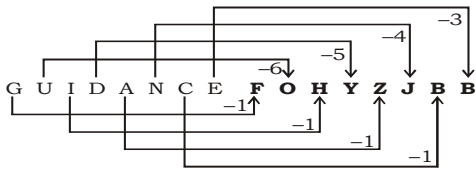
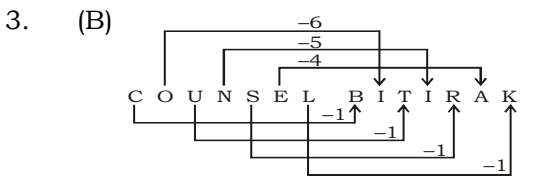


SSC MOCK TEST – 219 (SOLUTION)

1. (A) The relationship is $(x) : (x^3 + x^2) / 4$
 = 6: (216 + 36) / 4 = 6 : 63
 and 4 : (64 + 16) / 2 = 4 : **20**

2. (D) A Marathon is a long Race and Hibernation is a long period of **Sleep**.



4. (C) All except **sodium** are radioactive elements, while sodium is a metal.

5. (A) In each number except **751**, the difference of first and third digit is the middle one.

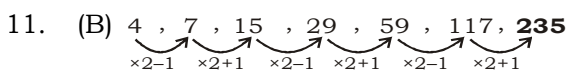
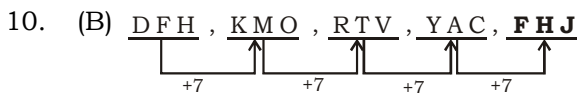
6. (D) After including the vowels, we can find the name of the months i.e. **April, May, August**. Whereas in **January** we have to include some consonant also i.e. 'N'.

7. (C) Balance → Balanced → Balancing → Ball → Balls

8. (A) Triangle 1 → $3^2 = 9$ and $4^2 = 16$ hence 916
 Triangle 2 → $2^2 = 4$ and $5^2 = 25$ hence 425

Similarly, $1^2 = 1$ and $7^2 = 49$
 Hence, 149 is the right answer.

9. (B) The letters are the first letter of counting numbers i.e. one, two, three, four, five etc. So, '**O**' is the right answer



12. (C)

13. (B) N U M E R A L
 1 2 3 4 5 6 7
 U E A L R M N
 2 4 6 7 5 3 1

Similarly,

A L G E B R A
 1 2 3 4 5 6 7
L E R A B G A
 2 4 6 7 5 3 1

14. (A) Number of letters in the spelling of each digit i.e. Zero = 4, One = 3, Two = 3, Three = 5, Four = 4 and so on.

So, We have, **Ten = 3**

15. (A) Let the marks in Geography be G and History be H.

Eq 1: $G + H = 160$

Eq 2: $G/3 = H/2$

By the problem:

$G = 160 - H$

Therefore, putting the value of G in Eq 2:

$(160 - H)/3 = H/2$

$\Rightarrow 320 - 2H = 3H$

$\Rightarrow 3H + 2H = 320$

$\Rightarrow 5H = 320$

$\Rightarrow H = \mathbf{64}$

16. (A) Given : S O I L D I S K
 \$ 4 % 6 5 % \$ #

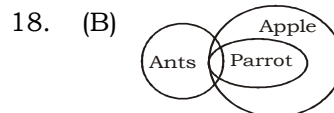
Then, S O L I D
\$ 4 6 % 5

17. (C) $20 \times 8 \div 8 - 4 + 2$

After changing the sign according to question.

$20 + 8 - 8 \div 4 \times 2 = 20 + 8 - 2 \times 2$

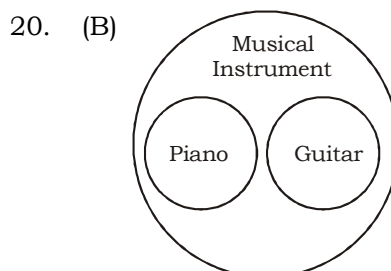
$= 20 + 8 - 4 = \mathbf{24}$.

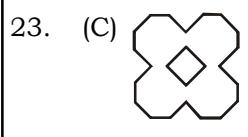
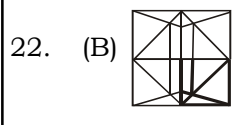
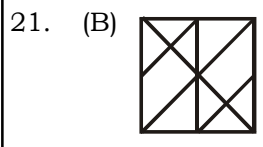


1. × 2. ✓

Hence, only conclusion II follows.

