## SSC MOCK TEST - 124 (SOLUTION)

1. (B) Cow's child is known as Calf. Similarly, Sheep's child is known as Lamb.
2. (C)


Similarly,

3. (C) $562 \Rightarrow 5 \times 6 \times 2 \times \frac{3}{2}=90$

Similarly, $663 \Rightarrow 6 \times 6 \times 3 \times \frac{3}{2}=\mathbf{1 6 2}$
4. (D) Except Chess, all games belongs to physical work.
5. (C)

6. (C) $120-1332 \Rightarrow\left[(11)^{2}-1\right]-\left[(11)^{3}+1\right]$
$168-2198 \Rightarrow\left[(13)^{2}-1\right]-\left[(13)^{3}+1\right]$
$197-2744 \Rightarrow\left[(14)^{2}+1\right]-\left[(14)^{3}\right]$
$288-4914 \Rightarrow\left[(17)^{2}-1\right]-\left[(17)^{3}+1\right]$
7. (A) Xanthic $\rightarrow$ Xenians $\rightarrow$ Xenous $\rightarrow$ Xylyls $\rightarrow$ Xyst.
8. (C) According to Suman,
the date will be $14^{\text {th }}$ May and $15^{\text {th }}$ May. but, according to her brother, the date will be $15^{\text {th }}$ May and $16^{\text {th }}$ May

Hence, Required date $=\mathbf{1 5}^{\text {th }}$ May
9. (C) $\mathrm{M}>$ all other drinks
$\mathrm{E}>\mathrm{L}$ only and $\mathrm{B}<\mathrm{R}$
Hence, correct sequence $=M>R>B>E$ $>\mathrm{L}$

Hence, 2nd most sugar content $=\mathbf{R}$
10. (B) TUNE
11. (A)

12. (D)


13. (A)



14. (B)
15. (C) Change the Symbol, as per given details,
$3-12+16 \times 17 \div 1=261 \neq 163$
$5 \div 7-9 \times 8+2=\frac{-485}{7} \neq 294$
$13 \div 13-13+13 \times 13=157$
$18 \div 16 \times 49-27+9=\frac{297}{8} \neq 200$
16. (A) $9 \# 2 \# 5 \Rightarrow 529=(23)^{2}$

1 \# $4 \# 8 \Rightarrow 841=(29)^{2}$
1 \# 6 \# $3 \Rightarrow 361=(\mathbf{1 9})^{2}$
17. (D) $9^{2}+6^{2}=117$
$8^{2}+2^{2}=68$
$7^{2}+3^{2}=\mathbf{5 8}$
18. (B)
19. (D)


## I True

II False
20. (A)
21. (D)
22. (B)
23. (B)
24. (B)
25. (A)
26. (C) Sri Nagendra Singh was an Indian lawyer and administrator who served as President of the International Court of Justice from 1985 to 1988.

- Justice Madan Bhimrao Lokur is a judge of the Supreme Court of India.
- Justice Dipak Misra is the Chief Justice of India. He is the 45th Chief Justice of India (CJI).
- Gita Mittal is the acting Chief Justice of the Delhi High Court.

27. (C) A Gandharva Marriage is one of the eight classical types of Hindu marriage. This ancient marriage tradition from the Indian subcontinent was based on mutual attraction between two people, with no rituals, witnesses or family participation.Any love affair with or without physical intimacy comes under this category for astrological purpose.

- Brahma Vivah : Marriage of a girl with the boy of same Varna with Vedic rites and rituals.
- Daiva Vivah: When father donated his daughter to a priest as a part of Dakshina.
- Arsa Vivah: A token bride-price of a Cow and a Bull was given.

28. (D) "An Inquiry into the Nature and Causes of the Wealth of Nations is the masterpiece of the Scottish economist and moral philosopher Adam Smith. It was first published in 1776.
29. (D) Kshitish Chandra Neogy also known as KC Neogy, was an Indian politician from West Bengal. He was a member of the Constituent Assembly of India, member of the first Cabinet of independent India and the chairman of the first Finance Commission of India.

- Sardar Patel was the first Deputy Prime Minister of India.
- P.V. Rajamannar was the first Indian to become Chief Justice of Madras High Court after independence from 1948 to 1961.
- John Mathai was the first Railway Minister of India.

