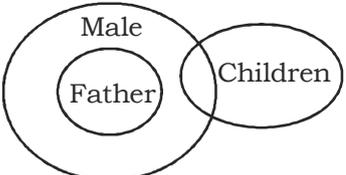
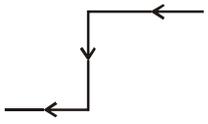
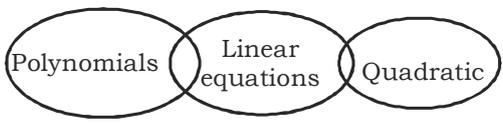
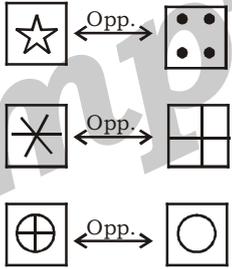
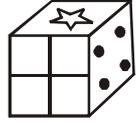


SSC MOCK TEST - 214

1. (D) $2^3, 3^3, 4^3$ and 5^3 .
2. (B) Sound is related to medium and light is related to Vacuum.
3. (C) $T \xrightarrow{+2} V$ Similarly, $M \xrightarrow{+2} O$
 $R \xrightarrow{+6} X$ $K \xrightarrow{+6} Q$
4. (A) $17 \xrightarrow{\times 9} 163$ $19 \xrightarrow{\times 4} 76$
 $14 \xrightarrow{\times 8} 112$ $23 \xrightarrow{\times 7} 161$
5. (D) Except Lucknow all others are cities on the bank of Ganga.
6. (B) All except a river contain stagnant water.
7. (B) $4 \rightarrow 3 \rightarrow 1 \rightarrow 6 \rightarrow 2 \rightarrow 5$
8. (A) $\frac{79}{+80}$ $\frac{159}{+40}$ $\frac{199}{+30}$ $\frac{219}{+10}$ $\frac{229}{+10}$
9. (B) $(11 \times 11 - 11)$ $(15 \times 15 - 15)$
 $11 : 121 : 110 :: 15 : 225 : 210$
 (11×11) (11×11)
 $(19 \times 19 - 19)$
 $:: 19 : 361 : 342$
 (19×19)
10. (A) c c b a / c c a b / c c b a / c c a b / c c b a
11. (B) ba / bbaa / bbbaaa / bbbbaaa
12. (D)
13. (D) $F R I S K E D S U N$
 $+2 \downarrow +2 \downarrow$
 $H T K U M G F U W P$
14. (A) Given $2 \times 3 + 6 - 12 \div 4 = 17$
 After interchanging the sides,
 $2 + 3 \times 6 - 12 \div 4$
 $= 2 + 18 - 3 = 17$
15. (D) 

16. (A) $7^2 + 4^3 = 113$
 $6^2 + 5^3 = 161$
 $22 + 3^3 = 31$
17. (C) 
 He is facing towards the West.
18. (B) 
 I. \times
 II. \checkmark
 Conclusion II follows
19. (B) The number of squares in the given figure = $(1^2 + 2^2 + 3^2 + 4^2) = 30$
19. (B) From figure,

 \therefore  can not be formed by folding the given figure.
21. (D)
22. (B)
23. (B)
24. (D)
25. (D) 87, 69, 58, 67, 88
26. (C) SeaWeb is a nonprofit ocean conservation organization. Their mission is to raise public awareness, to advance science-based solutions and mobilize decision-makers around ocean conservation. Blue Ventures is a science-led social enterprise that develops transformative approaches for nurturing and sustaining locally led marine conservation. Ocean Conservancy is one of the few organizations that help protect wildlife in the ocean.

