## SSC CHSL SOLUTION PAPER - 03

Ques 1. ANS (B) Solution:
Ques 2. ANS (C) Solution:


Ques 3. ANS (B) Solution:
Opposite letter is followed

| N | I | T | R | A | T | E |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| M | R | G | I | Z | G | V |

Ques 4. ANS (C) Solution:
$17 \times 8+17=153 \quad 16 \times 5+16=96$
Ques 5. ANS (D) Solution: Solution: Frog comes under Amphibian Geckos comes under Reptiles
Ques 6. ANS (B) Solution:

| 6 | 3 | 2 |
| :--- | :--- | :--- |
| $\mathfrak{l}$ | $\mathfrak{1}$ | $\mathfrak{1}$ |
| 4 | 1 | 5 |

Ques 7. ANS (A) Solution:
Ques 8. ANS (C) Solution:
Ques 9. ANS (A) Solution:

| 5: | 30 | 3 | $:$ | 5 |
| :--- | :--- | :--- | :--- | :--- |
| 5 | $4^{2}+3^{2}+2^{2}+1$ | 3 |  | $2^{2}+1^{2}$ |

Ques 10. ANS (A) Solution:
Ques 11. ANS (D) Solution:


Ques 12. ANS (A) Solution:


Ques 13. ANS (A) Solution:


Ques 14. ANS (C) Solution:

$$
\begin{aligned}
& 18 \times 6+12 \div 3-11 \\
& 108+4-11 \\
& 101
\end{aligned}
$$

Ques 15. ANS (A) Solution:

| $P$ | $A$ | $L$ | $E$ | $G$ | $O$ | $A$ | $T$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 6 | 9 | 1 | 4 | 7 | 6 | 2 |
| $E$ | $G$ | $O$ |  |  |  |  |  |
| 1 | 5 | 7 |  |  |  |  |  |

Ques 16. ANS (A) Solution: Country: National: animal.
Ques 17. ANS (C) Solution:


## All follow this logic except (c)

Ques 18. ANS (D) Solution:


Ques 19. ANS (C) Solution:

$$
\begin{aligned}
& 3 \times 6=18 \Rightarrow 3186 \\
& \text { All follow this logic except (c) }
\end{aligned}
$$

Ques 20. ANS (A) Solution:
Ques 21. ANS (D) Solution:

$$
\begin{aligned}
& 9 \times 3=27 \Rightarrow 27 \times 2=54 \Rightarrow 54+1=55 \\
& 7 \times 4=28 \Rightarrow 28 \times 2=56 \Rightarrow 56+1=57
\end{aligned}
$$

Ques 22. ANS (D) Solution: Solution: all are four footed animal except (d)
Ques 23. ANS (A) Solution:
Ques 24. ANS (A) Solution:
Ques 25. ANS (D) Solution: Solution: All are perfect squares except (d)
Ques 26. ANS (A) Solution: Solution: The famous 'Dancing girl' found in Mohenjodaro is an artifact that is some 4,500 years old. The 10.8 cm long statue of the dancing girl was found in 1926 from a house in Mohenjodaro is made of bronze.

Ques 27. ANS (B) Solution: Solution: A Moroccan traveller, Ibn Butula (1333-1347 AD) visited India during the reign of Muhammad-bin-Tughlaq. His book Rehla (the Travelogue) throws a lot of light on the reign of Muhammad-bin-Tughlaq and the geographical, economic and social conditions in India.

Ques 28. ANS (B) Solution: Solution: Lord Dalhousie had started the Public Works Department in India in 1848. Before the period of Dalhousie, the job of the Public Works Department was done by the Military Board. Dalhousie created a separate Public Works Department and allotted more funds for cutting canals and roads.

Ques 29. ANS (A) Solution: Solution: Latitude can be thought of as the angular distance of a point (on the surface of earth) north or south of the equator. Since the plane of equator is the reference plane for measuring latitudes, equator is at $0^{\circ}$ latitude.

