

SSC MOCK TEST – 230 (SOLUTION)

1. (A) As, $56 : 41 \Rightarrow (5 \times 6) + (5 + 6) = 41$
 Similarly,
 $94 : \mathbf{49} \Rightarrow (9 \times 4) + (9+4) = \mathbf{49}$
2. (B) Goiter is caused due to the deficiency of Iodine whereas Anemia is caused due to deficiency of Iron.
3. (B) As, A K P
 ↓ ↓ ↓
 1^2 11^2 16^2
 = 1121256
 Similarly,
 L N O
 ↓ ↓ ↓
 12^2 14^2 15^2
 = **144196225**
4. (D)

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    graph LR
      Lady --> Father
      Punit --> Sister
      Punit --> Aunt
      Punit --> Cousin
      Cousin --> Sister
      Father --> Wife
      Wife --> Sister
    
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5. (D) Except '633', others are divisible by 11.
6. (D) MN $\Rightarrow 13 + 14 = 27$
 NM $\Rightarrow 14 + 13 = 27$
 OL $\Rightarrow 15 + 12 = 27$
ET $\Rightarrow 5 + 20 = 25$
7. (C) Except "Huge", others indicate position.
8. (B) Order of height of students
 $T < P < S < Q < R$
 \therefore **R** has maximum height in the class.
9. (C)
-
10. (D)
-
11. (B) As,
- | | | | | | | |
|----------|---|---|---|---|---|---|
| B | I | O | L | O | G | Y |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| Opposite | | | | | | |
| Y | R | L | O | L | T | B |
- Similarly,
- | | | | | | | |
|----------|---|---|---|---|---|---|
| P | H | Y | S | I | C | S |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| Opposite | | | | | | |
| K | S | B | H | R | X | H |
12. (D) $6 + 8 \div 4 - 4 = 8$
 From option (D),
 $6 - 8 \div 4 + 4 = 8$
 $\Rightarrow 6 - 2 + 4 = 8$
 $\Rightarrow 8 = 8$
 Hence, option (D) is correct.

13. (B) From figure,
 $N \leftrightarrow O$
 $A \leftrightarrow D$
 $B \leftrightarrow E$
-
- \therefore can be formed by folding the figure.
14. (A) ATQ,
 Shoes \rightarrow ka
 leather \rightarrow lo
 \therefore **of \rightarrow fod**
15. (A)
-
- I. ✓
 II. ×
 Hence, Only conclusion (I) follows.
16. (C) $(2 + 3) \times (2 + 3 - 1) = 20$
 $(3 + 6) \times (3 + 6 - 1) = 72$
 $(3 + 7) \times (3 + 7 - 1) = 90$
 $(7 + 4) \times (7 + 4 - 1) = 110$
 $(1 + 7) \times (1 + 7 - 1) = 56$
 $(7 + 6) \times (7 + 6 - 1) = \mathbf{156}$
17. (C)
-
18. (B) Let the present age of Nihal = x
 Then, present age of Sahil = $x + 7$
 ATQ,
 $(x + 7 - 5) + (x + 6) = 58$
 $\Rightarrow (x + 7 - 5) + (x + 6) = 58$
 $\Rightarrow 2x = 50$
 $\Rightarrow x = 25$
 Then, age of Ruchi after 10 years
 $= x + 7 + 4 + 10$
 $= x + 21$
 $= 25 + 21 = 46$ years
19. (C) Number of quadrilateral = 7
20. (A) Number of bottles which are not brown
 $= 1 + 26 + 31 = 58$
21. (C)
 22. (B)
 23. (A)
 24. (A)
 25. (A) P U R E
 ↓ ↓ ↓ ↓
 89, 96, 86, 13