19. (A)





24. (D)
 25. (C) M A L E
 ↓ ↓ ↓ ↓
 03, 12, 11, 32

26. (B) The Nilgiri Biosphere Reserve is an International Biosphere Reserve in the Western Ghats and Nilgiri Hills ranges of South India. The Nilgiri Sub-Cluster is a part of the Western Ghats, which was declared a World Heritage Site by UNESCO in 2012. It includes the Aralam, Mudumalai, Mukurthi, Nagarhole, Bandipur and Silent Valley National Parks, as well as the Wayanad and Sathyamangalam Wildlife Sanctuaries.
27. (C) Zo-Mal-Lok, Tendong Lho Rum Faat and Kinchum-Chu-Bomsa are the most popular folk dances of the Lepcha community in Sikkim.
28. (B) **South Africa**-Election of members of the Rajya Sabha and Amendment of the Constitution.
Japan - Concept of "procedure established by Law".
U.S.A - Impeachment of the president, Functions of President and Vice-President, Removal of Supreme Court and High Court Judges, Fundamental Rights, Judicial Review, Independence of Judiciary and Preamble of the Constitution
29. (B) Pensi-La in the Ladakh is known as the Gateway to Zaskar. Pensi La is 4,400 m above sea level and connects the Suru Valley region to the Zaskar Valley region.
 Banihal Pass is a mountain pass across

- the Pir Panjal Range at 2,832 m maximum elevation.
 Khardung La is a mountain pass in the Ladakh.
30. (D) Boron can form n - tetragonal, and n - orthorhombic allotropes.
31. (B) Sirimavo Bandaranaike served as Prime Minister three times and was the leader of the Sri Lanka Freedom Party.
34. (B) **Fathirmath Dhiyana Saeed** was the first woman to hold this post since the organization's inception in 1985.
Antonio Guterres is serving as the ninth Secretary-General of the United Nations. Previously, he was the United Nations High Commissioner for Refugees between 2005 and 2015.
Jeremiah Kingsley is the Acting Joint Special Representative for Darfur and Head of the United Nations-African Union Mission in Darfur.
Madeleine Albright is the first female United States Secretary of State in U.S. history, having served from 1997 to 2001 under President Bill Clinton.
36. (A) Maharatna Companies are BHEL, CIL, FAIL, IOCL, NTPC, ONGC, SAIL and BPCL.
41. (C) 2018-19 Ranji Trophy was the 85th season. Vidarbha(2nd title) defeated Saurashtra by 78 runs in the final, to become the sixth team in the tournament's history to retain their title.
45. (D) Narasimhavarman I was a king of the Pallava dynasty who ruled South India from 630-668 AD.
 Mangalesha was a king of the Chalukya dynasty of Vatapi in Karnataka.
 Predecessor Kirttivarman I
 Successor Pulakeshin II
46. (B) Article 43 - Living wage, etc, for workers.
 Article 45 - Provision for free and compulsory education for children.
 Article 46 - Promotion of educational and economic interests of Scheduled Castes, Scheduled Tribes and other weaker sections.
51. (C) $4x^2 + 1 = 6x$
 Dividing by $2x$ by both sides
 $\Rightarrow 2x + \frac{1}{2x} = 3$

Taking cube both sides and solving
We get,

$$8x^3 + \frac{1}{8x^3} = 3^3 - 3(3) = 18$$

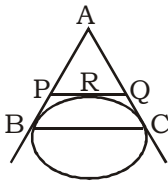
52. (B) Speed of train A = x km/hr
Speed of train B = $(x - 25)$ km/hr
A.T.Q.,

$$\frac{250}{x-25} - \frac{300}{x} = 4$$

On solving

∴ Speed of train A = 50 km/hr

53. (D)



