2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

## SSC MOCK TEST - 117 (SOLUTION)

1. (B) Index shows Content. Similarly, Calendar shows date
2. (D)


Similarly,

$$
\begin{array}{ccccccccc}
\text { C } & \text { A } & \text { L } & \text { E } & \text { N } & \text { D } & \text { E } & \text { R } \\
\downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
3 & 1 & 1 & 12 & +5 & +14 & 4 & +5+18= & \mathbf{6 2}
\end{array}
$$

3. (A) $(2 \times 4 \times 3)^{2}+243=819$
$(1 \times 6 \times 3)^{2}+163=487$
4. (C) Except Race, in all other games, ball is used to play.
5. (C)

6. (C) $(10)^{2}=100 \Rightarrow 100 \times \frac{5}{2}=250$
$(14)^{2}=196 \Rightarrow 196 \times \frac{5}{2}=490$
$(6)^{2}=36 \Rightarrow 36 \times 3=108$
$(2)^{2}=4 \Rightarrow 4 \times \frac{5}{2}=10$
7. (A) Decollete $\rightarrow$ Decorous $\rightarrow$ Desecrate $\rightarrow$

Desipicable $\rightarrow$ Destitute
8. (D) $a \underline{\boldsymbol{a}} b \underline{\boldsymbol{c}} d a b \underline{\boldsymbol{b}} c d \underline{\boldsymbol{a}} \underline{\boldsymbol{b}} c c d a b \underline{\boldsymbol{c}} d d$
9. (C) ATQ,
$\frac{x+6}{x+2+6}=\frac{7}{8}$
$\Rightarrow \quad x=8$
Hence, the ages of A and B = 8 years and 10 years respectively
10. (C)

11. (B)

12. (B)

13. (C)

14. (A) S U MMER S DN L V R


Similarly, W I N T ER SDUMJ V

15. (C) ATQ,
$3^{3} \div 9=3$
$6^{3} \div 12=18$
$8^{3} \div 32=16$
16. (A)
$(1 \times 2 \times 3 \times 5)+(1+2+3+5)=41$
$(3 \times 4 \times 2 \times 6)+(3+4+2+6)=159$
$(9 \times 8 \times 3 \times 4)+(9+8+3+4)=\mathbf{8 8 8}$
17. (B) $2232 \div 2=1116$
$1116 \div 3=372$
$372 \div 4=93$
18. (D) $5 \times 6+5+6=41$
$7 \times 8+7+8=71$
$5 \times 9+5+9=\mathbf{5 9}$
19. (B)
20. (C)

I. False
II. True
21. (B)
22. (C)
23. (A)
24. (D)
25. (D)
26. (A) Homerun's Tomb has been acclaimed as the "Necropolis of the Mughal". It was built by Humayun's wife Bega Begum and derived by Mirza Ghiyas. It was listed in world heritage list in 1993. It is located in Delhi.
28. (A) Rised rouate drug is used to cure osteoporosis. Osteoporosis is a condition in which bone becomes weak and brittle. It mainly occurs in old age people.

