SSC MOCK TEST – 71 (SOLUTION)
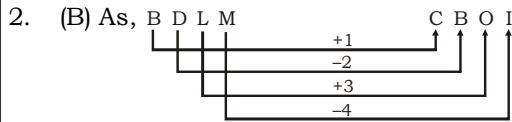
1. (C) Toshiba is a Japanese company and Samsung is a **South Korean** company.
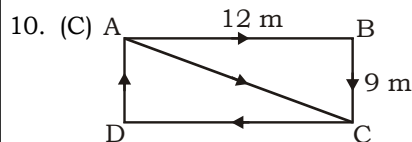
2. (B) As,

Similarly,

3. (D) In second figure, we are joining the corners by lines.

4. (B) $32 \Rightarrow 3^3 - 2^2 = 27 - 4 = 23$
   $21 \Rightarrow 2^3 - 1^2 = 8 - 1 = \mathbf{7}$

5. (D) $3214 \Rightarrow 3 + 2 + 1 + 4 = 10 \Rightarrow 10^2 = 100$
   $2531 \Rightarrow 2 + 5 + 3 + 1 = 11 \Rightarrow 11^2 = 121$
   $3243 \Rightarrow 3 + 2 + 4 + 3 = 12 \Rightarrow 12^2 = 144$
   $1245 \Rightarrow 1 + 2 + 4 + 5 = 12 \Rightarrow 12^2 \neq 256$
   ∴ **1245 – 256** is different from others.

6. (D) Except (D), others are types of angle.

7. (B) Except (B), other figures can be drawn with the help of lines.

8. (D) Kafan, Mansarovar and Gaban are the books of Munsi Premchand. **Gramya** is the book of Sumitranandan Pant.

9. (B) Both the given conclusions clearly bring out the central theme of the proverb given in the statement. So, both I and II follow.

10. (C)

Required distance
= $12 + 9 + 12 + 9 + \sqrt{12^2 + 9^2}$
= $42 + \sqrt{225}$
= $42 + 15$
= **57 m**

11. (B) $3 \times 0.5 + 0.5 = 2$
   $2 \times 1 + 1 = 3$
   $3 \times 1.5 + 2 = 6.5$
   $6.5 \times 2 + 4 = 17$
   $17 \times 2.5 + 8 = \mathbf{50.5}$
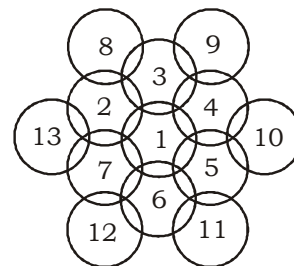 $50.5 \times 3 + 16 = 167.5$

12. (B) $13 - 1 = 0$
   $23 + 2 = 10$
   $33 - 3 = 24$
   $43 + 4 = 68$
   $53 - 5 = 120$
   $63 + 6 = 222$
   $73 - 7 = \mathbf{336}$

13. (A) The sequence is
   H **I** JH **H** IJHHI **J** HH **I** JH

14. (B) All these three games are different from each other.

15. (C) Let x and y be the number of elephants and peacocks in the zoo respectively. Then,
   $x + y = 80$ ...(i)
   $4x + 2y = 200$ or $2x + y = 100$ ...(ii)
   Solving (i) and (ii), we get $x = 20$, $y = 60$
   Required Difference = $60 - 20 = \mathbf{40}$

16. (A) The man in the photograph is the son of the only son of Charulata's grandfather i.e., the man is the son of Charulata's father. Hence, the man is the **brother** of Charulata.
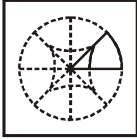
17. (A) $\sqrt{8 \times 3 \times 6} = \sqrt{144} = 12$
   $\sqrt{16 \times 8 \times 2} = \sqrt{256} = 16$
   $\sqrt{2 \times 18 \times 9} = \sqrt{324} = 18$
   $\sqrt{12 \times 8 \times 6} = \sqrt{576} = \mathbf{24}$

18. (B) $\dfrac{6 \times 8}{3} = 16$, $\dfrac{4 \times 12}{6} = 8$
   $\dfrac{8 \times 12}{4} = \mathbf{24}$, $\dfrac{12 \times 16}{8} = 24$

19. (D) $3 \to 4 \to 2 \to 1$

20. (B)

21. (C) The figure may be labelled as shown.

