## SSC (GD)MOCK TEST - 10 (SOLUTION)

1. (C) Total number of IITs in India is 23 and the total number of NITs in India is $\mathbf{3 1}$.
2. (A)
3. (A) As, $36-81 \Rightarrow 36+3^{2}+6^{2}=81$ Similarly, $54-\mathbf{9 5} \Rightarrow 54+5^{2}+4^{2}=\mathbf{9 5}$
4. (B) Sushma Sawraj is the minister of external affairs and Parkash javadekar is the minister of Human resource development.
5. (D) Except Hydrabad, all others are the world heritage cities.
6. (D) Number of heritage sites in Bihar is 2. While in all others, the total number of heritage site is 3 .
7. (B) Execpt CFIN, in all other is added next letter to get the next one letter.
8. (C) As, $9+12-10=11$
and, $12+16-17=11$
Similarly,
$6+11-6=11$
9. (A) As, $\sqrt{9}, \sqrt{16}, \sqrt{4}>\sqrt{25}$
and, $\sqrt{9}, \sqrt{4} . \sqrt{1}>\sqrt{16}$
Similalry,
$\sqrt{49}, \sqrt{36} \cdot \sqrt{25}>\sqrt{64}$
10. (A)

11. (A)

12. (D) Let the prestn age of Vipin $=x$ years
$\therefore$ Present age of Vipin's father $=3 x$ ATQ,
$3(3 x-6)=72$
$\Rightarrow 9 x=90$
$\Rightarrow x=10$
$\therefore$ Present age of Vipin $\mathbf{= 1 0}$ years
13. (C) As, $8 \times 7-8-7=41$
and, $9 \times 8-9-8=55$
Similarly,
$7 \times 6-7-6=29$
14. (B) $54 \div 6+3>6+3$
$\Rightarrow 12>9$
15. (C)
16. (A)

17. (D)

18. (A) $(4)^{2},(4+4)^{2},(8+4)^{2},(12+8)^{2},(20+8)^{2}$ $=784$
19. (C)
20. (C) As, $8 \times 7-7 \times 2=42$
and, $7 \times 6-6 \times 2=30$
Similarly,
$9 \times 8-8 \times 2=\mathbf{5 6}$
21. 

(B)


Hence, his face is in South-East Direction.
22. (B)
23. (C)
24. (B) Total number of triangles $=\mathbf{1 6}$
25. (A)


Hence, only conclusion I follows.
51. (C) Speed of train A
$=\frac{210+230}{22}=\frac{440}{22}=20 \mathrm{~m} / \mathrm{s}$
Ratio of speed of train $B$ and $\operatorname{train} A=5: 4$
Speed of train $B=\frac{5}{4} \times 20=25 \mathrm{~m} / \mathrm{sec}$
$=\frac{25 \times 18}{5}=90 \mathrm{~km} / \mathrm{hr}$
52. (C) Given that,

$$
\begin{aligned}
& x^{4}+\frac{1}{x^{4}}=727 \\
\Rightarrow & x^{4}+\frac{1}{x^{4}}+2=727+2 \\
\Rightarrow & \left(x^{2}+\frac{1}{x^{2}}\right)^{2}=727\left[\because(\mathrm{a}+\mathrm{b})^{2}=\mathrm{a}^{2}+\mathrm{b}^{2}+2 \mathrm{ab}\right] \\
\Rightarrow & x^{2}+\frac{1}{x^{2}}=27
\end{aligned}
$$

and, $\left(x-\frac{1}{x}\right)^{2}=x^{2}+\frac{1}{x^{2}}-2$

$$
\left[\because(a-b)^{2}=a^{2}+b^{2}-2 a b\right]
$$

$\Rightarrow\left(x-\frac{1}{x}\right)=\sqrt{27-2}=5$
Now, $\left(x-\frac{1}{x}\right)^{3}=x^{3}-\frac{1}{x^{3}}-3\left(x-\frac{1}{x}\right)$
$\left[\because(a-b)^{3}=a^{3}-b^{3}-3 a b(a-b)\right]$
$\Rightarrow(5)^{3}=x^{3}-\frac{1}{x^{3}}-3(5)$
$\therefore x^{3}-\frac{1}{x^{3}}=125+15=140$
53. (B) A.T.Q.,

|  | CP | SP |
| :--- | :--- | :--- |
| I | $(5$ | $4)_{\times 3}$ |
| II | $(2$ | $3)_{\times 5}$ |