Ques 30. ANS (B) Solution: Solution: Cumulonimbus clouds are a type of cumulus cloud associated with thunder storms and heavy precipitation. They are also a variation of nimbus or precipitation bearing clouds. They are formed beneath $20,000 \mathrm{ft}$. and are relatively close to the ground.

Ques 31. ANS (D) Solution: Solution: The Sea of Azov is the shallowest sea in the world, with the depth varying between 0.9 and 14 metres ( 2 ft 11 in and 45 ft 11 in ).

Ques 32. ANS (B) Solution: Solution: The Tehri Dam is the highest dam in India and one of the tallest in the world. It is a multi- purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand, India.

Ques 33. ANS (D) Solution: Solution: The president may also be removed before the expiry of the term through impeachment for violating the Constitution of India by the Parliament of India. The process may start in either of the two houses of the parliament. The house initiates the process by levelling the charges against the president.

Ques 34. ANS (D) Solution: Solution: Inflation is increase in the prices of commodities. It is caused due to decrease in supply and increase in demand of commodities. So when money supply in the economy increases it means people have more purchasing capacity and thus demand increases which results in inflation.

Ques 35. ANS (D) Solution: Solution: When water is heated from 0 degree Celsius to 10 degree Celsius , its volume first decreases and then increases .

Ques 36. ANS (B) Solution: Solution: If a liquid is heated in space under no gravity, the transfer of heat will take place by process of Convection.

Ques 37. ANS (D) Solution: Solution: Chlorophyll is a chlorine pigment in which at the centre of the chlorine ring is a magnesium ion. Chlorine ring also bears a long phytol chain.

Ques 38. ANS (D) Solution: Solution: Fullerenes are a class of carbon allotropes in which carbon takes the form of a hollow sphere, ellipsoid, or tube. This class of materials includes carbon nanotubes, buckyballs, and the newly discovered nanobuds.

Ques 39. ANS (D) Solution: Solution: Vitamin D is a steroid hormone, a group of fat- soluble secosteroids that plays a vital role in calcium and phosphate absorption. Vitamin D also enhances intestinal absorption of calcium, iron, magnesium, phosphate and zinc in human beings.

Ques 40. ANS (A) Solution: Solution: The annual "Flamingo Festival" began at Sullurpeta near the Pulicat lake bird sanctuary in Nellore district of Andhra Pradesh.

Ques 41. ANS (B) Solution: Solution: The UNESCO (United Nations Educational, Scientific and Cultural Organisation) inscribes three Indian performing-art forms, the Mudiyettu, a ritual theatre of Kerala; the Chhau dance, a tradition from eastern India; and the Kalbelia folk songs and dances of Rajasthan in the Representative List of the Intangible Cultural Heritage of Humanity.

Ques 42. ANS (A) Solution: Solution: In 2006, Kejriwal was awarded the Ramon Magsaysay Award for Emergent Leadership recognising his involvement in a grassroots movement Parivartan using right-to-information legislation in a campaign against corruption.

Ques 43. ANS (B) Solution: Solution: Morarji Desai has received both Bharat Ratna and Nishan -e -Pakistan.
Ques 44. ANS (C) Solution: Solution: Rajasthan's Jaipur station of Indian Railways has topped the list of cleanest railway stations in India, in the non-suburban group of stations.

Ques 45. ANS (C) Solution: Solution: Peddapalli in Telangana has jumped two places in the annual sanitation survey to become the cleanest district replacing Satara in Maharashtra.

Ques 46. ANS (B) Solution: Solution: $6.1 \%$ is the Gross domestic product (GDP) growth of India for the year 201920 as per Reserve Bank of India(RBI).

Ques 47. ANS (B) Solution: Solution: The Happiness Department of Madhya Pradesh government has decided to set up a Time Bank that would lend currency to an hour, which could be exchanged to learn a new skill without the need for any paper money. It's a reciprocal service exchange which uses units of time as currency.