There are **13 circles** in the given figure. This is clear from the adjoining figure in which the centres of all the circles in the given figure have been numbered from 1 to 13.

22. (C) From figures (ii) and (iii), we conclude that the alphabets C, D, B and F appear adjacent to the alphabet E. Therefore, the alphabet A appears to opposite to E. Conversely, **E** appears opposite A.

23. (C)

24. (B)

25. (B) Numerical value of letters has been taken from last to first as per the english alphabet i.e, Z = 1, Y = 2 ....., B = 25 and A = 26.
    RAAZ = 9 + 26 + 26 + 1 = 62%
    AKIRA = 26 + 16 + 18 + 9 + 26 = 95%
    SULTAN = 8 + 6 + 15 + 26 + 13 = 68%
    MIRZAYA = 14 + 18 + 9 + 1 + 26 + 2 + 26
    = **96%**

26. (A) The Aravallis range is the oldest mountain in India, making it a paradise for the trekkers. The approximate age of the Aravallis is 370 million years. The Aravalli Range is one of the most popular mountain ranges in the western part of India. Stretching about 300 miles from the northeast to the southwest, the Aravallis intercept the state of Rajasthan on its stretch. The highest point in the Aravalli Range is called Guru Shikhar, which is located in Mount Abu. At this point, the peak rises to about 5653 feet.

27. (C) The book "Andhere se ujale ki aur" has been authored by Finance Minister Arun Jaitley, which was recently launched at the BJP headquarters in New Delhi. The book is a compilation of blogs and articles by Jaitley that have appeared at various times.

28. (D) The Government of India (GoI) has signed $650 million loan agreement with the World Bank (WB) for construction of the Eastern Dedicated Freight Corridor (EDFC)-III project. The EDFC-III will build the 401 km Ludhiana-Khurja section which goes through Punjab, Haryana and Uttar Pradesh. The purpose of the EDFC project is to augment railway freight carrying capacity along the Railway Corridor between Ludhiana and Kolkata. The EDFC will help faster and more efficient movement of raw materials and finished goods between the north and eastern parts of India.

29. (C) India has won the 2016 Kabaddi World Cup by defeating Iran in a final by 38-29 in Ahmedabad, Gujarat. This was India's 3rd World Cup in the Standard Style version of Kabaddi.

30. (B) Captain William Sleeman was appointed by Lord William Bentick (1828-35) to suppress the thugs.

32. (C) Under the Indian legal system, jurisdiction issues 'prerogative writs'. It is given to the Supreme Court and to the High Courts of Judicature of all Indian states. Parts of the law relating to writs are set forth in the Constitution of India. The Supreme Court which is the highest in the country, may issue writs under Article 32 of the Constitution for enforcement of Fundamental Rights and under Articles 139 for enforcement of rights other than Fundamental Rights, while High Courts, the superior courts which is of the States, may issue writs under Articles 226.

33. (A) On August 8th, 1942 the Quit India Resolution was passed at the Bombay session of the All India Congress Committee and here Gandhi made a call to participate people in a non-violent way. It's worth noting that the communists had opposed this movement and it virtually damaged the labour movement. Labour Unions under Communist influence had apparently decided against participation in the movement, there were large-scale strikes in mills at Kanpur, Jamshedpur and Ahmedabad. There was an indifference of the Labour Class, so the statement D is correct. The First statement in this question needs to be looked into. The Quit India Movement was basically promoted as a nonviolent and non-cooperative movement but it was not non-violent. There were various events in which Police station, Railway Stations, Railway Lines and Post-Offices were burnt and destroyed.

34. (B) The Pir Panjal ranges lie in the Inner Himalayan region, running from east southeast to west northwest across the states of Himachal Pradesh and Jammu and Kashmir in India as well as Pakistan Administered Kashmir in Pakistan, where the average elevation varies from 1,400 m to 4,100 m.