## 2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

29. (B) Acetone is present in Nail polish remover. It's chemical formula is $\mathrm{C}_{3} \mathrm{H}_{6} \mathrm{O}$.
30. (A) $\mathrm{K}^{+}$is the formula of potassium ion in the noble gas state. It is not produce by body It's source is fruit, vegetable, meats, etc. If it is in excess, it cause hyperkalemia.
31. (A) Qatar is the highest per capita emitter of carbon Dioxide. $\mathrm{Co}_{2}$ is a green house gases. In total emission of $\mathrm{Co}_{2}$ China is first followed USA ( $2^{\text {nd }}$ ) Russia ( $3^{\text {rd }}$ ) and India ( $4^{\text {th }}$ )
32. (D) Hyderabad is the Capital City of Telangana. Mahavir Harina Vanasthali National Park is also in Telangana. Hyderabad is situated on the bank of Musi River.
33. (D) Lord Canning was first Viceroy and Governor General of Pre Independence era. Lord Canning was the GovernorGeneral of India during the Indian rebellion of 1857.
34. (C) Jahangir was the son of Akbar. He was born 1563 in Fatehpur Sikri. His childhood name was Salim. The art of Mughal Painting reached great height under Jahangir's reign. He was died in 1627 and his tombs in Lahore.
35. (C) If displacement in zero, work is zero, It is a scalar quantity. Work can be either positive or negative. It's unit is Joule.
36. (A) Inertia is tendency to resist change in the current state. Newton's first law is called law of Inertia.
37. (B) Article 356 of the Indian constitution is about Imposition of president rule in states. In the event that a state Govt. is not able to function as per the constitution, then Governor of the state prays president for President Rule.
38. (D) The Dholavira is the largest Indus Valley Site in independent India. It is located on Khadir Beyt, an island in the Great Rann of Kutch in Gujarat.It has been excavated by R S Bisht team of ASI. It had three citadels.Each of these three citadels of Dholavira was improved than Harappa and Mohen-jo-Daro and had an inner closure as well.
39. (C) Agriculture continues to play the primary role in the country's development and is still the mainstay to our large growing population for its sustained food security.
40. (C) The Maharashtra government has recently launched India's first comprehensive 'Crime Criminal Tracking Network System' (CCTNS) through 42 cyber labs in Mumbai on August $15^{\text {th }}, 2016$. Under the CCTNS, all police stations in the state will be linked with one another for sharing information about crimes in their respective jurisdictions and pave the way for a digital police force in Maharashtra.
41. (B) Karnataka will host the $15^{\text {th }}$ edition of Pravasi Bharatiya Divas (PBD) 2017 in Bengaluru for 3 days from January 7 th, 2017. The theme of 2017 PBD is "Redefined Engagement With Indian Diaspora". The PBD convention is held on January $9^{\text {th }}$ 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.
42. (D) The Indian Space Research Organization (ISRO) will launch the INSAT-3DR satellite into orbit by the GSLV-F05 rocket vehicle from the Satish Dhawan Space Centre at Sriharikotta, Andhra Pradesh. The INSAT-3DR is a modern weather satellite and has a mission duration of 8 years. It will help to predict weather patterns and also provide search and rescue information.
43. (B) Pench National Park is in Seoni and Chhindwara districts of Madhya Pradesh in India.
44. (C) India's first sunken museum will be set up at the World Heritage Site of Humayun's Tomb in New Delhi. The interactive museum will open to the public in early 2018 and will display a mix of artifacts that have been locked up in the reserve collections of the National Museum, National Archives and museums of the Archaeological Survey of India (ASI). It will focus on bringing alive the 7 -centuries of pluralistic cultural traditions and architectural history of the Nizamuddin area.


2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
51. (A) ATQ,

Numbers that divisible by $3=51$
Number that divisible by $7=22$
Number that divisible by $(3,7)=8$
Hence, total number $=151-(51+22-8)$
$=86$
52. (C) ATQ,
$\begin{aligned} & \mathrm{A} \rightarrow 30 \\ & \mathrm{~A} \rightarrow 32\end{aligned}>480<16$
Required percentage $=\frac{(16+15) \times 7}{480} \times 100$ $=45.21 \%$
53. (B) ATQ,

Total Area $=\frac{1}{2} \times(21+29) \times 35$
$=875 \mathrm{~cm}^{2}$
54. (C) ATQ,

Required discount $=56+14-\frac{56 \times 14}{100}$
55. (C) ATQ,

Let the total capacity of vessel = LCM of
$(5,11,15)=165$
then,

$$
\begin{array}{cl}
\text { Milk } & : \\
66+60+77 & \vdots \\
203 & :
\end{array}
$$

Water $99+105+88$
292
56. (A) ATQ,

The age of servant $=\frac{30 \times 120}{100} \times 6-5 \times 30$
7. (C) ATQ,
C.P. $=100 \%$
S.P. $=270 \%$

Again,
New C.P. $=115$
then, Profit on S.P. $=\frac{(270-115)}{270} \times 100$
= 57.4\%
58. (D) ATQ,

$$
\begin{array}{cccccc} 
& \mathrm{A} & : & \mathrm{B} & : & \mathrm{C} \\
128 & : & 100 & : & \\
85 & : & & : & 100 \\
\Rightarrow & 544 & : & 425 & : & 640
\end{array}
$$

then, C's marks $=\frac{340}{425} \times 640$

$$
=512
$$

59. (A) ATQ,

Distance travelled by A till 11:00 am = $25 \times 2=50$
then, time taken to meet $=\frac{260-50}{25+10}$
$=6$ hours
Hence, Required time

$$
\begin{aligned}
& =11: 00 \mathrm{am}+6 \text { hours } \\
& =\mathbf{5 : 0 0} \mathbf{~ p m}
\end{aligned}
$$

60. (B) ATQ,

$$
\begin{aligned}
& 2700 \times\left(1+\frac{r}{100}\right)^{2}=3091.23 \\
\Rightarrow & \left(1+\frac{r}{100}\right)^{2}=\left(\frac{107}{100}\right)^{2} \Rightarrow r=\mathbf{7 \%}
\end{aligned}
$$

61. (C) ATQ,

$$
\frac{1}{x}+\frac{1}{y}+\frac{1}{z}=0
$$

$\Rightarrow$ Again, $\quad x y+y z+z x=0$
$(x+y+z)^{2}=x^{2}+y^{2}+z^{2}+2(x y+y z+z x)$ $\Rightarrow \quad 121=x^{2}+y^{2}+z^{2}$ then, $x^{3}+y^{3}+z^{3}-3 x y z=$