AB = AC (tangents of circle)
and BP = PR, PQ = QC
and, AP + PQ + AQ = 30
AP + BP + QC + AC - QC = 30

$$\Rightarrow AB + AC = 30$$

$$\Rightarrow AB + AC = 30$$

$$\Rightarrow 2AB = 30$$

$$\Rightarrow AB = 15 \text{ cm.}$$

54. (C) In 3 years

$$₹12000 \times \left(\frac{6}{5}\right)^2 = ₹17280$$

$$12000 \left(1 + \frac{r}{100}\right)^3 = 20736$$

$$\Rightarrow \left(1 + \frac{r}{100}\right)^3 = \frac{20 + 36}{12000}$$

$$\Rightarrow r = 20$$

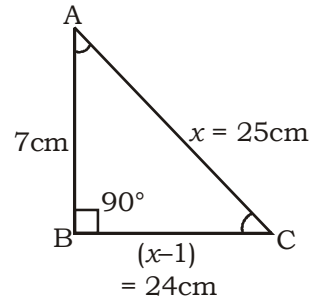
55. (C) M.P. = ₹550

$$\text{S.P.} = ₹550 \times \frac{80}{100} = 440$$

$$\text{C.P.} = \frac{440 \times 100}{(100 + 10)} = 400$$

$$\therefore \text{Profit percent} = \frac{470 - 400}{400} \times 100 = 17.5\%$$

56. (B)



Let AC = x then

$$BC = (x - 1)$$

A.T.Q.,

$$x^2 = (x - 1)^2 + 49$$

$$\Rightarrow x = 25$$

So, AC = 25 cm and BC = 24 cm
then, $\text{Sec}C + \text{Cot}A$

$$= \left(\frac{25}{24} + \frac{7}{24}\right) = \frac{32}{24} = \frac{4}{3}$$

57. (C) Let r be the radius and h be the height of the cylinder

A.T.Q

$$\frac{\pi r^2 h}{2\pi r h} = \frac{924}{264} \Rightarrow \frac{r}{2} = \frac{7}{2}$$

$$\Rightarrow r = 7 \text{ cm}$$

putting $r = 7$ then $2\pi r H = 264$

$$\Rightarrow H = \frac{264 \times 7}{22 \times 14} = 6 \text{ cm}$$

Required ratio = 716

58. (A) A.T.Q.,

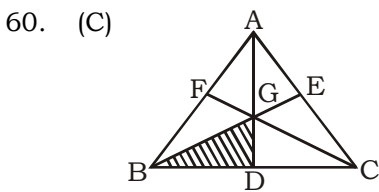
Price	quantity	total expenditure
100	1	$100 \times 1 = 100$
↓ 20% increase	↓ $x\%$ decrease	↓ 8% increase
120	$1 - \frac{x}{100}$	108

$$120 \times \left(1 - \frac{x}{100}\right) = 108$$

$$\Rightarrow 120 - \frac{120x}{100} = 108$$

$$\Rightarrow 12 = \frac{120}{100}x \Rightarrow x = 10\%$$

59. (C) ATQ.,
 $a + b + c = 13, ab + bc + ca = 54$
 $(a + b + c)^2 = a^2 + b^2 + c^2 + 2(ab + bc + ca)$
 $13^2 = a^2 + b^2 + c^2 + 2 \times 54$
 $a^2 + b^2 + c^2 = 169 - 108 = 61$
 Now,
 $a^2 + b^2 + c^2 - 3abc$
 $= (a + b + c)[a^2 + b^2 + c^2 - (ab + bc + ca)]$
 $\Rightarrow a^2 + b^2 + c^2 - 3abc = 13[61 - 54]$
 $\Rightarrow a^2 + b^2 + c^2 - 3abc = 13 \times 7 = 91$



$ar(\triangle BDG) : ar(\triangle ABC) = 1 : 6$

61. (D) Interest after 10 years at the rate of 5%
 = ₹ 500

$\therefore \text{Time} = \frac{\text{Interest} \times 100}{\text{Principal} \times \text{Rate}}$
 $= \frac{500 \times 100}{1500 \times 5} = \frac{20}{3} \text{ years} = 6 \frac{2}{3} \text{ years}$

$\therefore \text{Required time} = \left(10 + 6 \frac{2}{3}\right) \text{ yrs.} = 16 \frac{2}{3} \text{ y.rs}$

62. (B) Let the required number be x . Then

$x^2 + 5^2 = 386$
 $\Rightarrow x^2 = 386 - 25$
 $\Rightarrow x^2 = 361$
 $\Rightarrow x = \sqrt{361} = 19$

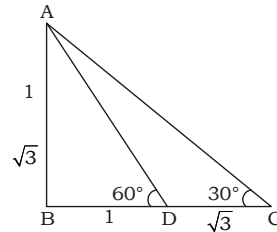
63. (D) A → 12 days $\left\{ \begin{array}{l} 12 \text{ units/day} \\ 9 \\ 6 \end{array} \right.$ Total work units
 B → 16 days $\left\{ \begin{array}{l} 9 \\ 6 \\ 4 \end{array} \right.$ units/day
 C → 24 days
 D → 36 days