35. (B) Agricultural Produce Market Committee Acts of respective states are responsible for markets in agricultural products.

36. (C) Oath or affirmation by the President under article Oath or affirmation by Judge of SC, Members of Parliament, Ministers for the Union comes under Third Schedule of the Constitution.

38. (B) The World Osteoporosis Day (WOD) is observed every year on October 20th to raise global awareness of the prevention, diagnosis and treatment of osteoporosis and metabolic bone disease. The 2016 theme is "Love Your Bones - Protect your Future"

39. (B) After the pollination of ovary, fruit develops gradually from it. Stem of tree develops to wood. Seed develops from fertilized ovule. Leaf produces starch at the time of photosynthesis.

41. (B) If the President is satisfied on the basis of the report of the Governor of the concerned state or from other sources that the governance in a state cannot be carried out according to the provisions in the Constitution, he/she can declare a state of emergency in the state. Such a emergency must be approved by the Parliament within a period of 2 months. Under Article 356 of the Indian Constitution, it can be imposed from six months to a maximum period of three years with repeated parliamentary approval after every six months.

42. (A) Sapta Sindhu plays a prominent part in the hymns of the Rigveda, and consequently in early Vedic religion.

43. (A) Social accounting is a method by which a firm seeks to place a value on the impact on society of its operations. It is a systematic analysis of the effects of the organisation on its shareholders, with stakeholder input as part of the data that are analysed for the accounting statement. One social accounting system primarily attempts to measure National Income, final product, consumption and accumulation of capital.

45. (C) Chloroform was once a widely used anaesthetic. Its vapour depresses the central nervous system of a patient, allowing a doctor to perform various activities and may damage the liver where chloroform is metabolized to phosgene.

48. (D) A rainbow is an optical phenomenon that is caused by both reflection and refraction of light in water droplets resulting in a spectrum of light appearing in the sky. It is caused by light being refracted inside on the back of the droplet and refracted again when leaving it.

49. (A) Higher concentration of Nitrogen and Phosphorus causes Eutrophication.

51. (B) At the right angular vertex.

52. (D) $x^2 - 3x + 1 = 0$

$\Rightarrow \dfrac{x^2 - 3x + 1}{x} = 0$

$\Rightarrow x - 3 + \dfrac{1}{x} = 0$

$\Rightarrow x + \dfrac{1}{x} = 3$

$\Rightarrow \left(x + \dfrac{1}{x}\right)^2 = x^2 + \dfrac{1}{x^2} + 2 = 9$

$\Rightarrow x^2 + \dfrac{1}{x^2} = 7$

then $x^2 + x + \dfrac{1}{x} + \dfrac{1}{x^2} = 7 + 3 = 10$

53. (D) $4.5 \text{ km/hr} = \left(4.5 \times \dfrac{5}{18}\right) = \dfrac{5}{4} = 1.25 \text{ m/sec}$

and $5.4 \text{ km/hr} = \left(5.4 \times \dfrac{5}{18}\right) = \dfrac{3}{2} = 1.5 \text{ m/sec}$

Let the speed of the train be x m/sec
Then, $(x - 1.25) \times 8.4 = (x - 1.5) \times 8.5$
$\Rightarrow 8.4x - 10.5 = 8.5x - 12.75$
$\Rightarrow 0.1x = 2.25$
$\Rightarrow x = 22.5$

$\therefore$ Speed of the train $= \left(22.5 \times \dfrac{18}{5}\right) = 81 \text{ km/hr}$

54. (C) Required gain percentage $= \dfrac{1000 - 750}{750}$

$= \dfrac{250}{750} \times 100 = \dfrac{100}{3} = 33\dfrac{1}{3}\%$

55. (B) S.I $= ₹ \left(\dfrac{12000 \times 10 \times 1}{100}\right) = ₹ 1200$

C.I. $= ₹ \left[12000 \times \left(1 + \dfrac{5}{100}\right)^2 - 12000\right] = ₹ 1230$

$\therefore$ Difference $= ₹ (1230 - 1200) = ₹ 30$
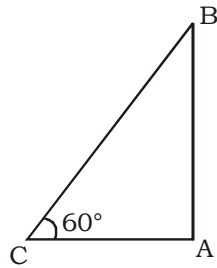
56. (D) Let the required number of days be x.