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

$$
=11 \times 121=\mathbf{1 3 3 1}
$$

62. (D) ATQ,

$$
x^{4}+\frac{1}{x^{4}}=119
$$

then,
$\Rightarrow x^{2}+\frac{1}{x^{2}}=11$
then, square root on both side

$$
\Rightarrow \quad x-\frac{1}{x}=3
$$

then, taking cube on both side

$$
\Rightarrow \quad x^{3}-\frac{1}{x^{3}}=3^{3}+3 \times 3=\mathbf{3 6}
$$

63. (A) ATQ,

$$
\begin{aligned}
& x=2-y \\
& x^{2}=3+y^{2} \\
\Rightarrow & (2-y)^{2}=3+y^{2} \\
\Rightarrow & 4+y^{2}-4 y=3+y^{2} \\
\Rightarrow & y=\frac{1}{4} \Rightarrow x=2-\frac{1}{4}=\frac{7}{4}
\end{aligned}
$$

Hence $x y=\frac{1}{4} \times \frac{7}{4}=\frac{\mathbf{7}}{16}$
64. (C) ATQ,
$x+\frac{1}{(x+7)}=0$
$\Rightarrow x+7+\frac{1}{x+7}=7$
Squaring on both sides
$(x+7)^{2}+\frac{1}{(x+7)^{2}}=7^{2}-2$
Square root on both side.
$(x+7)-\frac{1}{(x+7)}=\sqrt{47-2}$
$\Rightarrow x-\frac{1}{x+7}=\mathbf{3} \sqrt{5}-7$


2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
65. (A) ATQ,

$\angle \mathrm{ADE}=\angle \mathrm{ABC}$ and $\angle \mathrm{AED}=\angle \mathrm{BCA}$
then, $\triangle \mathrm{ADE} \sqcup \mathrm{ABC}$
$(\because \mathrm{DE}|\mid \mathrm{BC})$

$$
\begin{aligned}
& \Rightarrow \frac{\mathrm{DE}}{\mathrm{BC}}=\frac{\mathrm{AD}}{\mathrm{AB}}=\frac{5}{5+3}=\frac{5}{8} \\
& \Rightarrow \frac{\mathrm{DE}}{\mathrm{BC}}=\frac{\mathbf{5}}{\mathbf{8}}
\end{aligned}
$$

66. (D) ATQ,


$$
\angle \mathrm{ADC}=180^{\circ}-\left(90^{\circ}-23^{\circ}\right)=\mathbf{1 1 3}^{\circ}
$$

67. (B) ATQ,

then, $2 \times \frac{\sqrt{3}}{4} \times 16 \times 16=\frac{d_{1} \times 16}{2}$

$$
\Rightarrow \quad \mathrm{d}_{1}=16 \sqrt{3}
$$

Hence, Area of equilateral triangle
$=\frac{\sqrt{3}}{4} \times 16 \sqrt{3} \times 16 \sqrt{3}=192 \sqrt{3} \mathbf{~ c m}^{2}$
68. (A) $\Delta \mathrm{ABC} \sqcup \Delta \mathrm{OBM}$


$$
\begin{aligned}
& \Rightarrow \quad \frac{\mathrm{OB}}{\mathrm{AB}}=\frac{\mathrm{OM}}{\mathrm{AC}} \Rightarrow \frac{\mathrm{OB}}{5+\mathrm{OB}}=\frac{5}{9} \\
& \Rightarrow \quad 9 \mathrm{OB}=25-5 \mathrm{OB} \\
& \Rightarrow \quad \mathrm{OB}=\frac{25}{4}
\end{aligned}
$$

Again,
$\Delta \mathrm{ABC} \sqcup \Delta \mathrm{DBT} \Rightarrow \quad \frac{\mathrm{AC}}{\mathrm{DT}}=\frac{\mathrm{AB}}{\mathrm{DB}}$

$$
\begin{aligned}
& \Rightarrow \quad \frac{9}{\mathrm{DT}}=\frac{5+\frac{25}{4}}{\frac{25}{4}-5} \Rightarrow \mathrm{DT}=\frac{\frac{45}{\frac{4}{5}}}{\frac{4}{4}} \times \frac{1}{9} \\
& \Rightarrow \quad \mathrm{DT}=1 \mathrm{~cm} \\
& \text { Hence, DT }=\mathbf{1} \mathbf{~ c m}
\end{aligned}
$$

