

SSC MOCK TEST – 78 (SOLUTION)

1. (B) 35 = THIRTY FIVE = 8 different letters
58 = FIFTY EIGHT = 7 different letters

2. (B) E V I L L I V E
 1 2 3 4 4 3 2 1
 R O A R R A O R
 1 2 3 4 4 3 2 1

3. (A) Gandhi Jayanti is celebrated on 2nd October and **Republic day** is celebrated on 26 January.

4. (B) H₂SO₄ is the chemical formula of Sulphuric acid and **HNO₃** is the chemical formula of Nitric acid.

5. (C) Except **Moral science**, other three comes under Social science.

6. (D) Except **DLCR**, we can find one vowel in rest of the options.

7. (D) **No. Factors (f) N(f)**

| | | |
|----|-----------------------|-------|
| 24 | 1, 2, 3, 4, 6, 12, 24 | 7 |
| 15 | 1, 3, 5, 15 | 4 |
| 27 | 1, 3, 9, 27 | 4 |
| 30 | 1, 2, 3, 5, 6, 15, 30 | 7 4 8 |

8. (C) **Words Vowels used (No.) (No.)³ No. of Letters Result**

| | | | | |
|----------|---------|---------------------|---|---------|
| January | AU (2) | 2 ³ = 8 | 7 | 87 |
| February | AEU (3) | 3 ³ = 27 | 8 | 278 |
| August | U (1) | 1 ³ = 1 | 6 | 16 ≠ 86 |
| December | E (1) | 1 ³ = 1 | 8 | 18 |

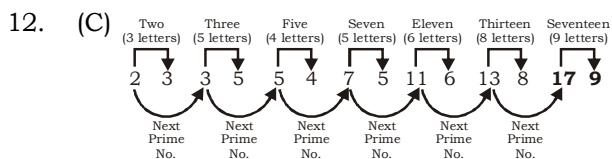
9. (B) **Words No. of vowels Result**

| | | |
|---------------|---|--|
| ZILA GAZIABAD | 6 | 6 ³ - 6 ² = 216 - 36 = 180 |
| MUMBAI MIRROR | 5 | 5 ³ - 5 ² = 125 - 25 = 100 |

10. (C) After substituting the signs as per the given direction.

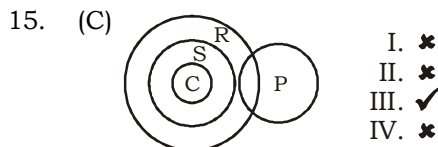
(3C9)A (4B6) B6
= (3 × 9) - (4 + 6) + 6
= 27 - 10 + 6
= **23**

11. (A) 8 × 5 + 1 = 41
41 × 4 + 2 = 166
166 × 3 + 3 = 501
501 × 2 + 4 = **1006**
1006 × 1 + 5 = 1111

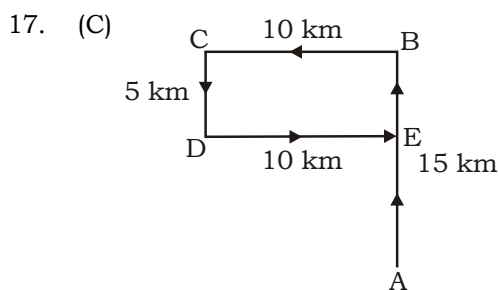


13. (B) 8 + 6 = 14 □ 14 3 □ 143
9 + 2 = 11 □ 11 7 □ 117
3 + 5 = 8 □ 8 2 □ 82

14. (D) ab c / a a bc / a b b c / ab c c



16. (C) We can't find 'E' in the given word RIDICULOUS.



Finally, Akhilesh is in the **North** of his house.

18. (A) 12 □ 12³ = 1728 □ 12² = 144
09 □ 09³ = 0729 □ 09² = 081
13 □ 13³ = **2197** □ 13² = **169**

19. (A) (3 × 5)² = 15² = 225
(2 × 4)³ = 8³ = 512

(9 × 4)^{1.5} = (36)^{3/2} = (6)^{2 × 3/2} = 6³ = **216**

20. (B) Only daughter of my mother = Kamal's Sister

Kamal's Sister is Jitendra's Mother
So Kamal is **maternal uncle** of Jitendra as well as his sister.