Work done on first day = 12 units
 on second day = 12 + 9 = 21 units
 on third day = 21 + 6 = 27 units
 on fourth day = 27 + 4 = 31 units
 on fifth day = 31 units and so on.
 \therefore Work done in five days = 91 + 31 = 122 units

Remaining work = 144 - 122 = 22 units

$\therefore \text{Total time} = 5 \frac{22}{31} \text{ days}$

64. (A) ATQ.,



In $\triangle ABC$,

$\tan 30^\circ = \frac{AB}{BC}$

$\Rightarrow BC = \frac{AB}{\tan 30^\circ} = \sqrt{3} AB \quad \dots(i)$

$\therefore BD = BC - CD = \sqrt{3} AB - 1 \quad \dots(ii)$

In $\triangle ABD$,

$\tan 60^\circ = \frac{AB}{BD} = \frac{AB}{\sqrt{3} AB - 1}$

$\Rightarrow \sqrt{3} = \frac{AB}{\sqrt{3} AB - 1}$

$\Rightarrow 3AB - \sqrt{3} = AB$

$\Rightarrow 2AB = \sqrt{3}$

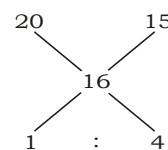
$\Rightarrow AB = \frac{\sqrt{3}}{2} \text{ km}$

65. (D) $\sqrt{24010000} = 4900$

again $\sqrt{4900} = 70$

$\therefore \sqrt[4]{24010000} = 70$

66. (D) From alligation



$\therefore \text{Required ratio} = 1 : 4$

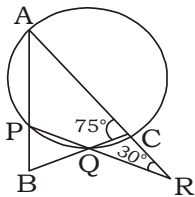
67. (D) A : B : C : D
 2 : 3 : 3 : 3
 4 : 4 : 3 : 3
 $\frac{2 : 2 : 2 : 3}{16 : 24 : 18 : 27} \rightarrow 85$
 $\begin{matrix} \downarrow \times 60 & \downarrow \times 60 & \downarrow \times 60 \\ 1440 & 1620 & 5100 \end{matrix}$

Total B + D = ₹3060

68. (A)

	CP	SP
	(100 - Discount)	(100 + Profit)
	(100 - 4)	(100 + 35)
Total number of article	$\frac{96}{16}$	$\frac{135}{15}$
Ratio of cost of 1 article	$\frac{6}{2}$	$\frac{9}{3}$

69. (D) \therefore Sum of opposite angles of a cyclic quadrilateral are equal.



$\therefore \angle ACQ + \angle APQ = 180^\circ$
 $\Rightarrow 75^\circ + \angle APQ = 180^\circ$
 $\Rightarrow \angle APQ = 105^\circ$
 $\therefore \angle APQ + \angle BPQ = 180^\circ$
 $\therefore 105^\circ + \angle BPQ = 180^\circ$
 or, $\angle BPQ = 180^\circ - 105^\circ = 75^\circ$
 $\therefore \angle ACQ$ is an exterior angle of $\triangle RCQ$
 $\therefore \angle ACQ = \angle CRQ + \angle CQR$
 $\Rightarrow 75^\circ = 30^\circ + \angle CQR$
 $\Rightarrow \angle CQR = 45^\circ$

In $\triangle BPQ$, $\angle B = 180^\circ - 75^\circ - 45^\circ = 60^\circ$

70. (C) $\tan^2\theta = 1 - e^2$
 $\Rightarrow \tan^2 + 1 = \sec^2\theta = 2 - e^2$
 $\sec\theta + \tan^2\theta \cdot \tan\theta \operatorname{cosec}\theta = \sec\theta + \tan^2\theta \cdot \sec\theta = \sec\theta (1 + \tan^2\theta)$
 $= (2 - e^2)^{1/2} \cdot (2 - e^2) = (2 - e^2)^{3/2}$

71. (C) $\tan 60^\circ = \frac{\tan 20^\circ + \tan 40^\circ}{1 - \tan 20^\circ \tan 40^\circ}$
 $\Rightarrow \tan 20^\circ + \tan 40^\circ = \sqrt{3} - \sqrt{3} \tan 20^\circ \cdot \tan 40^\circ$
 $\Rightarrow \tan 20^\circ + \tan 40^\circ + \sqrt{3} \tan 20^\circ \cdot \sin 40^\circ = \sqrt{3}$

72. (C) Total protein = 20% of total body weight.
 Skin and muscular protein = 30% of total proteins.
 Therefore, the percentage of skin and muscular protein as a fraction of the total body weight = 20% of 30%
 $= 6\% = \frac{3}{50}$.