$\left.\begin{array}{lr}\text{Persons} & 30 : 78 \\ \text{Working hours/day} & 6 : 5\end{array}\right\} :: 12 : x$

$\therefore 30 \times 6 \times x = 78 \times 5 \times 12$

$\Rightarrow x = \dfrac{(78 \times 5 \times 12)}{(30 \times 6)} \Rightarrow x = 26$

$\therefore$ Required number of days = 26 days

57. (C) Let AB be the wall and BC be the ladder.

Then, $\angle ACB = 60°$ and AC = 4.6 m

$\Rightarrow \dfrac{AC}{BC} = \cos 60° = \dfrac{1}{2}$

BC = 2 × AC

= (2 × 7.6) m

= 15.2 m

58. (A) Let their investments be ₹ x for 15 months, ₹ y for 9 months and ₹ z for 6 months respectively.

Then, $15x : 9y : 6z = 5 : 7 : 8$

Now, $\dfrac{15x}{9y} = \dfrac{5}{7} \Leftrightarrow 105x = 45y \Leftrightarrow y = \dfrac{7}{3}x$

and, $\dfrac{15x}{6z} = \dfrac{5}{8} \Leftrightarrow 120x = 30z \Leftrightarrow z = \dfrac{4}{1}$

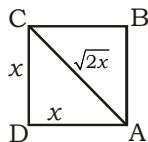$\therefore x : y : z = x : \dfrac{7}{3}x : \dfrac{4}{1}x = 3 : 7 : 12$

59. (C) (A + B + C)'s 1 day's work = $\left(\dfrac{1}{24} + \dfrac{1}{6} + \dfrac{1}{12}\right)$

= $\dfrac{7}{24}$

So, all the three together will complete the job in $\left(\dfrac{24}{7}\right)$ days = $3\dfrac{3}{7}$ days.

60. (C) Let the side of square (ABCD) be x m.

Then, AB + BC = $2x$ m

Saving on $2x$ m = $(2 - \sqrt{2})x = (2 - 1.41)x$

= $(0.59x)$ m

Saving % = $\left(\dfrac{0.59x}{2x} \times 100\right)\% = 30\%$ (approx.)

61. (B) Required average

= $\left(\dfrac{55 \times 50 + 60 \times 55 + 45 \times 60}{55 + 60 + 45}\right)$

= $\left(\dfrac{2750 + 3300 + 2700}{160}\right)$

= $\dfrac{8750}{160} = 54.68$

62. (D) Let ABC be a isoceles triangle such that AB = AC

Let BC = X cm

Perimeter of ABC = 544 cm

$\Rightarrow$ AB + BC + CA = 544

$\Rightarrow$ 2AB + X = 544

Given AB = $\dfrac{5}{6}$ (AC) = $\dfrac{5X}{6}$

Hence 544 = X + $2\left(\dfrac{5X}{6}\right)$

= X + $\dfrac{5X}{3}$ = $\dfrac{8X}{3}$

$\Rightarrow$ 8X = 544 × 3

$\Rightarrow$ X = 204 cm

$\Rightarrow$ AB = 5 × $\dfrac{204}{6}$ = 170cm

Area of the given Triangle ABC = $\dfrac{1}{2}$ (BC ×AD)

AD is height of ABC, AD bisect BC,

By Pythagoras theorem

$AD^2 = AB^2 - BD^2 = AB2 - \dfrac{1}{4}(BC^2)$

$AD^2 = 170^2 - \dfrac{1}{4}(204^2) = 28900 - \dfrac{1}{4}(41616)$

= 28900 – 10404 = 18496

$\Rightarrow$ AD = 136 cm

$\therefore$ Area = $\dfrac{1}{2}$ (204 × 136) = 13872 cm²

63. (A) $1 + \dfrac{1}{1 + \tan^2 \theta} + \dfrac{1}{1 + \cot^2 \theta}$

= $1 + \dfrac{1}{1 + \sec^2 \theta} + \dfrac{1}{\csc^2 \theta}$

= $1 + \cos^2\theta + \sin^2\theta$

= 1 + 1 = 2

64. (C) Principal = ₹ $\left(\dfrac{100 \times 540}{12 \times 3}\right)$ = ₹ 1500

65. (C) Speed in still water = $\frac{1}{2}(21 + 15)$ km/h

$= 18$ km/h

66. (A) Here, a straight line will pass through the point (0, 0).

