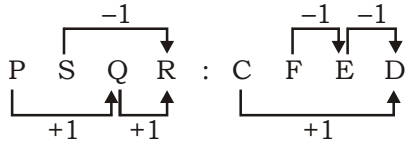
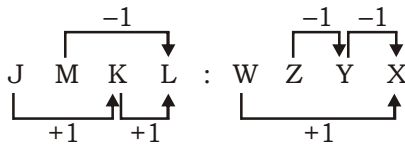


**SSC MOCK TEST – 63 (SOLUTION)**

1. (D) As,



Similarly,



2. (A) As,  $61 = (4)^3 - 3$

$121 = (5)^3 - 4$

and  $337 = (7)^3 - 6$

Therefore,  $? = (6)^3 - 5 = 211$

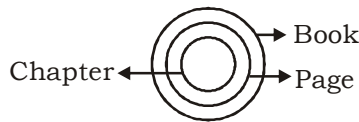
3. (D) As Wick is a part of Candle, similarly Wheel is a part of Bicycle.

4. (C) All except Sword strike the target from a distance.

5. (C) All except ROAD have only one vowel.

6. (B) All except Hammer have a pointed end.

7. (D)



8. (B)  $3 \times 1 + 2 = 5$  (V)

$5 \times 2 + 3 = 13$  (XIII)

$13 \times 3 + 4 = 43$  (XXXIII)

$43 \times 4 + 5 = 177$  (CLXXVII)

9. (A) 208, 106, 50, 29, 9.5

$$\begin{aligned} \frac{208}{2} + 2 &= 104 + 2 & \frac{106}{2} - 3 &= 53 - 3 & \frac{50}{2} + 4 &= 25 + 4 & \frac{29}{2} - 5 &= 14.5 - 5 \end{aligned}$$

10. (C) Given words are arranged as per their order in english alphabet from right to left.

11. (B)  $\frac{12 \times 9}{27} = 4$        $\frac{28 \times 16}{14} = 32$

$\frac{18 \times 12}{36} = 6$        $\frac{57 \times 32}{48} = 38$

12. (B) LCM (36, 12, 48) = 144

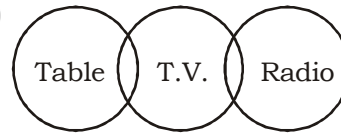
LCM (16, 24, 32) = 96

LCM (96, 36, 24) = **288**

13. (C)

14. (B) Q part of the figure represents those girls who are players but not coach.

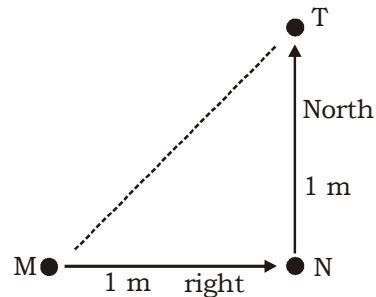
15. (D)



- I. ✖
- II. ✖
- III. ✖
- IV. ✖

16. (C) B is the son of A, C is the wife of B, D is C's sister and E husband. So, C is the sister in law of E.

17. (B) According to M # N \$ T



Hence T is in the North-East of M.

18. (C) Suppose their paths cross after  $x$  minutes. Then,  $11 + 57x = 51 - 63x \Leftrightarrow 120x = 40$

$\Leftrightarrow x = \frac{1}{3}$  min

Number of floors covered by David in  $\frac{1}{3}$  min.

$= \left(\frac{1}{3} \times 57\right) = 19$  floors

So, their paths cross at (11 + 19)th i.e. 30<sup>th</sup> floor.

19. (D)



20. (B)

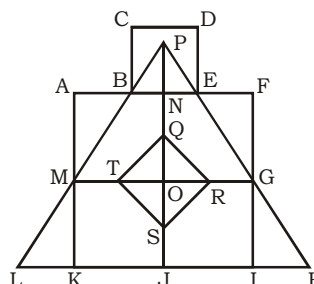
	B	A	L	E	C	A	R	T	O	Y
<b>Position</b>	2	1	12	5	3	1	18	20	15	25
<b>Position + 1</b>	3	2	13	6	4	2	19	21	16	26
<b>(Position + 1)<sup>2</sup></b>	9	4	169	36	16	4	361	441	256	676

21. (C)

22. (C)

23. (B)

24. (A)



**Triangles :**

Simple triangles are BPN, PNE, ABM, EFG, MLK, GHI, QRO, RSO, STO and QTO i.e. 10 in number.

Triangles composed of two components each are BPE, TQR, QRS, RST and STQ i.e. 5 in number.