27. (A) The Chandra X-ray Observatory, previously known as the Advanced X-ray Astrophysics Facility, is a Flagship-class space telescope launched on STS-93 by NASA on July 23, 1999.
31. (B) The formation of Seema Aayog was announced in the Parliament on 23 September 1965. On 23 April 1966, acting on the recommendation of the Hukam Singh Committee, the Indian government set up the Shah Commission under the chairmanship of Justice J. C. Shah, to divide and set up the boundaries of Punjab and Haryana.
35. (B) Indra Nooyi is an Indian American business executive and former CEO of PepsiCo. She has consistently ranked among the world's 100 most powerful women. In 2014, she was ranked at number 13 on the Forbes list of The World's 100 Most Powerful Women, and was ranked the 2nd most powerful woman on the Fortune list in 2015.
- Shantanu Narayen is an Indian American business executive, and the chairman and CEO of Adobe Inc. Prior to this he had been the president and chief operating officer since 2005. He was honored with India's civilian honor Padma Shri in 2019
- James Quincey is the CEO of coca cola.
36. (B) Runner-up Serena Williams
Men's Winner Novak Djokovic
Runner-up Roger Federer
40. (B) Kaveri, is an Indian river flowing through the states of Tamil Nadu and Karnataka. It is the fourth largest after Godavari and Mahanadi River in south India and the largest in Tamil Nadu.
- Bharathappuzha, also known as the Nila, is a river in India in the state of Kerala. With a length of 209 km, it is the second longest river in Kerala, after Periyar although the total length of Bharathapuzha is 250km of which 41km runs along Tamil Nadu from where it originates
41. (B) Dhana Nanda was the last ruler of the Nanda dynasty. He was the youngest of the eight brothers of the dynasty's founder Ugrasena.

47. (C) The Eidgah was built in 1640 CE during the Mughal era and has been in use for Eid celebration since then.
48. (A) Country Capital
Tajikistan Dushanbe
Kyrgyzstan Bishkek
Uzbekistan Tashkent

51. (B) $\frac{11}{x+11} + \frac{23}{y+23} + \frac{239}{z+239} = 2$

Subtracting one in each terms on both sides

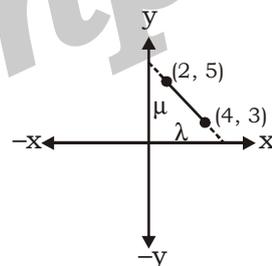
$$\frac{11}{x+11} - 1 + \frac{23}{y+23} - 1 + \frac{239}{z+239} - 1 = 2 - 1 - 1 - 1$$

$$\frac{11-x-11}{x+11} + \frac{23-y-23}{y+23} + \frac{239-z-239}{z+239} = -1$$

$$\frac{-x}{x+11} + \frac{-y}{y+23} + \frac{-z}{z+239} = -1$$

$$\frac{x}{x+11} + \frac{y}{y+23} + \frac{z}{z+239} = 1$$

52. (D)



The equation of line passing through Point (2, 5) and (4, 3) are

$$y - 3 = \frac{5-3}{2-4}(x-4) = -(x-4)$$

$$\Rightarrow y - 3 = 4 - x$$

$$\Rightarrow x + y = 7$$

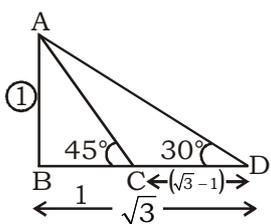
$$\Rightarrow \frac{x}{7} + \frac{y}{7} = 1 \quad \dots(i)$$

$$\left(\frac{x}{\lambda} + \frac{y}{\mu} = 1 \right) \quad \dots(ii)$$

Comparing eq. (i) and (ii)

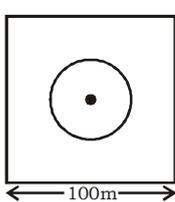
$$\lambda = \mu = 7$$

53. (C) $AB \parallel CF$
 $\angle ABC = \angle BCF = 85^\circ$ (Alternate interior angle)
 $\angle DCB = 180^\circ - 85^\circ - 20^\circ = 75^\circ$
 $\therefore \angle DCB + \angle BAD = 180^\circ$
 $\angle BAD = 180^\circ - 75^\circ = 105^\circ$