67. (C) C.P. = ₹ $\left(\frac{100}{122.5} \times 3920\right)$

$= ₹\left(\frac{1000}{1225} \times 3920\right)$ = ₹ 3200

∴ Profit = ₹ (3920 – 3200) = ₹ 720

68. (B) $(a \times 50) = (0.75 \times 80) \Rightarrow a = \left(\frac{6}{5}\right) = 1.2$

69. (A) Area of the wet surface
$= [2(lb + bh + lh) – lb]$
$= 2(bh + lh) + lb$
$= [2(4 \times 1.25 + 6 \times 1.25) + 6 \times 4]$ m^2
$= 49$ m^2

70. (C) Largest number of 4-digits is 9999.
L.C.M. of 5,15, 25, 30,40 and 75 is 600.
On dividing 9999 by 600, the remainder is 399.
∴ Required number (9999 – 399) = 9600

71. (A) Let the number be x.

Then, error = $\frac{5}{4}x - \frac{4}{5}x = \frac{9}{20}x$

Error % = $\left(\frac{9x}{20} \times \frac{4}{5x} \times 100\right)\%$ = 36%

72. (D) A : B = 100 : 90
A : C = 100 : 87

$\frac{B}{C} = \frac{B}{A} \times \frac{A}{C} = \frac{90}{100} \times \frac{100}{87} = \frac{30}{29}$

When B runs 30 m, C runs 29 m

When B runs 180 m, C runs $\left(\frac{29}{30} \times 180\right)$ m

$= 174$ m

∴ B beats C by (180 – 174) m = 6 m

73. (B) Difference in degree of Physics and Chemistry = 85° – 70° = 15°
It is same as difference of **Chemistry and Social Science** i.e. 70° – 55° = 15°

74. (B) Required fraction = $\frac{135}{810} = \frac{1}{6} = \frac{60°}{360°}$ and

Measurement English is given 60°.
So, It is clear that student obtained 135 marks in english.

75. (A) Required marks

$= 810 \times \left[\frac{(90 + 70) - (85 + 55)}{360}\right]$

$= 810 \times \frac{20}{360} = \frac{810 \times 1}{18} = 45$

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Segregated	something set apart from the rest	अलग, विखंडित
Solicit	ask for or try to obtain	मांगना, याचना करना
Ludicrous	so foolish, unreasonable	बेतुका
Hindrance	resistance, delay or obstruction to something	रूकावट, बाधा
Tardy	running late or behind schedule	विलम्बित
Epistle	a letter	पत्र
Repartee	comments or replies	हाजिरजवाबी, शीघ्र उत्तर
Asylum	an institution offering shelter and support to people who are mentally ill	पागलखाना
Megalomaniac	a person who is obsessed with their own power	अंहकारी
Laconic	using very few words	संक्षिप्त
Mausoleum	a royal tomb	शाही समाधि
Souvenir	a thing that is kept as a reminder of a person, place, or event	यादगार
Remission	the act of absolving	क्षमा, माफी
Sanctum	a sacred place	पवित्र स्थान
Recidivist	a convicted criminal	मुजरिम
Endemic	certain area	स्थानिक
Emetic	a medicine that induces nausea and vomiting	वमनकारी औषधि
Antipathy	a deep-seated feeling of dislike; aversion	घृणा, द्वेष
Deformities	a distortion or crookedness	विकृति, कुरूपता
Indignation	anger	रोष

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SSC MOCK TEST - 71 (ANSWER KEY)

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

76. (A) Replace 'has met' by 'met', because yesterday denotes past time.
77. (B) We should use 'the' before USA as countries with Union, United, Republic and Kingdom take 'the'.
78. (B) Replace 'than' by 'when', as the conjunction hardly is followed by when.

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