Triangles composed of three components each are MPO and GPO i.e. 2 in number.

Triangles composed of six components each are LPJ, HPJ and MPG i.e. 3 in number.

There is only one triangle LPH composed of twelve components.

Total number of triangles in the figure =  $10 + 5 + 2 + 3 + 1 = 21$ .

**Squares :**

Squares composed of two components each are KJOM and JIGQ i.e. 2 in number.

Squares composed of three components each are ANOM, NFGO and CDEB i.e. 3 in number.

There is only one square i.e. QRST composed of four components.

There is only one square i.e. AFIK composed of ten components.

Total number of squares in the figure =  $2 + 3 + 1 + 1 = 7$ .

25. (B) From positions X and Y we conclude that 1, 5, 6 and 3 lie adjacent to 4. Therefore, 2 must lie opposite 4. From positions Y and Z we conclude that 4, 3, 2 and 5 lie adjacent to 6. Therefore, 1 must lie opposite 6. Thus, 2 lies opposite 4, 1 lies opposite 6 and consequently 5 lies opposite 3.

As analysed above, the number on the face opposite 4 is 2. In position Y, since 4 lies on the top, therefore 2 must lie at the bottom face.

26. (C) The Indian Constitution was adopted by the Constituent Assembly on the 26<sup>th</sup> November, 1949 and it came into force after two months on 26<sup>th</sup> January, 1950. The day January 26<sup>th</sup> was chosen because it was on this very day when the Poorna Swaraj resolution was made in Lahore in 1930 and the first tricolor of India unfurled.

27. (C) Some of the dynasties that ruled Magadha were: Haryanka Kingdom (684-424 BC); Shishunaga Kingdom (413-345 BC); Nanda Empire (424-321 BC); and Maurya Empire (321-184 BC).

28. (B) Shaktikanta Das, an Economic affairs secretary, has represented India at the 2016 South Asian Association for Regional Cooperation (SAARC) Finance ministers' conference on 25-26<sup>th</sup> August at Islamabad, Pakistan.

30. (A) Article 14 of the constitution guarantees that all citizens shall be equally protected by the laws of the country. It means that the State cannot discriminate any of the Indian citizens on the basis of their caste, creed, colour, sex, gender, religion or place of birth.

32. (B) A merchant bank is a financial institution which provides capital to companies in the form of share ownership instead of loans. It is a bank that deals mostly in (but is not limited to) international finance, long-term loans for companies and underwriting. Merchant banks do not provide regular banking services to the general public.

37. (D) When a piece of paper and a cricket ball are dropped from the same height, they reach the surface at different time because the shape of the paper is more flat and it behaves like a parachute causing more air resistance acting on it with respect to the ball. But, in order to reach the surface at the same time by both the articles, they must be dropped in vacuum. It is because in vacuum there is no other force other than force of gravity occurring on them and this leads to a conclusion that both the article reaches at the same time.

38. (D) The taste buds for sweet are on the tip of the tongue. The 'salt' taste buds are on the either side of the front of the tongue. The 'sour' taste buds are behind this and 'bitter' taste buds are way in the back.

39. (A) Raisina Hill is an area of Lutyens Delhi, New Delhi, housing India's most important government buildings, including Rashtrapati Bhavan, the official residence of the President of India and the Secretariat building housing the Prime Minister's Office and several other important ministries. It is surrounded by other important buildings and structures, including the Parliament of India, Rajpath, Vijay Chowk and India Gate.

40. (C) This is a method is described whereby, using primitive equipment anyone can measure the size of the earth to an accuracy of order of magnitude 10% by observing two sunsets in the space of a few seconds.

41. (B) Lead-potash lime glass is flint glass. It has high refractive index and is used in making prisms lens etc. It is a soft glass.

42. (D) Rock salt is another name given to "Sodium Chlorides ores".

44. (A) The 4<sup>th</sup> edition of Mother Teresa International Film Festival (MTIFF) 2016 started in Kolkata, West Bengal on August 26. The 4-day-long movie carnival at the state-run Nandan multiplex screened a selection of 23 best foreign and Indian films ever made on or inspired by Teresa. It is organized by the Archdiocese of Kolkata, Missionaries of Charity and SIGNIS India (Indian chapter of World Catholic Association for Communication). The Roman Catholic nun Mother Teresa, who passed away in 1997 after serving the poor and sick on the streets of Kolkata for 45 years, will be declared a saint by Pope Francis in the Vatican City on September 2016.