54. (A) 
 1 unit \rightarrow 60 metres
 $(\sqrt{3} - 1)$ units \rightarrow $60(\sqrt{3} - 1)$ metres

$$\text{Speed} = \frac{\text{Distance covered}}{\text{Time}}$$

$$= 12(\sqrt{3} - 1) \text{ m/s}$$

55. (B) 
 Area of ground (Leaving the garden of flowers) = 8614 m^2
 $(100)^2 - \pi r^2 = 8614$
 $\pi r^2 = 10000 - 8614 = 1386$
 $r^2 = \frac{1386 \times 7}{22}$
 $r = 21 \text{ cm}$

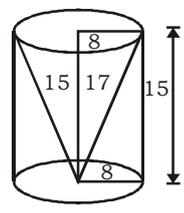
56. (A) Let the number of balls be n
 Volume of large circle = $n \times$ Volume of small circle

$$\therefore \frac{4}{3} \pi (100^3) = n \times \frac{4}{3} \pi (5)^3$$

$$(\because 1 \text{ cm} = 10 \text{ mm})$$

$$\frac{100 \times 100 \times 100}{5 \times 5 \times 5} = n$$

$$n = 8000$$

57. (A) Slant height of cone (l) = $\sqrt{r^2 + h^2}$
 $l = \sqrt{15^2 + 8^2}$

 $l = \sqrt{289}$
 $l = 17$
 The entire surface area of the solid =
 the area of the base of the solid +
 curve surface area of the cylinder +
 curve surface area of the cone
 $= \pi r^2 + 2\pi rh + \pi rl$
 $= \pi r (r + 2h + l)$
 $= \pi r (8 + 30 + 17)$
 $= \pi \times 8 \times 55$
 $= \pi \times 8 \times 55$
 $= 440\pi \text{ cm}^2$

58. (D) From 259 to 492, there are 200 natural numbers so there will be $2 \times 20 = 40$ 8's
 From 459 to 492 we have 13 more 8's and so answer is $40 + 13 = 53$

59. (B) We can see by symmetry $b = c$ and hence all we need to calculate b and a .
 $b = 280$ and $a = 180$
 $\Rightarrow 2b - a = 380$

60. (B) C.P. of 56 kg rice = $(48 \times 25 + 25 \times 36)$
 $= (1200 + 900)$
 $= ₹ 2100$
 S.P. of 73 kg rice = $(73 \times 30) = ₹ 2190$
 $\therefore \text{Gain} = \left(\frac{90}{200} \times 100 \right) \% = 4.23\%$

61. (B) Let x km/h be the speed of the boat in still water
 Speed of the boat downstream = $(x + 2)$ km/h
 and speed of the boat upstream = $(x - 2)$ km/h

$$\text{So, } \frac{20}{x+2} + \frac{20}{x-2} = \frac{110}{60}$$

$$\frac{20(x-2+x+2)}{(x+2)(x-2)} = \frac{11}{6}$$

$$\Rightarrow 11x^2 - 44 = 240x$$

$$\Rightarrow (x-22)(11x+2) = 0$$
 or, $x - 22 = 0 \Rightarrow x = 22 \text{ km/h}$

62. (B) In such type of question

$$\begin{aligned}
 CP &= \frac{\text{Total cost (100 + percent profit)}}{(100 - \text{percent loss}) + (100 + \text{percent profit})} \\
 &= \frac{720 \times 119}{85 + 119} = \frac{720 \times 119}{204} = ₹ 420
 \end{aligned}$$

63. (B) Let total principal is 36 units

36 units

1st year interest 6
 2nd year interest 6 1
 Total CI for 2 years is 13 units
 13 units → ₹780

$$12 \text{ units} \rightarrow \frac{780}{13} \times 12 = ₹720$$

∴ Total SI for 2 years is ₹720

64. (D) A : B : C

$$1 : 2 : 3 \quad \left[\text{Average} = \frac{1+2+3}{3} = 2 \right]$$

2 units → 600

1 unit → 300

So, A : B : C

1 : 2 : 3

300 600 900

Now,

A $\xrightarrow{+10\%}$ 300 + 30 = 330 (new value of A)