- | | |
|---|--|
| <p>26. (D) Arjuna Award 2019 Awardees - Swapna Barman, Sundar Singh Gurjar (Athletics), Pramod Bhagat (Badminton), Sonia Lather (Boxing), Fouaad Mirza (Equestrian), Gurpreet Singh Sandhu(Football), Chinglensana Kangujam (Hockey), Ajay Thakur (Kabaddi), Simran Singh Shergill (Polo), Anjum Moudgil (Shooting) Pooja Dhanda (Wrestling), S Bhaskaran (Body Building) and Gaurav Singh Gill (Motorsports).</p> <p>27. (B) Ghadar party was founded in 1913 and dissolved in 1948. Other members included Bhagwan Singh Gyanee, Har Dayal, Tarak Nath Das, Kartar Singh Sarabha, Abdul Hafiz Mohamed Barakatullah, and Gulab Kaur.</p> <p>28. (C) Maharashtra is the second-most populous state and third-largest state by area. CM of Maharashtra is Uddav Thackeray and Governor of Bhagat Singh Koshyari. There is 48 Lok Sabha seats in Maharashtra.</p> <p>29. (B) Sixth Schedule - Provisions as to the Administration of Tribal Areas in the States of Assam, Mehalaya, Tripura and Mizoram.

Seventh Schedule - allocation of powers and functions between Union & States. It contains Union List, State List and Concurrent List.

Eighth Schedule - Lists 22 languages (Article 344 and 351)</p> <p>30. (D) Chlorophyceae - Green Algae
Phaeophyceae - Brown algae
Rhodophyceae - Red algae</p> <p>31. (D) Gol Gumbaz is constructed by Muhammad Adil Shah. Its construction was started in 1626 and completed 1648.</p> <p>32. (A) Album of the year - When We All Fall Asleep, Where Do We Go.</p> | <p>Record of the year - Bad Guy
Song of the year - Bad Guy
Best New Artist - Billie Eilish</p> <p>33. (D) The author of the novel 'Bird Box' is Josh Malerman.

The author of the novel 'The Devil in Silver' is Victor LaValle.

The author of the novel 'Fellside' is Mike Carey.</p> <p>36. (A) The Shyok River meets the Nubra or Siachan River to form a large valley that separates the Ladakh and Karakoram Ranges.

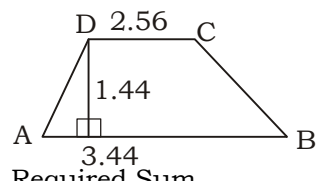
The Queyras valley located in the French Hautes-Alpes, of which the geographical extent is the basin of the river Guil, a tributary of the Durance.</p> <p>38. (B) Private Banking Sector - 49%</p> <p>39. (D) Tropic of Capricorn passes through Argentina, Australia, Botswana, Brazil, Chile, Madagascar, Mozambique, Namibia, and Paraguay.</p> <p>40. (D) Manaus is situated on the banks of the Negro River.</p> <p>42. (D) Gramophone - Thomas Edison
Graphophone - Graham Bell</p> <p>43. (D) World Health Organization was established on 7 April 1948 and is headquartered in Geneva. The WHO is a member of the United Nations Development Group. Its Director-General is Tedros Adhanom.

United Nations High Commissioner for Refugees (UNHCR) is a United Nations agency with the mandate to protect refugees, forcibly displaced communities and stateless people, and assist in their voluntary repatriation, local integration or resettlement to a third country.

It was created in 1950. Its headquarters are in Geneva. The UNHCR has won two Nobel Peace Prizes, once in 1954 and again in 1981 and a Prince of Asturias Awards for International Cooperation in 1991. Its High Commissioner for Refugees is Filippo Grandi.

International Committee of the Red Cross (ICRC) was founded on 9 February 1863 and is headquartered in Geneva.</p> |
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51. (C)



Required Sum
 $= \frac{1}{2} (3.44 + 2.56) \times 1.44 \times 1800$
 $= ₹ 7776$

52. (A)

$$\frac{1+a}{a^{\frac{1}{2}}+a^{-\frac{1}{2}}} - \frac{a^{\frac{1}{2}}+a^{-\frac{1}{2}}}{1+a} + a^{-\frac{1}{2}}$$

$$= \frac{1+a}{\sqrt{a} + \frac{1}{\sqrt{a}}} - \frac{\sqrt{a} + \frac{1}{\sqrt{a}}}{1+a} + \frac{1}{\sqrt{a}}$$