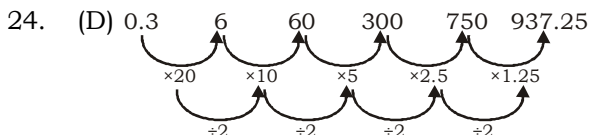
21. (C)

| | | | |
|--------|-------|---|---|
| Top | 6 / 3 | 1 | 4 |
| Bottom | 6 | 2 | 5 |

The digit on the top of the surface will be **3**, when the digit at the bottom is 6.

22. (C) 5 × 6 + 3 = 8 × 5 - 7

23. (A) 3 + 4 × 6 - 4 × 5 = 7



25. (B)

- | | |
|--|---|
| <p>26. (D) Graphite is a good conductor of heat and electricity because of their bonding. The free electrons are able to move very freely. Since electricity and heat need electrons to move, the bonding promotes conductivity.</p> <p>27. (D) Article 16 gives the guarantee of equality of opportunity in matters of public employment. Article 16(1) & 16(2) have laid down a general rule that there shall be equal opportunity for all citizens and thus emphasizes universality of Indian Citizenship. However, further section of Article 16 provides the exceptions.</p> <p>³⁵/₁₇ Article 19: Protection of certain rights regarding freedom of speech, etc.</p> <p>³⁵/₁₇ Article 15: Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.</p> <p>³⁵/₁₇ Article 14: Article 14 provides equality before the law & equal protection within the territory of India.</p> <p>29. (D) It is published by Ministry of Statistics and Programme Implementation, Central Statistical Organization.</p> <p>31. (A) The 42nd Amendment added secular and socialist character to Indian Republic. It is specially relevant because our neighboring countries like Afghanistan, Bhutan, Bangladesh, Nepal, Pakistan and Sri Lanka have opted for the theocratic model of their states. The bewildering diversities of religion, caste, creed, language and ethnic groups make it imperative upon the Indian state to develop a secular ethos of pluralism and multi-religious society over the sub-continent.</p> <p>³⁵/₁₇ 44th amendment: Amendment passed after revocation of internal emergency in the Country. It was provided for human rights safeguards and mechanisms to prevent abuse of executive and legislative authority.</p> <p>³⁵/₁₇ 43rd amendment: Amendment passed after revocation of internal emergency in the Country. Repeals some of the more 'Anti-Freedom' amendments enacted through Amendment Bill 42.</p> <p>³⁵/₁₇ 45th amendment: Extends reservation for SC/ST and nomination of Anglo Indian members in Parliament and State Assemblies for another ten years i.e. up to 1990.</p> <p>33. (D) Durand Line is the line demarcating the boundaries of Pakistan and Afghanistan. It was drawn up in 1896 by Sir Mortimer Durand.</p> | <p>³⁵/₁₇ Radcliffe Line drawn up by Sir Cyril Radcliffe, demarcated the boundary between India and Pakistan.</p> <p>36. (C) The Union IT Minister Ravishankar Prasad has recently launched "Digidhan Abhiyan" to enable every citizen, small traders and merchants to adopt digital payments in their everyday financial transactions. During the campaign, citizens will be informed about various modes of digital payments by educating them to download, install and transact digital payments. Beside this, the IT Minister has also launched Digishala TV Channel. It is a free-to-air channel which will educate people about digital payment and is available on DTH service. The channel will encourage people for digital payment in their everyday life. The channel will be airing shows targeted at the rural and suburban population to inform them of various aspects of going digital like e-wallet, UPI, USSD, AADHAAR and usage of cards through talk shows and demonstrations. The services will initially be available in Hindi and English and later in local languages as well.</p> <p>37. (A) The Sardar Patel Cricket Stadium in Ahmedabad, popularly known as Motera Stadium, is set to become the world's largest seating capacity cricket stadium. Presently, the stadium can house 54,000 people, but with the new plans, it is projected to have a capacity of about 1,10,000 people. This will almost double its seating capacity and will surpass the Melbourne Cricket Ground, which has a capacity of 1,00,024 people.</p> <p>38. (A) Hwang Kyo-ahn, who is the South Korean Prime Minister, has become the acting President after Parliament voted to impeach President Park Geun-hye on December 9, 2016 over a corruption scandal.</p> <p>39. (B) Person having blood group 'AB' is called universal recipient because the 'AB' blood group has no antibody in the blood plasma. So, the person can accept any type of blood group (i.e. A, B or O).</p> <p>40. (D) The Internet and Mobile Association of India (IAMAI) has recently constituted committee to fight against the menace of online piracy. The committee will be chaired by Ajit Mohan of Hotstar and co-chaired by Uday Sodhi of SET India and Salil Kapoor of HOOQ. The mandate of the committee is to safeguard the interest of the digital entertainment businesses.</p> |
|--|---|