45. (A) An ashrama in Hinduism has four stages in an age-based social system as laid out in the Manu Smriti and later Classical Sanskrit texts. These stages are: Brahmachari (student), Grihastha (Householder), Vanaprastha (forest dweller or Hermit in semi retirement age) and Sannyasi (the renounced one in full retirement age). The Ashram system is believed by the Hindus to lead to a fulfillment of the four aims of life namely, Dharma (righteousness), Artha (wealth), Kama (pleasure) and Moksha (liberation).

46. (A) Because aluminium with oxygen forms a thin layer of Aluminium Oxide which is tough and protects aluminium objects from further corrosion.

48. (B) Karnataka will host the 15<sup>th</sup> edition of Pravasi Bharatiya Divas (PBD) 2017 in Bengaluru for 3 days from January 7<sup>th</sup>, 2017. The theme of 2017 PBD is "Redefined Engagement With Indian Diaspora". The PBD convention is held on January 9<sup>th</sup> each year to commemorate the return of Mahatma Gandhi from South Africa in 1915. It is celebrated to mark the contribution of the overseas Indian community to the development of the country.

51. (A) Required percentage

$$= \frac{10 + 5 + 4 + 3}{9 + 15 + 18 + 22 + 14 + 10 + 5 + 4 + 3} \times 100$$

$$= \frac{22}{100} \times 100 = 22\%$$

52. (C) Required percentage

$$= \frac{4 + 3}{9 + 15 + 18 + 22 + 14 + 10 + 5 + 4 + 3} \times 100$$

$$= \frac{7}{100} \times 100 = 7\%$$

53. (B) Required percentage

$$= \frac{18 + 22}{9 + 15 + 18 + 22 + 14 + 10 + 5 + 4 + 3} \times 100$$

$$= \frac{40}{100} \times 100 = 40\%$$

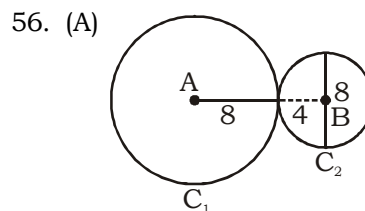
54. (C)

A	B	C
80	100	125

Required % =  $\frac{125 - 80}{125} \times 100\% = 36\%$

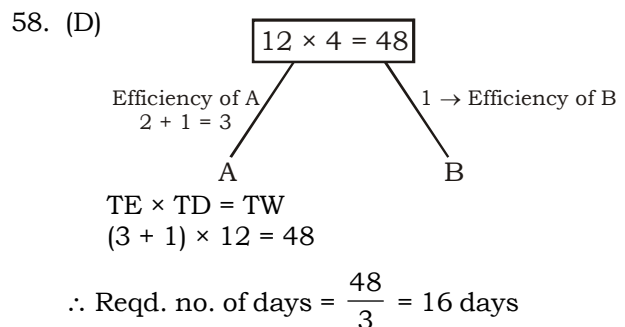
55. (B) Diff. in % = Diff. in marks  
 $\Rightarrow (36 - 24)\% = 12\% \ \& \ 12\% = 9 \text{ marks}$

Also, Total marks =  $\frac{9}{12} \times 100 = 75$



Radius of first circle = 8 cm  
 Radius of second circle = 4 cm  
 Diameter of new circle =  $(8 + 4) = 12 \text{ cm}$   
 Area of new circle =  $\pi r^2 = 36 \pi \text{ cm}^2$

57. (B)  $l = 15 + 15 = 30 \text{ cm}$   
 $b = 15 \text{ cm}, h = 15 \text{ cm}$   
 Total surface area =  $2(lb + bh + hl)$   
 $= 2(30 \times 15 + 15 \times 15 + 30 \times 15)$   
 $= 2(450 + 225 + 450)$   
 $= 2250 \text{ cm}^2$



59. (C) Let the sum be 100  
 As it become four times

$$100 \xrightarrow{300 \text{ diff.}} 400$$

↑  
(400 - 100)

$\therefore$  Required rate =  $\frac{300}{15} = 20\%$

60. (A) Sum of interior angle =  $1440^\circ$   
 Sum of exterior angle =  $360^\circ$   
 The number of sides of regular polygon

$$= \frac{1440^\circ + 360^\circ}{180^\circ} = 10$$

61. (B) Remainder  $[1421 \times 1423 \times 1425]/12$

$$\left[ \begin{aligned} \therefore \frac{1421}{12} = 5, \frac{1423}{12} = 7 \\ \frac{1425}{12} = 9 \end{aligned} \right]$$

$$\begin{aligned} &= \text{Remainder } [5 \times 7 \times 9]/12 \\ &= 3 \text{ as remainder} \end{aligned}$$