$$= \frac{(1+a)\sqrt{a}}{a+1} - \frac{a+1}{\sqrt{a}(1+a)} + \frac{1}{\sqrt{a}}$$

$$= \sqrt{a} - \frac{1}{\sqrt{a}} + \frac{1}{\sqrt{a}} = \sqrt{a}$$

53. (A)

$$\tan \frac{\theta}{2} + \cot \frac{\theta}{2}$$

$$= \tan \frac{\theta}{2} + \frac{1}{\tan \frac{\theta}{2}} = \frac{\tan^2 \frac{\theta}{2} + 1}{\tan \frac{\theta}{2}}$$

$$= \frac{2 \sec^2 \frac{\theta}{2}}{2 \tan \frac{\theta}{2}} = \frac{2}{\sin \theta} = 2 \operatorname{cosec} \theta$$

54. (B)

$$\frac{12}{\sqrt{5} + \sqrt{3}} + \frac{18}{\sqrt{5} - \sqrt{3}}$$

$$= \frac{12\sqrt{5} - 12\sqrt{3} + 18\sqrt{5} + 18\sqrt{3}}{5 - 3}$$

$$= \frac{30\sqrt{5} + 6\sqrt{3}}{2}$$

$$= \frac{6(5\sqrt{5} + \sqrt{3})}{2}$$

$$= 3(5\sqrt{5} + \sqrt{3})$$

55. (A)

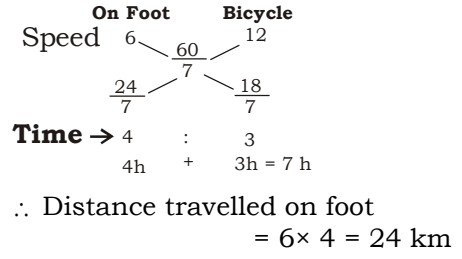
Given that, Number '347XY' is completely divisible by 80.
 So, Y = 0
 Now,
$$\begin{array}{r} 434 \\ 80 \overline{) 347X0} \\ \underline{320} \\ 27X \\ \underline{240} \\ 3X0 \\ \underline{320} \\ X \end{array}$$

Then, X = 2
 $\therefore X + Y = 2 + 0 = 2$

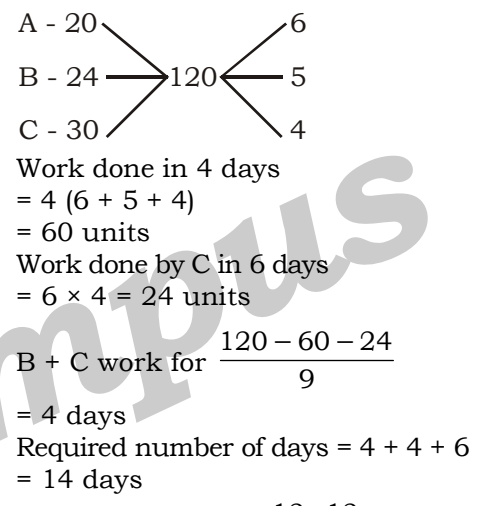
56. (A)

New average age
 $= \frac{6x + (x-2) + (x+2) + (x+4) + (x+6)}{10}$
 $= \frac{10x + 10}{10} = x + 1$

57. (D)



58. (C)



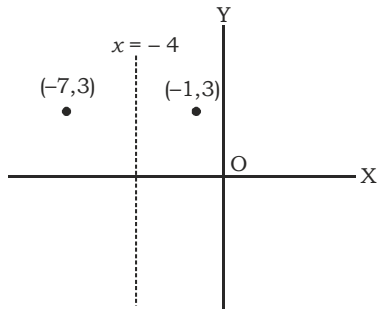
59. (C)

Net Rate = $12 + 12 + \frac{12 \times 12}{100}$
 $= 25.44\%$
 Now, 25.44 units = ₹ 10176
 100 units = $\frac{10176}{25.44} \times 100 = ₹ 40,000$
 \therefore Required Sum = ₹ 40,000

60. (C)