41. (D) Indian Golfer Mukesh Kumar has won the 2016 Panasonic Open India golf title at Delhi Golf Club (DGC). With this win, he became the oldest golfer to win an Asian Tour title at the age of 51 years and 126 days.
42. (A) He was a resident of Bombay Presidency, but was elected to Constituent Assembly from West Bengal.
43. (C) The book "Dipa Karmakar: The Small Wonder" has been authored by sports journalists Vimal Mohan, Digvijay Singh Deo and Dipa Karmakar's coach Bishweshwar Nandi. The book will have many untold stories of struggle and triumph besides rare archival photos from the Karmakars' private album as well as competition photos from the Olympics and Commonwealth Games. The book is set to release on August 2017.
44. (B) The capital of the Hoysalas was initially located at Belur but was later moved to Halebid.
46. (A) Heavy water can serve as a neutron moderator in a nuclear reactor, which slows down fast particles and encourages the fission reaction. Neutrons in a fission reaction travel either fast or slow. The fast neutrons tend to be absorbed by certain isotopes of uranium rather than continuing the fission reaction, but the larger deuterium atoms in heavy water help slow down these fast neutrons, ensuring they continue the chain reaction.
47. (B) The Committee on Digital Payments headed by Ratan Watal has submitted its final report to the Union Finance Minister Arun Jaitley in his office in New Delhi. The committee has recommended a medium term strategy for accelerating growth of Digital Payments in India with a regulatory regime which is conducive to bridging the digital divide by promoting competition, open access & interoperability in payments.
48. (C) Ghiyasuddin Tughlaq founded Tughlaq dynasty in 1320 AD (CE). Nasiruddin Mahmud was the last ruler of Tughlaq dynasty (1395-1412 AD).
49. (D) The Major Rock Edict XIII of Ashokan inscription mentions Asoka's victory over Kalinga and names of Greek Kings such as Antiochus, Ptolemy, Antigonus, Magas and southern Indian rulers such as Cholas, Pandyas. It has also mentioned the names of Kamboj, Nabhaks, Bhoja, Andhra, etc.
50. (B) Inflation is a condition, when cost of services coupled with goods rise and the entire economy seems to go haywire. Inflation has never done good to the economy. Whenever there is expected inflation, governments around the world take appropriate steps to minimize the ill effects of inflation to a certain extent.
51. (D) $2M = 5W = 7B$
Let the required no. of days = x
- $$2M \times 469 = \frac{x}{7} + 2 + \frac{4x}{7} M \times x$$
- $$x = \frac{2 \cdot 469 \cdot 7}{49 + 14 + 4} = 98 \text{ days}$$
- Required no. of days = 98
52. (C) Speed = 4 : 3
Time = 3 : 4
Difference for 1 unit = Time difference 2 hr
Hence normal time = $3 \times 2 = 6$ hr
53. (C) $2^{39} = ((2^3)^{13}) = 8^{13}$
- Now, $\text{Rem}_{\frac{39}{8}} 8^1 = 8$, $\text{Rem}_{\frac{39}{8}} 8^2 = 25$,
- $\text{Rem}_{\frac{39}{8}} 8^3 = 5$, $\text{Rem}_{\frac{39}{8}} 8^4 = 1$ & $\text{Rem}_{\frac{39}{8}} 8^5 = 8$
- So, the pattern is 8, 25, 5, 1.
□ 8 will be the 13th term as per the pattern.
54. (A) Let price of article be ₹ 100, then
Markup price = 180
Price after discount = 135
Let trader gives 1000 gm
- $$\begin{array}{l} \text{C.P. } 1000 \quad \times \quad 100 = 900 \times 100 \\ \text{S.P. } 900 \quad \times \quad 135 = \frac{1000 \times 135}{45 \times 1000} \end{array}$$
- Hence % profit = $\frac{45 \cdot 1000}{90 \cdot 1000} \times 100 = 50\%$
55. (A) Divisor = 48
Quotient = 6
Remainder = 12
Dividend = Divisor \times Quotient + Remainder
= $48 \times 6 + 12 = 300$
56. (B) Difference of C.I. for 2 years
= $756 - 720 = 36$
Hence ₹ 36 will be the interest on ₹ 360.
[∴ SI for 2 yrs = ₹ 720]
- then $\frac{36 \cdot 100}{360} = R$ □ $R = 10\%$
- now,
if $r = t$, SI = 900
- then, $900 = \frac{3600 \cdot r \cdot t}{100}$
- $r^2 = 25$ □ $r = 5\%$
□ Required rate = 5%