(CP of first item $=$ SP of second item)

| II | 15 | 12 |
| :---: | :---: | :---: |
| II | 10 | 15 |
| Total | 25 | 27 |

Now,
27 units = 5400
1 units $=5400 / 27=200$
Profit $=\mathrm{SP}-\mathrm{CP}=27-25=2$
Required answer $=2 \times 200=₹ 400$
54. (B) A.T.Q,

Parveen Ankit
Work efficiency 4
$\therefore$ Total work $=4 \times 40=160$ units
As given, they follow this pattern to complete the work
$3+4+4=11$ units in 3 days.
$\therefore 14 \times 11=154$ units in $3 \times 14=42$ days
Now, next day Ankit will come to work and then Parveen
Work $\rightarrow 154+3=157$ units
Now work left $=160-157=3$ units

Time taken by Parveen to complete 3 unit
$=\frac{3}{4}$ days
$\therefore$ Total number of days $=43+\frac{3}{4}=43 \frac{3}{4}$ days
55. (B) Given that,
$x=2$ is the root of $f(x)$.
$\therefore f(x)$ in divisible by $(x-2)$.
$\frac{2 x^{3}-x^{2}-5 x-2}{x-2}=2 x^{2}+3 x+1$
Now, find root of quadratic equation
$2 x^{2}+3 x+1$
$=2 x^{2}+2 x+x+1$
$=2 x(x+1)+1(x+1)$
$=(2 x+1)(x+1)$
$\therefore$ Required roots are $\left(-\frac{1}{2},-1\right)$
56. (D) LCM of 2, 3, 6 and $11=66$
$6 6 \longdiv { 9 9 9 9 9 9 ( 1 5 1 5 1 }$ $\frac{66}{339}$
$\frac{330}{99}$
$\frac{66}{339}$
$\frac{330}{99}$
Remainder $\rightarrow \frac{66}{33}$
Required number $=$ 999999-33 +1

$$
=999967
$$

57. (A) A.T.Q.,
$\frac{16 \times 3+18 x+21 \times 5+42 \times 2}{10+x}=21$
$\Rightarrow 237+18 x=21(10+x)$
$\Rightarrow 21 x-18 x=237-210$
$\Rightarrow 3 x=27$
$\Rightarrow x=9$
58. (C)


Reflection of $(4,-5)$ in the line $(y=-2)=(4,1)$

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59. (A) Let the speed of boat be $x \mathrm{~m} / \mathrm{min}$.

Let the speed of stream be $y \mathrm{~m} / \mathrm{min}$.
A.T.Q.,
$x+y=250$
$x-y=200$
$2 x=450$
$x=225 \mathrm{~m} / \mathrm{min}$.
$\therefore$ In $\mathrm{km} /$ hour $=225 \times \frac{60}{1000}=13.5 \mathrm{~km} /$ hour
60. (B) M.P. of Table $=₹ 1200$

After discount
$=1200 \times \frac{100-15}{100} \times \frac{100-33 \frac{1}{3}}{100}=₹ 680$
After transportation charge
= ₹ 680 + ₹ $70=₹ 750$
Now, SP = ₹ 1000
$\therefore$ Profit\%
$=\frac{1000-750}{750} \times 100=\frac{100}{3}=33 \frac{1}{3} \%$
61. (C) ATQ,
H.C.F. $=8$
$\therefore$ Let the numbers are $8 x$ and $8 y$ respectively.
L.C.M $\Rightarrow 8 x . y=96$ (given)
$\Rightarrow x y=\frac{96}{8}=12$
Also given,
$8 x+8 y=56$
$x+y=7$.
$\therefore$ Sum of reciprocal of numbers
$=\frac{1}{8 x}+\frac{1}{8 y}=\frac{x+y}{8(x y)}$
$=\frac{7}{8(12)}=\frac{7}{96}$
62. (C) Required H.C.F of fraction
$=\frac{\text { H.C.F of Numerator }}{\text { L.C.M of Denominator }}$
$=\frac{3}{1400}$
63. (B)

$\mathrm{AO}=\frac{A B}{2}=8 \mathrm{~cm}$.