Ques 48. ANS (D) Solution: Solution: Prime Minister Narendra Modi inaugurated newly constructed Vidhan Sabha or Legislative Assembly of Jharkhand building at Kute gram in Ranchi (capital of Jharkhand). PM Modi was accompanied by Jharkhand Chief Minister Raghubar Das and Jharkhand Governor Droupadi Murmu for the inauguration.

Ques 49. ANS (C) Solution: Solution: India will host the 2023 Men's Hockey World Cup from 13th to 29th of January.

Ques 50. ANS (D) Solution: Solution: Launched earlier this year in the US, Europe - the UK, France, Italy, Spain, Germany, and Japan, Project Zero is a programme which ensures that customers always receive authentic products when shopping on Amazon.

Ques 51. ANS (D) Solution:

$\frac{720}{53}=13 \frac{31}{53}$ days
Ques 52. ANS (A) Solution:

$$
\begin{aligned}
& x+\frac{1}{x}=10 \\
& x^{3}+\frac{1}{x^{3}}=(10)^{3}-30=970 \\
& \frac{x^{3}+\frac{1}{x^{3}}}{2}=\frac{970}{2}=485
\end{aligned}
$$

Ques 53. ANS (B) Solution:
माना $A$ और $B$ की वर्तमान आयु क्रमश: $4 x$ एवं $3 x$ है।

## प्रश्नानुसार:

$\frac{4 x-5}{3 x-5}=\frac{2}{1}$
$\Rightarrow 4 x-5=6 x-10$
$\Rightarrow x=5 / 2=2.5$

5 साल बाद, कुल आयु $=(4 x+5)+(3 x+5)$
$=7 x+10=7 \times 2.5+10$
$=27.5$ वर्ष

Ques 54. ANS (A) Solution:

$\frac{577}{100} \times 100=57.7 \%$
Ques 55. ANS (A) Solution:


Ques 56. ANS (A) Solution:
$\frac{3(3)-5+7}{3(3+5+7)}=\frac{11}{45}$
Ques 57. ANS (A) Solution:
Ques 58. ANS (B) Solution:
$2 x 2987 y$
For $\mathrm{y}=2872$ is divisible by 8
$\frac{2+x+2+9+8+7+2}{9} \Rightarrow x=6$
$x+y=6+2=8$
Ques 59. ANS (B) Solution:
$\frac{1}{8}\left\{x^{2}+\frac{1}{x^{2}}+2-x^{2}-\frac{1}{x^{2}}+2\right\}$
$\frac{1}{2}$
Ques 60. ANS (D) Solution:

$$
\mathrm{A}=\frac{1}{2} \times \frac{9}{100} \times \frac{24}{100}=\frac{108}{10000}=0.0108 \mathrm{~m}^{2}
$$

Ques 61. ANS (A) Solution:


Ques 62. ANS (A) Solution:

| 100 | 129 | $\times 73$ |
| :---: | :---: | :---: |
| 100 | 73 | $\times 129$ |
| CP | SP |  |
| 7300 | 9417 |  |
| $\frac{12900}{20200}$ |  | 9417 |
|  |  |  |
| $-\frac{18942}{20200} \times 100=6.22 \%$ loss |  |  |

Ques 63. ANS (A) Solution:


$$
\begin{aligned}
& \frac{Q R}{C R}=\frac{\sqrt{5}}{\sqrt{2}} \\
& \cdot \frac{Q R}{C R}=\frac{\sqrt{5}}{\sqrt{5}-\sqrt{2}} \times \frac{\sqrt{5}+\sqrt{2}}{\sqrt{5}+\sqrt{2}} \\
& =\frac{\sqrt{5}(\sqrt{5}+\sqrt{2})}{3}
\end{aligned}
$$