57. (C)

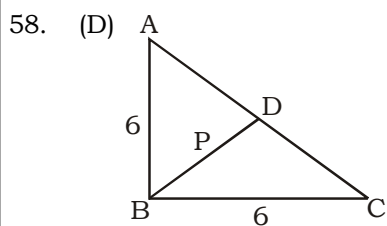
| | | |
|---------|-----------------|----------|
| Time | Work | Capacity |
| $A + B$ | $\frac{23}{11}$ | 30 |
| 30 | $\frac{23}{11}$ | 30 |
| 30 | $\frac{23}{11}$ | 1 |

$$(A + B)11 + 28A = 30$$

$$A = \frac{19}{28}$$

Hence A will complete the work

$$= \frac{30 \times 28}{19} = \frac{840}{19} = 44 \frac{4}{19} \text{ days}$$



Let $\angle B$ be right angle in $\triangle ABC$ and BD be perpendicular on hypotenuse AC

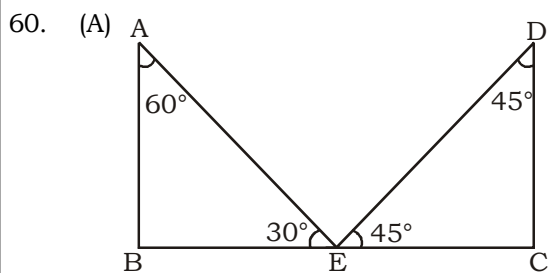
then $\frac{1}{P^2} = \frac{1}{6^2} + \frac{1}{6^2}$

$P^2 = \frac{6^2}{2} \Rightarrow P = 3\sqrt{2} \text{ cm}$

59. (D) $A + B = 45^\circ$

$$\frac{\tan A + \tan B}{1 - \tan A \tan B} = 1$$

$$\tan A + \tan B + \tan A \tan B = 1$$



Let AB, CD are two towers
 E is the point between road BC

Then in $\triangle DCE$
 $DE = EC = x = AB$

In $\triangle ABE$

$BE = \sqrt{3} x$ then

$$x = \frac{100}{(\sqrt{3} + 1)} \times \frac{(\sqrt{3} - 1)}{(\sqrt{3} - 1)} = \frac{100(\sqrt{3} - 1)}{2}$$

$= 50(1.732 - 1) = 36.6 \text{ m} = AB$

Position of farthest tower from point (BE)

$= 36.6 \times \sqrt{3} = 63.4 \text{ m}$

61. (B) CP of 12 orange = SP of 9 oranges
 $CP : SP = 9 : 12 = 3 : 4$

then, profit % = $\frac{4 - 3}{3} \times 100 = 33.33\%$

CP of 10 oranges = 3

SP of 10 oranges = 4

Profit on 10 oranges = $4 - 3 = 1$

Discount on 10 oranges = Profit on 5 oranges = 0.5

\square MP of 10 oranges = $4 + 0.5 = 4.5$

Discount % = $\frac{0.5 \times 100}{4.5} = 11.11$

\square Required diff. = $33.33 - 11.11 = 22.22\%$

62. (B) Let fixed expenses of a hotel be x and dependent expenses be y

$10y + x = 6000$... (i)

$25y + x = 9000$... (ii)

On solving,

$15y = 3000$

$\square y = 200$

and $x = 4000$

Hence total expenses of hotel when there are 40 guest in the hotel

$= 4000 + 40 \times 200 = 4000 + 8000 = 12,000$

63. (C) For $N = 31$ and $D = 17$, it will give 14 as a remainder.

$\square 3N = 93$ and $D = 17$, it will give 8 as a remainder.

$\square 4N = 124$ and $D = 17$, it will give 5 as a remainder.

64. (B) The sum of square of 5 prime number will be even, when a number be even we know that 2 is an least even prime number. Hence $a^5 = 2^5 = 32$

65. (D) Divisible by all numbers

Number formed by repetition of digit

$= a \times 111111$

$= a \times 111 \times 1001$

$= a \times 3 \times 37 \times 11 \times 13 \times 7$

Hence the no. will be divisible by 3, 7 and 11.