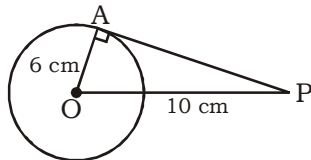
62. (C) 5 yrs  $\times 2$

Become 8 times =  $(2)^3$

$$\begin{array}{ccc} 5 & \xrightarrow{\times 2} & \\ \downarrow & & \downarrow \\ 5 \times 3 & & \times (2)^3 \end{array}$$

$\therefore$  Required no. of yrs. =  $5 \times 3 = 15$  yrs

63. (D)



$$\begin{aligned} \text{So, length of PA} &= \sqrt{(PO)^2 - (OA)^2} \\ &= \sqrt{(10)^2 - (6)^2} \\ &= 8 \text{ cm} \end{aligned}$$

64. (C)  $\tan \theta = \frac{p}{q}$  [given]

$$\frac{p \sin \theta - q \cos \theta}{p \sin \theta + q \cos \theta} = \frac{\frac{p}{q} \tan \theta - 1}{\frac{p}{q} \tan \theta + 1}$$

$$\begin{aligned} &= \frac{\frac{p}{q} \times \frac{p}{q} - 1}{\frac{p}{q} \times \frac{p}{q} + 1} = \frac{p^2 - q^2}{p^2 + q^2} \end{aligned}$$

65. (D)  $\frac{1}{\sqrt{2} + \sqrt{1}} = \frac{1}{\sqrt{2} + \sqrt{1}} \times \frac{\sqrt{2} - \sqrt{1}}{\sqrt{2} - \sqrt{1}} = \sqrt{2} - \sqrt{1}$

$$\begin{aligned} &\frac{1}{\sqrt{1} + \sqrt{2}} + \frac{1}{\sqrt{2} + \sqrt{3}} + \frac{1}{\sqrt{3} + \sqrt{4}} \dots \frac{1}{\sqrt{99} + \sqrt{100}} \\ &= \sqrt{2} - \sqrt{1} + \sqrt{3} - \sqrt{2} + \dots + \sqrt{100} - \sqrt{99} \\ &= \sqrt{100} - \sqrt{1} = 10 - 1 = 9 \end{aligned}$$

66. (B) 5 yrs ago avg. age of husband and wife = 23 yrs

$$\begin{aligned} \text{Present age of husband and wife} &= 23 + 5 \\ &= 28 \text{ yrs} \end{aligned}$$

Sum of age present age of husband and wife =  $28 \times 2 = 56$  yrs

Sum of present age of husband, wife and child =  $20 \times 3 = 60$  yrs

$\therefore$  Age of child =  $60 - 56 = 4$  yrs

67. (B) Diagonals of three faces =  $x, y$  and  $z$

Let sides of cuboid =  $a, b$  and  $c$

ATQ,  $a^2 + b^2 = x^2$

$$b^2 + c^2 = y^2$$

$$c^2 + a^2 = z^2$$

$$abc = \sqrt{a^2 \times b^2 \times c^2}$$

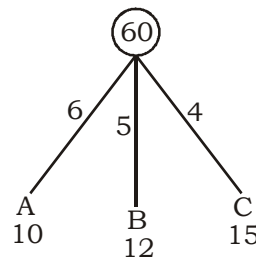
$$= \sqrt{\left(\frac{x^2 + z^2 - y^2}{2}\right) \left(\frac{x^2 + y^2 - z^2}{2}\right) \left(\frac{y^2 + z^2 - x^2}{2}\right)}$$

$$= \frac{1}{2\sqrt{2}} [(x^2 + z^2 - y^2)(x^2 + y^2 - z^2)(y^2 + z^2 - x^2)]$$

68. (C)  $\angle CBA = \frac{1}{2} \angle COA = 60^\circ$

$$\begin{aligned} \therefore \angle CBE &= 180^\circ - \angle CBA = 180^\circ - 60^\circ \\ &= 120^\circ \end{aligned}$$

69. (A)



$$\therefore \text{Required no. of days} = \frac{64}{5+4} = \frac{64}{9} \text{ days}$$

70. (C) Required no. of toffees =  $\frac{1}{\frac{1}{12} \times \frac{100}{80} \times \frac{120}{100}}$

$$= \frac{1}{\frac{1}{12} \times \frac{6}{4}} = \frac{1}{\frac{1}{8}} = 8$$

71. (D)  $\sin^2 50^\circ + \sin^2 40^\circ - \cos^2 0^\circ$

$$= \cos^2 (90^\circ - 50^\circ) + \sin^2 40^\circ - (1)^2$$

$$= \cos^2 40^\circ + \sin^2 40^\circ - 1$$

$$= 1 - 1$$

$$= 0$$

72. (B) A : B = 3 : 2 = 6 : 4

$$B : C = 4 : 3$$

$\therefore$  A : B : C = 6 : 4 : 3  $\Rightarrow$  total no. of books should be multiple of 13.

