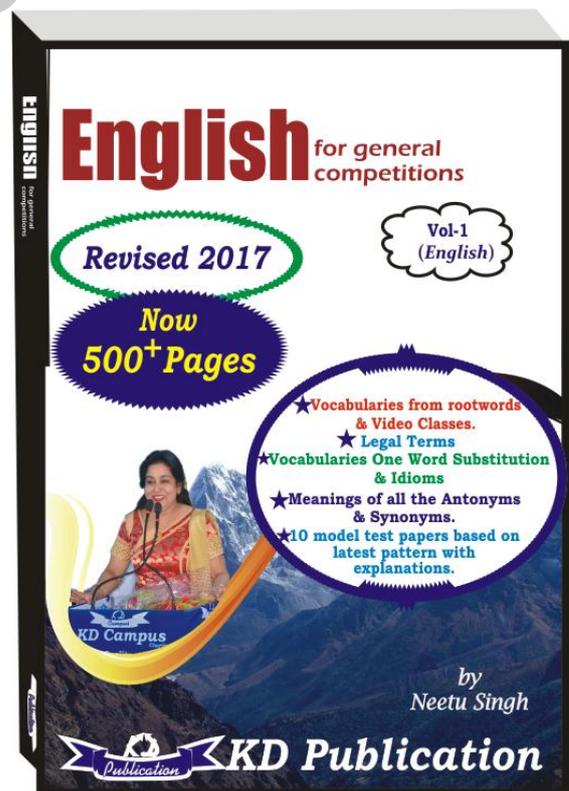
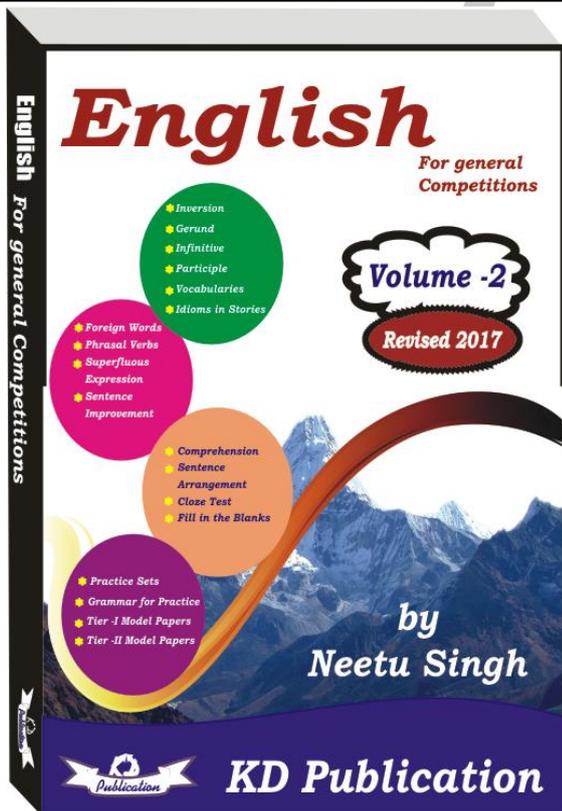
75. (B) The required average marks

$$= \frac{120 + 100 + 98 + 90 + 130 + 135}{6} = \frac{673}{6}$$

$$= 112 \frac{1}{6}$$

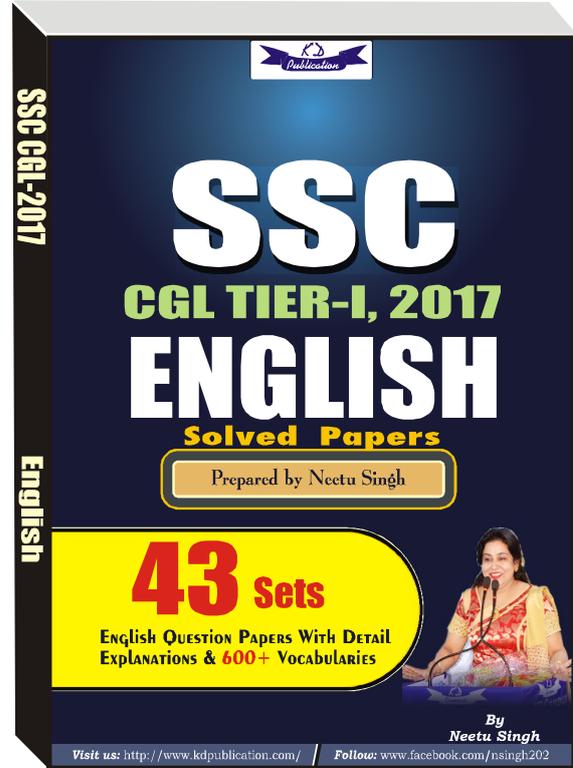
MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Middling	moderate or average in size, or amount	मध्यम
Evasive	tending to avoid commitment	टालना
Maudlin	highly sentimental	भावुक
Clammy	unpleasantly damp and sticky to touch	चिपचिपा
Objurgate	rebuke severely	डाटना, फटकारना
Lambaste	criticise (someone) harshly	डाटना
Fiend	bring up	पालन करना
Fuebd	an evil spirit or demon	राक्षस
Remnant	remaining	शेष
Unsullied	not spoiled by anything	बेदाग
Unsavory	unpleasant or morally offensive	बेस्वाद
Pesky	Causing irritation, trouble	परेशान करने वाला
Edify	to educate, uplift	समझाना, सिखाना
Vexing	causing annoyance, frustration	तंग करना
Nauseous	affected with disgust	धिनौना
Loathsome	causing hatred or disgust	घृणित
Protract	prolong	देर करना
Cryptic	having a mysterious or obscure meaning	गुप्त
Maverick	an orthodox or independent minded person	आबारा
Hormephobia	fear of shock (both electrically or mentally)	
Neophobia	fear of new places	नई स्थानों का डर

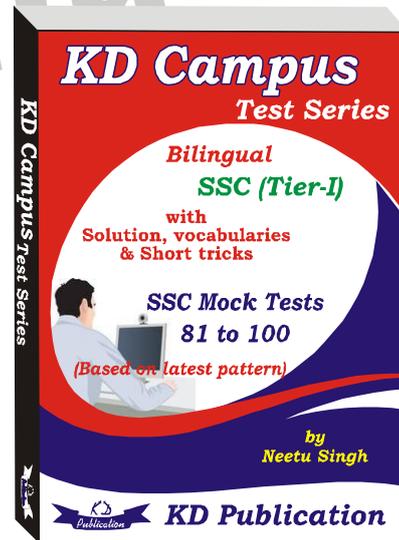


SSC MOCK TEST - 178 (ANSWER KEY)

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



76. (B) Change 'either to pay' with 'to either pay'. 'Either....or' being a connector should be placed properly in a sentence.
77. (A) Replace 'electrifying India' with 'electrification of India', which complete the meaning of the sentence.
88. (C) 'Benevolent' is the correct spelling which means a kind hearted person.
89. (D) 'Unambiguous' is the correct spelling which means a single interpretation.
90. (C) Here preposition is followed by gerund i.e. getting.
91. (A) Often (Adverb) = frequently, many times
Example: I often see her in pub.



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