66. (C)

| | | |
|-------------|--------------|--------------|
| | R | S |
| Shot firing | 5×8 | 7×8 |
| Killed | 2×8 | 3×8 |
| Shot missed | 3×8 | 4×8 |

\square Number of birds killed by Remo = $2 \times 8 = 16$

67. (D) $P + Q = 560$... (i)

$\frac{4}{7}P = \frac{1}{4} \Rightarrow 16P = 7Q - 700$

$7Q - 16P = 700$... (ii)

On solving equ. (i) and (ii)

$$7Q + 7P = 3920$$

$$7Q - 16P = 700$$

$$\begin{array}{r} - \quad + \quad - \\ \hline 23P = 3220 \end{array}$$

$$P = 140$$

$$\text{and } Q = 420$$

□ Required number of trees in forest $Q = 420$.

68. (B) $C + M = \frac{8}{17}$

$$M + G = \frac{12}{17}$$

$$C + M + G = 1$$

$$(C + M + M + G) - (C + M + G) = M$$

$$\frac{8}{17} + \frac{12}{17} - 1 = M \quad \square \quad M = \frac{3}{17}$$

$$C = \frac{5}{17}, G = \frac{9}{17}$$

$$C : M : G = 5 : 3 : 9$$

Hence amount to less efficient person

$$= 816 \times \frac{3}{17} = 48 \times 3 = 144$$

69. (D) $4^{n+m-1+m-n-2m} \times 5^{m-1+m+n-2-2m-n} \times 3^{m-n+m+n-2-2m+2}$

$$= 4^{-1} \times 5^{-3} \times 3^0 = \frac{1}{500}$$

70. (A) Surface area of cube = $6 \times (5)^2 = 150$
Surface area of cuboid = $2(1 \times 1 + 1 \times 125 + 1 \times 125) = 502$

$$\% \text{ increase in surface area} = \frac{502 - 150}{150} \times 100$$

$$= \frac{704}{3} = 234\frac{2}{3}\%$$

71. (B) Difference in price after 3 years

$$= 10 \times (1.2)^3 - 16 \times (0.75)^3$$

$$= 17.28 - 6.75 = 10.53 \text{ lakh}$$

$$= ₹ 1053000$$

72. (D) Let x m cloth is required

$$\frac{22}{7} \times 14 \times 50 = x \times 10$$

$$x = 220 \text{ m}$$

□ The length of the cloth = 220 m

73. (C) Percentage decrease = $\frac{6-5}{6} \times 100\%$

$$= \frac{50}{3}\% = 16\frac{2}{3}\%$$

74. (B) Required ratio = $2 : 6 = 1 : 3$

75. (A) Required Average sell

$$= \left(\frac{3+4+10+6+6}{5} \right) \text{million}$$

$$= \frac{29}{5} = 5.8 \text{ million}$$

MEANINGS IN ALPHABETICAL ORDER

| Word | Meaning in English | Meaning in Hindi |
|-------------|--|-------------------------|
| Abdicate | renounce one's throne | पद त्यागना |
| Acquaint | make someone aware of or familiar with | परिचित होना |
| Adversity | difficulties, misfortune | दुर्भाग्य, विपत्ति |
| Apparition | a ghost or ghostlike image of a person | छाया |
| Ardent | enthusiastic or passionate | उत्साही |
| Bifurcate | divide into two | दो भागों में बट जाना |
| Captious | in a way tending to find fault or raise petty objections | दोषपूर्ण तरीके से |
| Constitute | to be a part of a whole | निर्माण करना |
| Devout | having or showing deep religious feeling or commitment | धार्मिक |
| Eager | a curious | उत्सुक |
| Folly | foolishness | मूर्खतापन |
| Implode | collapse | टूट जाना |
| Inessential | not absolutely necessary | अनावश्यक |
| Innocuous | not harmful or offensive | हानि रहित |
| Insight | the capacity to gain an accurate and deep intuitive understanding of something | सूक्ष्मदृष्टि |
| Manoeuvre | a clever plan or action | युक्ति |
| Perceptible | able to be seen or noticed | प्रत्यक्ष |
| Perilous | full of danger or risk | जोखिम भरा |
| Pious | devoutly religious | पवित्र |
| Precarious | uncertain | अनिश्चित |
| Salubrious | healthy | स्वास्थ्यप्रद |
| Setbacks | misfortune or mishap | असफलता, नाकामयाबी |
| Strip away | to remove something unnecessary | हटा देना |



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SSC MOCK TEST - 78 (ANSWER KEY)

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

76. (C) Replace 'much' by 'many', as 'investors' is a countable noun.
77. (B) Replace 'if' by 'that'. 'Doubt' takes 'that' in positive sentences and 'if' in negative and interrogative sentences.
78. (C) 'Lend' will take 'to'. Change 'for' into 'to'.

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