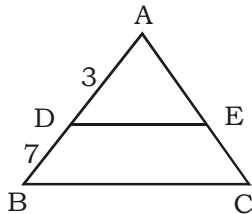
ATQ,
 $a + (4 - 1)d = 11$
 $\Rightarrow a + 3d = 11 \dots (i)$
 and, $a + (7 - 1)d = -4$
 $\Rightarrow a + 6d = -4 \dots (ii)$
 From (i) and (ii),
 $a = 26, d = -5$
 Now, Required sum = $\frac{n}{2} [2a + (n - 1)d]$
 $= \frac{11}{2} [2 \times 26 + (11 - 1) \times (-5)]$
 $= \frac{11}{2} (52 - 50) = 11$

61. (B)



Hence, point $(-7, 3)$ is the reflection of point $(-1, 3)$ in the line $x = -4$.

62. (A)



$AD \parallel DE$

and, $AD : DB = \frac{3}{7}$

$$\therefore \frac{\text{Area of } \triangle ADE}{\text{Area of } \triangle ABC} = \left(\frac{AD}{AB}\right)^2$$

$$\Rightarrow \frac{\text{Area of } \triangle ADE}{200} = \left(\frac{3}{3+7}\right)^2$$

$$\Rightarrow \text{Area of } \triangle ADE = 18 \text{ cm}^2$$

Now, Area of quadrilateral BDEC

$$= 200 - 18 = 182 \text{ cm}^2$$

63. (C) Total cost of 4 items

$$= 1250 \times 4$$

$$= ₹5000$$

\therefore Required average

$$= \frac{5000 + 2000}{5}$$

$$= ₹1400$$

64. (A) $\frac{1}{\sqrt{2}} \cot 30^\circ + \frac{1}{\sqrt{3}} \operatorname{cosec} 60^\circ$

$$= \frac{1}{\sqrt{2}} \times \sqrt{3} + \frac{1}{\sqrt{3}} \times \frac{2}{\sqrt{3}} = \frac{3\sqrt{3} + 2\sqrt{2}}{3\sqrt{2}}$$

65. (B) Let the required discount = x

ATQ,

$$\frac{8400 \times (100 - 25)}{100} \times \frac{(100 - x)}{100} = 5040$$

$$\Rightarrow 84 \times \frac{3}{4} (100 - x) = 5040$$

$$\Rightarrow 100 - x = 80$$

$$\Rightarrow x = 20\%$$

66. (A) $P : Q : R = 2 : 3 : 5$

Now, $(P+Q) : (Q+R) : (R+P)$

$$(3+5) : (5+7) : (7+3)$$

$$8 : 12 : 10$$

$$4 : 6 : 5$$

67. (D) In 80 litres solution,

Milk = 8 litres and water = 72 litres

Let required quantity of water = x litres

ATQ,

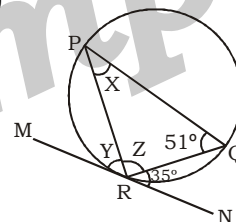
$$\frac{8}{80 + x} \times 100 = 5$$

$$\Rightarrow x = 80 \text{ litres}$$

68. (A) Surface area of sphere = $4\pi r^2$

$$= 4 \times \frac{22}{7} \times \frac{28}{2} \times \frac{28}{2} = 2464 \text{ cm}^2$$

69. (A)



$\angle X = 35^\circ$
 and $\angle Y = 51^\circ$ } Alternate Segment theorem

Then, $\angle Z = 180^\circ - 35^\circ - 51^\circ = 94^\circ$.

70. (C) $\frac{1}{y+1} + \frac{2y+1}{y^2-1}$

$$= \frac{y-1+2y+1}{y^2-1}$$

$$= \frac{3y}{y^2-1}$$

$$= \frac{3}{y - \frac{1}{y}}$$

Now, putting y

$$= \frac{2-x}{1+x}, \text{ we get}$$

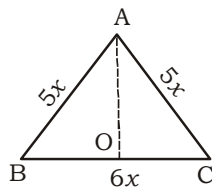
$$\frac{3}{\frac{2-x}{1+x} - \frac{1+x}{2-x}}$$

$$= \frac{3(1+x)(2-x)}{4+x^2-4x-1-x^2-2x}$$

$$= \frac{3(1+x)(2-x)}{3-6x}$$

$$= \frac{(1+x)(2-x)}{1-2x}$$

71. (B)