30. (A) Mount Everest, also known in Nepal as Sagarmatha and in Tibet as Chomolungma, is Earth's highest mountain. It is located in the Mahalangur mountain range in Nepal and Tibet. Its peak is 8,848 meters $(29,029 \mathrm{ft})$ above sea level. It is not the furthest summit from the center of the Earth.
31. (B) A crescograph is a device for measuring growth in plants. It was invented in the early 20th century by Sir Jagdish Chandra Bose. India, in 1958 issued a commemorative postage stamp in honour of the centennial of his birth.
32. (B) Mulberry is a plant that is grown for silkworm rearing. It is the exclusive food for the silkworm, which during its larval life is reared for silk production. Mulberry forms the basic food material for silkworms.
33. (D) Ptyalin is an enzyme found in the saliva that has the same properties as amylase. Ptyalin converts cooked starch into maltose. The main function of ptyalin is to catalyze the hydrolysis of starch into maltose and dextrin.
34. (A) Article 15 of Constitution of India deals with Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.
35. (B) Otorhinolaryngology is a surgical subspecialty within medicine that deals with conditions of the ear, nose, and throat (ENT) and related structures of the head and neck.
36. (A) A unit of measurement for the total amount of ozone in the atmosphere above a point on the earth's surface, one Dobson unit being equivalent to a layer of pure ozone 0.01 mm thick at standard temperature and pressure.
40.(C) Amoebic dysentery or intestinal amoebiasis is a parasitic infection that is caused by the protozoa Entamoeba histolytica. This protozoan parasite is said to be the 3rd leading intestinal infection that can cause death.
37. (A) The GDP or gross domestic product of a country provides a measure of the monetary value of the goods and services it produces in a specific year.
38. (D) kinetics is the study of chemical processes and rates of reactions. This includes analysis of conditions that affect speed of a chemical reaction, understanding reaction mechanisms and transition states, and forming mathematical models to predict and describe a chemical reaction.
39. (A) Hydroscope: An optical device used for viewing objects far below the surface of water.
40. (C) Helium exists only as a gas except in extreme conditions. It is the second lightest element and is the second most abundant in the universe. Most helium was formed during the Big Bang, but new helium is created through nuclear fusion of hydrogen in stars.
41. (D) Anti-Defection Law is contained in the Tenth Schedule of the Constitution, which was introduced by the 52 nd Amendment in 1985 during tenure of Rajiv Gandhi. Earlier, 10th schedule was related to association of Sikkim with India.
42. (A) The Ashta Pradhan was a council of eight ministers that administered the Maratha empire. The council was formed in 1674 by their king, Chatrapati Shivaji Maharaj.
43. (D) Manushi Chhillar is an Indian model and beauty pageant titleholder who was crowned Miss World 2017. She was previously crowned Femina Miss India 2017 on 25 June 2017. Chhillar was born to Jat family in Haryana. Her father, Dr. Mitra Basu Chhillar, is a scientist at the Defence Research and Development Organisation.
44. (B) ATQ,

Factors of $2145=11 \times 13 \times 15$
So, smallest number $=\mathbf{1 1}$
52. (D) ATQ,
$42 \mathrm{M}=56 \mathrm{~B}$
$\Rightarrow 3 \mathrm{M}=4 \mathrm{~B}$
Then, $56 \times 20=(8 B+20 B) \times D$
$\Rightarrow \quad \mathrm{D}=40$ days
53. (B) ATQ,
$\begin{aligned} \text { No. of spherical balls } & =\frac{\frac{2}{3} \times \pi \times 8 \times 8 \times 8}{\frac{4}{3} \pi \times 1 \times 1 \times 1} \\ & =\mathbf{2 5 6}\end{aligned}$
54. (A) ATQ,

Required discount $=\frac{(1380-950)}{1380} \times 100$

$$
=31.159 \%
$$

55. (C) ATQ,

Required ratio $=\frac{12 \times(100-25)}{100}$
$: \frac{14 \times(100-42.85)}{100}: \frac{15 \times(100-33.33)}{100}$
$=12 \times \frac{3}{4}: 14 \times \frac{4}{7}: 15 \times \frac{2}{3}$
$=9: 8: 10$
56. (D) ATQ,

Required Weight $=\frac{23 \times 3+27 \times 5}{8}$

$$
=\frac{204}{8}=\mathbf{2 5 . 5} \mathbf{k g s}
$$

57. (B) ATQ,

Required profit

$$
=\frac{48 \times(60+10)-60 \times 45}{60 \times 45} \times 100=\mathbf{2 4 . 4 4 \%}
$$

58. (B) ATQ,

Required percent $=\frac{(10-1)}{10} \times 100=\mathbf{9 0} \%$
59. (C) ATQ,

Distance travelled by first runner till
$8: 30 \mathrm{am}=12 \times \frac{5}{2}=30 \mathrm{kms}$
Hence, Required time $=8: 30+\frac{30}{15-12}$ hours = 6 : 30pm
60. (B) ATQ,
$P \times\left(1+\frac{12}{100}\right)^{3}=7305.6256$
$\Rightarrow \mathrm{P} \times \frac{28}{25} \times \frac{28}{25} \times \frac{28}{25}=\frac{73056256}{10000}$
$\Rightarrow \quad P=₹ 5200$
61. (A) ATQ,
$x+\frac{1}{x}=7$
$\Rightarrow x-\frac{1}{x}=\sqrt{(7)^{2}-4}=\sqrt{45}=3 \sqrt{5}$
62. (C) ATQ,
$x=\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}=\frac{3+2+2 \sqrt{6}}{3-2}=5+2 \sqrt{6}$
and $\frac{1}{x}=5-2 \sqrt{6}$
$\Rightarrow x+\frac{1}{x}=5-2 \sqrt{6}+5+2 \sqrt{6}=10$
then, $x^{2}+\frac{1}{x^{2}}=98$
Hence, $\frac{x^{5}+x^{4}+x^{3}+x}{x^{3}}=x^{2}+\frac{1}{x^{2}}+x+\frac{1}{x}$ $=98+10=\mathbf{1 0 8}$
63. (C) ATQ,
$x=7-2 \sqrt{12}$
$\left.\Rightarrow \sqrt{x}=(\sqrt{3})^{2}+(\sqrt{4})^{2}-2 \times \sqrt{3} \times \sqrt{4}\right)^{\frac{1}{2}}=(2-\sqrt{3})$
and $\frac{1}{\sqrt{x}}=\frac{1}{2-\sqrt{3}}=2+\sqrt{3}$
Hence, $\sqrt{x}+\frac{1}{\sqrt{x}}=2-\sqrt{3}+2+\sqrt{3}=\mathbf{4}$
64. (B) ATQ,
$27^{x}+27\left(x-\frac{1}{3}\right)=26244$