In $\triangle \mathrm{AOC}$ and $\triangle \mathrm{AOD}$
$C D=C O+O D$.
and,
$\mathrm{CO}=\sqrt{(17)^{2}-(18)^{2}}=\sqrt{289-64}$
$=\sqrt{225}=15 \mathrm{~cm}$
$\mathrm{OD}=\sqrt{(10)^{2}-(8)^{2}}=\sqrt{100-64}$
$=\sqrt{36}=6 \mathrm{~cm}$
$\square \mathrm{CD}=15+6=21 \mathrm{~cm}$
64. (B) Total area to be painted $=2(16+9) \times 8$
$=2(16+9) \times 8$
$=400 \mathrm{~m}^{2}$
Required amount $=400 \times 8.5$
= ₹ 3400
65. (C) ATQ,
$\frac{60}{100}(x-y)=\frac{50}{100}(x+y)$
$\Rightarrow 6 x-6 y=5 x+5 y$
$\Rightarrow x=11 y$
Required Percentage $=\frac{1}{11} \times 100$
$=9 \frac{1}{11} \%$
66. (A) $x(x+y+z)=17$
$y(x+y+z)=25$
$z(x+y+z)=154$
Adding equation (i), (ii) and (iii),
$(x+y+z)(x+y+z)=17+25+154$
$\Rightarrow(x+y+z)^{2}=196$
$\Rightarrow x+y+z=14$
putting equation (iv) in equation (ii),
$y=\frac{25}{14}$.
67. (D) Let the amount invested at $3 \%$ rate of interest be $x$.
Now, ATQ.
$\frac{x \times 3 \times 1}{100}=\frac{(60000-x) 7 \times 1}{100}$
$\Rightarrow 3 x=420000-7 x$
$\Rightarrow x=42000$
Interest earned $=\frac{42000 \times 3 \times 1}{100}=₹ 1260$
Total interest earned from both investement $=1260 \times 2=₹ 2520$
Average R.O.I is
$2520=\frac{60000 \times R \times 1}{100}$
$\Rightarrow R=4.2 \%$

68. (C) Ratio of speed of A, B and C is

A B C
$(2: 1) \leftarrow 3$

$1: 2: 6 \leftarrow$ Ratio of time
C covers 6 units in 96 minutes

$$
1 \text { unit } \rightarrow \frac{90}{6}=15
$$

$\therefore$ Required time $=15$ minutes.
69. (A) Let the unit digit and tens digit of number be $x$ and $y$.
Number $=10 y+x$
A.T.Q
$10 x+y=10 y+x+27$
$\Rightarrow x-y=3 \quad \ldots$ (i)
$\Rightarrow \quad x+y=9 \quad \ldots$ (ii)
...(given)
From eq. (i) and eq. (ii), we get

$$
\begin{aligned}
& x=6 \\
& \text { and, } y=3
\end{aligned}
$$

$$
\therefore \text { Required number }=10(3)+6=36
$$

70. (C) L.C.M of 63 and $36=252$
H.C.F of 63 and $36=9$

Required product $=252 \times 9=2268$
71. (A) $5 \times 0.5 \times 0.05 \times 0.005 \times 0.0005 \times 50$
$=\left(\frac{25}{1000}\right)^{3}=(0.025)^{3}$
72. (B) Required difference $=7000-5500=1500$
73. (A) Required increment $=\frac{10}{40} \times 100=25 \%$
74. (D) Required difference
$=\left(\frac{70+75+30+55+65}{5}-\frac{40+50+55+25+35}{5}\right) \times 100$
$=100 \times\left(\frac{295-205}{5}\right)=1800$
75. (C) Required year Febuary and March.