69. (A) ATQ,
$(\operatorname{cosec} A+\sin A)(\operatorname{cosec} A-\sin A)$
$=\left(\operatorname{cosec}^{2} A-\sin ^{2} A\right)$
$=1+\cot ^{2} \mathrm{~A}-1+\cos ^{2} \mathrm{~A}$
$=\boldsymbol{\operatorname { c o t }}^{2} \mathrm{~A}+\boldsymbol{\operatorname { c o s }}^{2} \mathrm{~A}$
70. (C) ATQ,
$\tan 75^{\circ}=\tan \left(45^{\circ}+30^{\circ}\right)$
$=\frac{\tan 45^{\circ}+\tan 30^{\circ}}{1-\tan 45^{\circ} \tan 30^{\circ}}$
$=\frac{1+\frac{1}{\sqrt{3}}}{1-\frac{1}{\sqrt{3}}}=\frac{\sqrt{\mathbf{3}+1}}{\sqrt{\mathbf{3}-1}}$
71. (C) ATQ,
$\frac{\sin 2 A}{\cos 2 A} \times \cot 2 A=\frac{\sin 2 A}{\cos 2 A} \times \frac{\cos 2 A}{\sin 2 A}=\mathbf{1}$
72. (B) ATQ,

Total literate people $=600000 \times \frac{63}{100} \times \frac{1}{2}$
$=\mathbf{3 7 8 0 0}$
73. (C) ATQ, Ratio

Literate male
of city 2
Literate female of city 6
$\frac{220000 \times 675}{100} \times \frac{7}{11}: \frac{200000 \times 58}{100} \times \frac{3}{5}$
74. (A) ATQ

Total population of city 5

$$
=259210 \times \frac{16}{7} \times \frac{100}{92}=\mathbf{6 4 4 0 0 0}
$$

75. (A) ATQ,

Literate people in city $1=250000 \times \frac{80}{100}$

$$
=200000
$$

Literate people in city $2=200000 \times \frac{85}{100}$

$$
=170000
$$

Literate people in city $3=220000 \times \frac{78}{100}$

$$
=171600
$$

Literate people in city $4=300000 \times \frac{63}{100}$

$$
=189000
$$

Literate people in city $5=150000 \times \frac{92}{100}$

$$
=138000
$$

Literate people in city $6=400000 \times \frac{58}{100}$

$$
=232000
$$

Hence,
City $6>$ city $1>$ city $4>$ city $3>$ city 2 $>$ city 5 is coreect order.

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

## MEANINGS IN ALPHABETICAL ORDER

Word
Acclaim
Appalling
Applaud
Barren
Billowed
Bouffant

Braid
Colony
Contemplative
Dependant

## Dire <br> Drove <br> Eulogize

Flock
Ghastly
Glabrous

Hirsut
Imminent
Meow
Pensive
Petrified
Prosody
\(\left.\left.\left.$$
\begin{array}{ll}\text { Purr } & \text { A low vibratory murmur typical of an apparently } \\
\text { contented or pleased cat }\end{array}
$$\right\} $$
\begin{array}{l}\text { A slight objection or criticism. } \\
\text { Quibble } \\
\text { Reassure }\end{array}
$$ $$
\begin{array}{l}\text { Say or do something to remove the doubts and } \\
\text { fears of (someone) }\end{array}
$$\right\} \begin{array}{l}Dependence on or trust in someone or something <br>

Reliance\end{array} \quad $$
\begin{array}{l}\text { To become enraptured faint, droop, fade }\end{array}
$$\right\}\)| Swoon | Stupor, daze, a sleep like state |
| :--- | :--- |

## Meaning in Hindi

प्र प सा क्रना
\% T यकर, $\%$ T य वह
सा हना
बं ज़ $\mathrm{T}_{\mathrm{o}}$ मि
विशे षा तः जनतरं ग
हा, हॉ रा ले बा ल

गु 2 T ना

एकप्र का र के जानवरा ${ }^{\text { }}$ का
समू ह

धय नश१ ल
आ श्रित
\& $\uparrow \uparrow$ Øण प
जानवरा ${ }^{\text {' }}$ का झू प्ड
प्र प सा क्रना
पक्ष्र य' का सू ह

चिकना

रा ${ }^{\prime}$ ये दा र, 9 बा लदा र
सने नक्ट
बिल ली की अ वा ज
विचा रमग न
ड रा ना
छ द च

बिल ली की आ वा जज्म वह
ख. प्र हा'
आ ला` चना
स हसदिला ना

निभ $T^{〔}$ र
बे हॉ' प
बे हा' पी की हा लत

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
SSC MOCK TEST - 117 (ANSWER KEY)

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

86. (C) When each, every, neither, either, anyone, is used as subject, 3rd person singular is uses as the possessive case. Thus replace 'theirs' with 'his'. However the noun or pronoun following 'of' is plural in form.
87. (D) Past continuous tense is used to show that something continued for some time. Hence 'The wolf was waiting'. is correct
88. (C) Indefinite article 'a/an' is used before singular countable noun. Hence replace article 'the' with 'a'.

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

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