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$\Rightarrow 27^{x}+\frac{27^{x}}{27^{\frac{1}{3}}}=26244$
$\Rightarrow 27^{x}\left(1+\frac{1}{3}\right)=26244$
$\Rightarrow 27^{x}=26244 \times \frac{3}{4}=19683$
$\Rightarrow 27^{x}=27^{3}$
On comparing both sides.
$\Rightarrow x=3$
65. $(\underset{\text { C })}{ }$ circum-radius of equilateral triangle $=$ $2 \times$ inradius $=2 \times 20=40 \mathrm{~cm}$
66. (C) ATQ,

## Centroid

67. (B) ATQ,

All the points like centriod, ortho centre, incentre and circum centre lie on onepoints. Hence,
$\angle \mathrm{BPC}=90^{\circ}+\frac{\angle \mathrm{A}}{2}=\mathbf{1 2 0}^{\circ}$
68. (A) ATQ,


When two sides are in ratio $3: 4$, then triangle will be in triplet $3: 4: 5$ then,
$\frac{\mathrm{AB}}{\mathrm{AC}}=\frac{\mathrm{BD}}{\mathrm{BC}}=\frac{3}{4}$
$\frac{x}{5-x}=\frac{3}{4}$
$\Rightarrow \quad x=(5-x) \times \frac{3}{4}$
$4 x=15-3 x$
$x=\frac{15}{7} \mathrm{~K}$
But perpendicular from $A=\frac{\frac{1}{2} \times 3 \times 4}{5}=2.4 \mathrm{~K}$
Hence area of $\Delta \mathrm{ABD}=\frac{1}{2} \times \frac{15}{7} \mathrm{~K} \times 2.4 \mathrm{~K}$

$$
=\frac{1}{2} \times \frac{15}{7} \times \frac{24}{10} \times \frac{700}{12}
$$

$=150 \mathrm{~cm}^{2}$
[But

$$
\left[\frac{1}{2} \times 3 \mathrm{~K} \times 4 \mathrm{~K}=350\right]
$$

$$
\Rightarrow \quad \mathrm{K}^{2}=\frac{700}{12}
$$

69. (C) ATQ,

in 10 sec distance travelled by boat $=$ 40m.
then, Required time $=\frac{60 \times 10}{40}=\mathbf{1 5} \mathbf{~ s e c}$
70. (D) ATQ,
$\frac{\operatorname{cosec} \theta}{(\operatorname{cosec} \theta-1)}+\frac{\operatorname{cosec} \theta}{(\operatorname{cosec} \theta+1)}$
$=\frac{\operatorname{cosec} \theta(2 \operatorname{cosec} \theta)}{\left(\operatorname{cosec}^{2} \theta-1\right)}=\frac{2 \operatorname{cosec}^{2} \theta}{\cot ^{2} \theta}$
$=2 \boldsymbol{s e c}^{2} \boldsymbol{\theta}$
71. (D) ATQ,
$\sec \theta=\frac{1}{4 x}+x$
$\Rightarrow 2 \sec \theta=\frac{1}{2 x}+2 x$
this is calculated by following equations
$\boldsymbol{\operatorname { t a n }} \theta+\sec \theta=2 x$ or $\frac{1}{2 x}$
$\sec \theta-\tan \theta=\frac{1}{2 x}$ or $2 x$
72. (C) Required percentage $=\frac{(24-8)}{8} \times 100$

$$
=200 \%
$$

73. (A) Required difference $=\frac{1875 \times(24-16)}{100}$

$$
=150
$$

74. (D) The sectorial Angle $=\frac{360 \times 32}{100}=\mathbf{1 1 5 . 2}^{\circ}$
75. (A) Here one number is required which can be divided into such\%.

## MEANINGS IN ALPHABETICAL ORDER



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## SSC MOCK TEST - 124 (ANSWER KEY)

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

76. (A) Replace 'were' with 'was' because the main subject 'luggage' is an uncountable noun and it takes singular verb.
77. (D) 'Many a' is used with 'singular noun'.
78. (A) In this sentence 'who are' is not needed.
79. (B) Replace 'didn't he' with 'doesn't he' because the sentence and the question tag must be in same tense.


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