73. (B) Protein in muscles = 20% of protein of body
 Protein in eyes = 50% of protein of body
 \therefore Required ratio = 20% : 50% = 2:5

74. (D) Here, the distribution of material of Vipin's body is given. So, we cannot determined anything about Mahesh Babu's body.

75. (A) Let weight of total body = 100%
 Percentage of material other than protein and water = 20%
 \therefore Required proportion = $\frac{20}{100} = \frac{1}{5}$

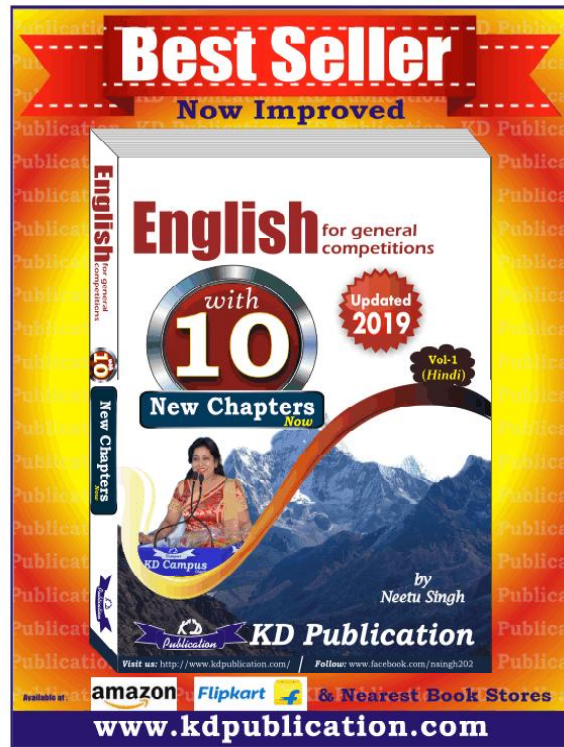


MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Aphorism	a concise statement of a principle	कहावत
Apogee	the point in the orbit of an object (such as a satellite) orbiting the earth that is at the greatest distance from the center of the earth	पराकाष्ठा
Apothegm	a short, pithy, and instructive saying or formulation	कहावत
Briskly	In a brisk manner, fast	तेज
Disown	to refuse to acknowledge as one's own	अस्वीकार करना
Disquisition	a formal inquiry into or discussion of a subject	अन्वेषण
Epicentre	the part of the earth's surface directly above the focus of an earthquake	उपरिकेंद्र
Espouse	to take up and support as a cause	सहायता देना
Exhortation	an act or instance of exhorting	प्रबोधन
Fleetly	In a swift manner	चुस्ती से
Immovability	incapable of being moved	अचल स्थिति
Indefatigable	incapable of being tired	अथक
Indelible	that cannot be removed	अमिट
Indorse	to inscribe (something, such as an official document with a title or memorandum)	पुष्टि करना
Infallible	incapable of error	अचूक
Invincible	incapable of being conquered	अजेय
Obduracy	the quality or state of being obdurate	पक्का होना
Obstinacy	the quality or state of being obstinate	हठ
Pliability	adjustable to varying conditions	लचक
Posthaste	with all possible haste	फुर्ती से
Repudiate	to refuse to accept	परित्याग करना
Sluggishly	markedly slow in movement	सुस्त
Spurn	to reject with disdain or contempt	तिरस्कार करना
Stubbornness	performed or carried on in an unyielding manner	जिद्दी

SSC MOCK TEST - 219 (ANSWER KEY)

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



76. (C) The error lies in the third part of the sentence. The use of "training" is incorrect here as it is not giving any meaning here. The correct word is "trained" which is an adjective to modify the noun "manpower".
77. (A) The error lies in the first part of the given sentence. Here the expression "have

- striving" is incorrect, and the usage of "have" indicates that the present perfect tense should be used. The correct form to be used here is "have strived".
86. (D) 'Photographers' is a plural form of noun and it will agree with plural form of verb. So 'was listed' will be replaced by 'were listed'.

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