B $\xrightarrow{-20\%}$ 600 - 120 = 480 (new value of B)

Average 600 $\xrightarrow{+5\%}$ 600 + 30 = 630 (new average)

Now,

$$\Rightarrow \frac{330 + 480 + \text{new value of C}}{3} = 630$$

$$\text{New value of C} = (630 \times 3) - (330 + 480) = 1080$$

$$\text{Increase in C} = 1080 - 900 = 180$$

65. (C)

₹ 500	Required Sum
--------------	---------------------

Rate of interest 12% 10%

S.I after 4 yrs 480 480

S.I is same

$$\Rightarrow \frac{500}{\text{Required Sum}} = \frac{10\%}{12\%}$$

$$\Rightarrow \frac{500}{\text{Required Sum}} = \frac{5}{6}$$

$$\Rightarrow \text{Required sum} = ₹ \frac{500}{5} \times 6 = ₹ 600$$

66. (B) A + C = $\frac{22}{37}$ part

$$\Rightarrow B = 1 - \frac{22}{37} \text{ part} = \frac{15}{37} \text{ part}$$

And,

$$B + C = \frac{21}{37} \text{ part}$$

$$\text{or } \frac{15}{27} + C = \frac{21}{37} \Rightarrow C = \frac{21}{37} - \frac{15}{37} = \frac{6}{37} \text{ part}$$

So,

$$\text{Wage of C} = \frac{6}{37} \times 9250 = ₹ 1500$$

67. (A) Let x = length of the faster train in (in metres),

$$\text{So, } 54 \text{ seconds} = \frac{x}{(60 - 40) \text{ kmph}}$$

$$\Rightarrow x = 54 \text{ second} \times 20 \times \frac{5}{18} \text{ m / sec}$$

$$= 300 \text{ metres}$$

68. (B) S = 7×11+11×15+15×19+....+95×99

Nth term of the series can be written as

$$T_n = (4n + 3) \times (4n + 7)$$

Last term, (4n + 3) = 95 i.e n = 23

$$\sum_{n=0}^{n=23} (4n + 3) \times (4n + 7)$$

$$\Rightarrow \sum_{n=0}^{n=23} 16n^2 + 40n + 21$$

$$= 16 \times \frac{n(n+1)(2n+1)}{6} + 40 \times \frac{n(n+1)}{2} + 21$$

$$= 16 \times \frac{23(23+1)(46+1)}{6} + 40 \times \frac{23(23+1)}{2} + 21$$

$$\Rightarrow 80245$$

69. (D) It is given that $N^N = 2^{160}$

We can rewrite the equation as

$$N^N = (2^5)^{160/5} = 32^{32}$$

$$\Rightarrow N = 32$$

$$N^2 + 2^N = 32^2 + 2^{32} = 2^{10} \times (1 + 2^{22})$$

Hence, we can say that $N^2 + 2^N$ can be divided by 2^{10}

$$\text{Therefore, } X_{\max} = 10$$

70. (D) $2a + 3b = 4$
Taking cubes on both side
 $(2a + 3b)^3 = 4^3$
 $8a^3 + 27b^3 + 3 \times 2a \times 3b(2a + 3b) = 64$
 $8a^3 + 27b^3 + 18ab(4) = 64$
 $8a^3 + 27b^3 + 72ab = 64$

71. (C) $\alpha + \gamma = 180^\circ$
 $50 + \gamma = 180^\circ$
 $\gamma = 180^\circ - 50^\circ = 130^\circ$

72. (B) $\sec\theta = x + \frac{1}{4x}$
 $2\sec\theta = 2x + \frac{1}{2x} \quad \dots(i)$
 $(\because \sec^2\theta - \tan^2\theta = 1)$

$2\tan\theta = 2x - \frac{1}{2x} \quad \dots(ii)$

Adding both equation
 $2(\sec\theta + \tan\theta) = 4x$
 $\sec\theta + \tan\theta = 2x$