Note:- If your opinion differs regarding any answer, please message the

Note:- Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the

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


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76. (C) Here possessive case is not required. So '3 o'clock train' is the correct usage.
77. (B) Replace 'have' with 'has', as the subject 'a period of six years' is singular.
78. (B) Replace 'was' with 'is' as it is a universal truth.
98. (C) 'Word' is 'a peice of information or news'. Therefore 'sent word' is a correct usage.
99. (C) Correct compound conjuction is 'had....
would have'. Therfore 'shall not be' should be replaced by 'would not have been'.
100. (B) Look for - try to find

Look up - search for information
Look in - make a short visit
Look to - be careful of or about something

## MEANINGS IN ALPHABETICAL ORDER

## Word

Pretentious
Abrasion
Infirm
Lull
Mutiny
Delude
Tepid
Reconnoiter
Scalding

## Meaning in English

attempting to impress by affective greater importance process of scraping or wearing something away not physically or mentally strong a temporary interval or lack of activity an open rebellion against authorities make (someone) believe something is true only slightly warm; showing little enthusiasm make an military observation very hot, burning

## Meaning in Hindi

मिथ य $\uparrow \uparrow$ वा नी हा णा प
कमज' र
मं दी
क्रां ति
धा T' ख T
गु नगु ना, निरा प्र पता लगा ना
ती ख T, गरम


## SSC (GD) MOCK TEST - 10 (ANSWER KEY)

## Answer key

| 1. (C) | 11. (A) | 21. (B) | 31. (A) | 41. (B) | 51. (C) | 61. (C) | 71. (A) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. (A) | 12. (D) | 22. (B) | 32. (D) | 42. (D) | 52. (C) | 62. (C) | 72. (B) |
| 3. (A) | 13. (C) | 23. (C) | 33. (A) | 43. (A) | 53. (B) | 63. (B) | 73. (A) |
| 4. (B) | 14. (B) | 24. (B) | 34. (A) | 44. (D) | 54. (B) | 64. (B) | 74. (D) |
| 5. (D) | 15. (C) | 25. (A) | 35. (B) | 45. (A) | 55. (B) | 65. (C) | 75. (C) |
| 6. (D) | 16. (A) | 26. (D) | 36. (B) | 46. (B) | 56. (D) | 66. (A) |  |
| 7. (B) | 17. (D) | 27. (D) | 37. (A) | 47. (C) | 57. (A) | 67. (D) |  |
| 8. (C) | 18. (A) | 28. (B) | 38. (D) | 48. (D) | 58. (C) | 68. (C) |  |
| 9. (A) | 19. (C) | 29. (A) | 39. (C) | 49. (B) | 59. (A) | 69. (A) |  |
| 10. (A) | 20. (C) | 30. (B) | 40. (C) | 50. (C) | 60. (B) | 70. (C) |  |

Hindi

## English

| 76. (D) | 85. (B) |
| :--- | :--- |
| 94. (B) |  |
| 77. (C) | 86. (A) |
| 78. (B) | 87. (A) |
| 78. (B) |  |
| 79. (C) | 88. (A) |
| 97. (D) |  |
| 80. (B) | 89. (B) |
| 81. (B) | 98. (D) |
| 81. (B) |  |
| 82. (C) | 91. (C) |
| 100.(C) |  |
| 83. (C) | 92. (A) |
| 84. (B) | 93. (C) |


| 76. (C) | 86. (C) | 96. (C) |
| :--- | :--- | :--- |
| 77. (B) | 87. (B) | 97. (B) |
| 78. (B) | 88. (D) | 98. (C) |
| 79. (A) | 89.(C) | 99. (C) |
| 80. (A) | 90. (A) | 100.(B) |
| 81. (D) | 91. (B) |  |
| 82. (B) | 92.(A) |  |
| 83. (B) | 93.(A) |  |
| 84. (A) | 94. (B) |  |
| 85. (D) | 95. (B) |  |