ATQ,
 $5x + 5x + 6x = 64$

$\Rightarrow x = 4$

\therefore Sides of \triangle are 20cm, 20 and 24cm
Now, Area of triangle

$$= \frac{1}{2} \times 24 \sqrt{20^2 - \frac{1}{4} \times 24^2}$$

$$= 12 \times \sqrt{400 - \frac{576}{4}}$$

$$= 12 \times 16 = 192 \text{cm}^2$$

72. (B) Required number of Shoes

$$= \frac{23}{100} \times 2400 = 552$$

73. (A) Difference in number of Shoes of Spark

and Red-Tape = $\frac{(21-13)}{100} \times 2400$
 $= 192$

74. (C) Difference between the number of shoes of Nike and Woodland is same as that of Red-Tape and Nike.

75. (B) Required percentage

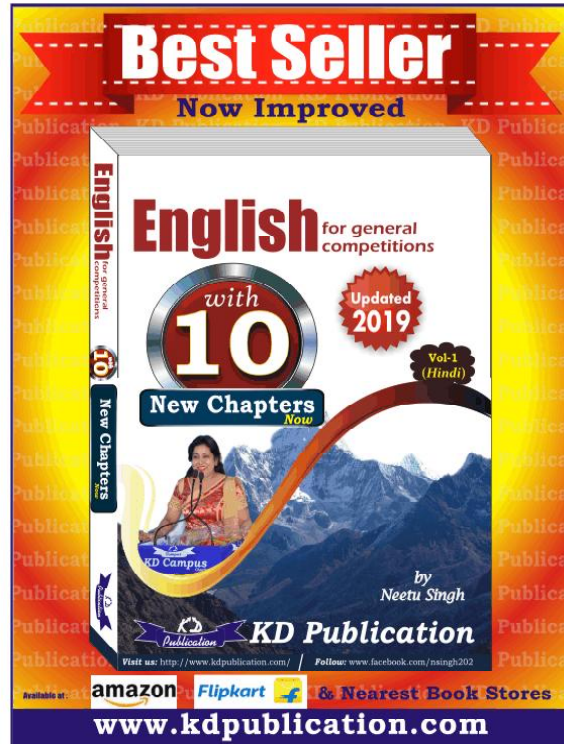
$$= \frac{(21-18)}{18} \times 100 = 16.66$$

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Alliteration	the occurrence of the same letter or sound at the beginning of adjacent or closely connected words.	अनुप्राय
Allusive	using or containing suggestion rather than explicit mention.	सांकेतिक
Bemused	puzzled, confused or bewildered	उलझन में
Ennui	a feeling of listlessness and dissatisfaction arising from a lack of occupation or excitement.	विरक्ति
Gloomy	dark or poorly lit, especially so as to appear depressing or frightening.	उदास
Hypocritical	behaving in a way that suggests one has higher standards or more noble beliefs than is the case.	पाखंडी
Monotonous	dull, tedious, and repetitious, lacking in variety and interest	नीरस
Nonplussed	so surprised and confused that one is unsure how to react	भौचक
Perilous	full of danger or risk	जोखिम
Pertinent	relevant or applicable to a particular matter, apposite	उचित
Pious	devoutly religious	पवित्र
Protean	tending or able to change frequently or easily	बहुरूपिया
Pun	a joke exploiting the different possible meanings of a word or the fact that there are words which sound alike but have different meanings.	यमक
Renaissance	a revival of or renewed interest in something	पुनर्जागरण काल
Vibrant	full of energy and life	जिवंत
Vogue	the prevailing fashion or style at a particular time	प्रचलन

SSC MOCK TEST - 230 (ANSWER KEY)

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



76. (A) "wish" in place of "wishes" because in present indefinite tense s/es is used only with singular subject and "You" takes plural verb.
77. (C) Use 'with'. You use 'by' with does (in Passive Voice) and 'with' with instrument/ weapon etc.
78. (C) Replace 'is' with 'are'. 'Places' a plural noun will take plural verb.
89. (A) the "solid object " is a singular subject so, change "do" into "does"



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