73. (D) A chair can be made
by carpenter X = in 4 days

by carpenter Y = in 3 days
Therefore, required number of days
 $= \frac{4 \times 3}{4 + 3} = \frac{12}{67} = 1\frac{5}{67}$ days

74. (B) Number of days taken by carpenter Z to make
a chair = 2
a table = 3
a bed = 8
a cupboard = 10
Thus, required number of days = $2 + 3 + 8 + 10 = 23$

75. (C) Number of days taken to make a table
by carpenter X = 6
by carpenter Y = 2
by carpenter Z = 3
Therefore, required number of day

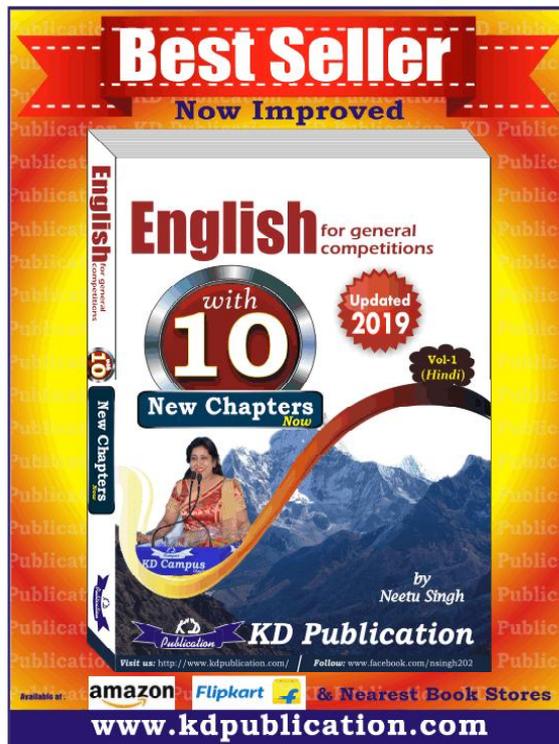
$= \frac{1}{\frac{1}{6} + \frac{1}{2} + \frac{1}{3}}$
 $= \frac{6}{1 + 3 + 2} = \frac{6}{6} = 1$ days

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Averment	something that is declared strongly affirmation	दृढ़ कथन
Collusion	secret cooperation for an illegal or dishonest purpose	आपसी साँठ-गाँठ
Ceased	to come or bring to an end, stop	समाप्त करना, बंद करना
Expiration	the end of something that lasts for a certain period of time	समय सीमा समाप्त
Eventual	coming or happening at a later time	अंतिम
Fleeting	passing by quickly	क्षणभंगुर
Imitation	made to look like something that is valuable, not genuine	नकली
Parsimony	the quality of being very unwilling to spend money	मितव्ययी
Persistent	continuing to act or exist longer than usual	दृढ़, लगातार
Spurious	not genuine, sincere, or authentic	जाली
Subsequent	happening or coming after something else	आगामी
Transient	short lived	क्षणिक
Unadulterated	not mixed, pure	शुद्ध

SSC MOCK TEST - 214 (ANSWER KEY)

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



76. (C) Remove 'by all' as its usage is superfluous with 'universally'. 'Universally' itself means 'accepted by all or acknowledged by all'.
78. (B) In our country Teachers' Day is celebrated on September 5 or on the 5th of September is the correct formation.
88. (A) 'Yet' and 'so far' mean 'upto the time when the sentence was spoken' and are generally used in Present Perfect Tense. Hence 'Present Perfect' is the most appropriate Tense here.
89. (A) In future conditional sentences, the first action is in simple present tense and the 2nd action is in future tense.
Change 'who will score the maximum marks' into 'who scores the maximum marks'.
96. (A) Again sentence is already in Passive voice form, we have to change it into active voice form
When active voice is as Sub + Verb (First form) + ing + Object
Passive voice will be Object + Verb (H-V) + being + V3 + by Sub.

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