So, 689 is the required no. of books.

73. (A)  $x + y = 2z$

$$x = 2z - y$$

$$x - z = 2z - y - z$$

$$= z - y$$

$$\therefore \frac{x}{x-z} + \frac{z}{y-z} = \frac{x}{x-z} - \frac{z}{z-y}$$

$$= \frac{x}{x-z} - \frac{z}{x-z}$$

$$= \frac{x-z}{x-z} = 1$$

74. (B) Length of train

$$= \frac{\text{length of platform} \times \text{time taken to cross boy}}{\text{Diff. in time}}$$

$$= \frac{350}{27-9} \times 9$$

$$= \frac{350 \times 9}{18} = 175 \text{ m}$$

75. (B)  $1 + \frac{1}{2 + \frac{1}{3 + \frac{1}{21}}} = 1 + \frac{1}{2 + \frac{1}{3 + \frac{5}{21}}}$

$$= 1 + \frac{1}{2 + \frac{21}{68}} = 1 + \frac{1}{\frac{157}{68}}$$

$$= 1 + \frac{68}{157} = \frac{225}{157}$$

**MEANINGS IN ALPHABETICAL ORDER**

<b>Word</b>	<b>Meaning in English</b>	<b>Meaning in Hindi</b>
Accessory	subsidiary or supplementary	संलग्न, अतिरिक्त
Accountable	responsible	उत्तरदायी
Acquittal	the act of freeing (someone) from a criminal charge by a verdict of not guilty	अपराधमुक्त करना
Ample	enough or plentiful	प्रचुर, पर्याप्त
Apprentice	a trainee or beginner	प्रशिक्षु
Auxiliary	providing supplementary or additional help and support	सहायक
Corollary	a proposition that follows from one already proved	उपप्रमेय, निष्कर्ष
Denigration	belittling or defamation	निंदा, बदनामी
Diagnosis	identifying the nature or cause of an illness	रोगनिदान
Disparagement	disrespect	अनादर, तिरस्कार
Enunciated	something expressed clearly and exactly	व्यक्त, प्रतिपादित
Evoked	bring or recall	आह्वान करना
Exonerate	absolve (someone) from blame	दोषमुक्त करना
Extinction	being no longer in existence	विलुप्त
Fetter	restrain with chains, hamper	बेड़ी डालना, रूकावट पैदा करना
Indulgent	overly generous or lenient	कृपालु, दयालु
Inferior	lower in quality	निम्न स्तर का
Irradiation	the fact of illuminating	प्रकाशमान, प्रज्वलित
Kinsman	close friend or relative	संबंधी
Liberate	to set free or release	स्वतंत्र करना
Meagre	inadequate	अपर्याप्त, अल्प
Overbearing	unpleasantly or arrogantly domineering	अभिमानि, रोबदार
Parley	a conference between opposing sides in a dispute	संवाद, पंचायत
Parole	the release of a prisoner temporarily	जेल से अस्थायी अवकाश
Persist through	to continue	लगे रहना
Prompt	done without delay; immediate	शीघ्र, तुरंत
Pursue	continue or proceed along	पीछा करना
Quantitative	relating to the measurement of quantity	मात्रा संबंधी
Repulsion	a feeling of intense distaste or disgust	अरूचि, विरक्ति
Splash out	to strike some liquid	छपछपाना
Summon	authoritatively or urgently call on (someone) to be present	बुलावा भेजना
Uprisings	a revolt	बगावत, विद्रोह

**SSC MOCK TEST - 63 (ANSWER KEY)**

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

76. (C) If two subjects are joined by 'neither ... nor', the verb agrees with the nearest subject i.e., 'knowledge' in the given sentence. Replace 'were' by 'was'.
77. (A) The past form of the verb i.e, V<sub>3</sub> of 'overflow' is 'overflowed'.
78. (A) Remove article i.e, 'The' before South Asia.
80. (B) Since, there is a movement, 'into' shall be considered.
92. (D) 'More than one' is singular in nature. It will take singular verb, noun, adjective etc.

**Note:- If you face any problem regarding result or marks scored, please contact 9313111777**

**Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003**