Ques 64. ANS (B) Solution:
$x \times \frac{72}{100} \times \frac{96}{100}=483.84$
$x=\frac{483.84 \times 100 \times 100}{72 \times 96}$
$x=700$
Ques 65. ANS (D) Solution:

$$
\frac{2.0050+0.0000125}{1.905}=1.0525
$$

Ques 66. ANS (B) Solution:

$$
\frac{7}{25} \operatorname{Sin} \theta+\frac{24}{25} \cos \theta=1
$$



$$
\begin{aligned}
& \operatorname{Sin}^{2} \theta+\operatorname{Cos}^{2} \theta=1 \\
& \tan \theta=\frac{7}{24}
\end{aligned}
$$

Ques 67. ANS (A) Solution:
$\mathrm{AO} \times \mathrm{OB}=\mathrm{CO} \times \mathrm{OD}$
$1 \times 12=x \times(7-x)$
$12=x(7-x)$
Put $x=3$, satisfy the equation CO: OD=3:4


Ques 68. ANS (C) Solution:

$$
\begin{aligned}
& 3 \frac{1}{3} \text { of }\left(\frac{4}{7} \div \frac{2}{21}\right)-\left(6 \frac{1}{3}+\left(\frac{361}{27} \div \frac{19}{81}\right)\right) \\
& \frac{10}{3} \text { of }\left(\frac{4}{7} \times \frac{21}{2}\right)-\left(\frac{19}{3}+\left(\frac{361}{27} \times \frac{81}{19}\right)\right) \\
& \frac{10}{3} \times 6-\left(\frac{19}{3}+19(3)\right) \\
& 20-19\left(\frac{1}{3}+3\right) \\
& 20-19\left(\frac{10}{3}\right) \\
& \frac{60-190}{3}=\frac{-130}{3}
\end{aligned}
$$

Ques 69. ANS (C) Solution:
Let the principal be P and Rate of interest be R\%
Therefore acc. to the given statement
$3 \mathrm{P}=\mathrm{P}+\frac{\mathrm{P} \times R \times 8}{100}$
$\Rightarrow R=\frac{2 P \times 100}{8} \times \frac{1}{P}=25 \%$
Now the same sum became 10 times in
$10 \mathrm{P}=\mathrm{P}+\mathrm{P} \times 25 \times \frac{T}{100}$
$\Rightarrow T=9 P \times \frac{100}{25} \times \frac{1}{P}=36$ years .

Ques 70. ANS (B) Solution:
$\operatorname{Avg}$ of $\mathrm{A}=\frac{5300}{4}=13250$
Avg of $C=\frac{26000}{4}=6500$
Difference $=6750$
Ques 71. ANS (A) Solution:

$$
\operatorname{Avg}=\frac{12000+15000+8000}{3}=\frac{35000}{3}=11666.66
$$

Ques 72. ANS (C) Solution:

$X Y=45 \mathrm{~cm}$
Ques 73. ANS (C) Solution:

$A+C=18 \times 2=36$
Remaining work $=36$ units
$\frac{36}{15}=2 \frac{6}{15} \mathrm{hrs}$
Ques 74. ANS (C) Solution:

## प्रश्नानुसार:

वृत्त की परिधि वर्ग के परिमाप के बराबर होगी।
$\Rightarrow 2 \times \pi \times R=4 a(R=$ वृत्त की त्रिज्या और $a=$ वर्ग की भुजा)
$\Rightarrow 2 \times(22 / 7) \times 14=4 \times \mathrm{a}$
$\Rightarrow a=22$ सेमी

अब,
$\Rightarrow 2 \times \pi \times r \times h=4 \times 22(r$ और $h=$ बेलन की त्रिज्या और ऊंचाई)
$\Rightarrow 2 \times(22 / 7) \times r \times 2=88$
$\Rightarrow r=28$ सेमी
अब प्रश्नानुसार अभीष्ट अनुपात $=(28+2):(28-2)=15: 13$ होगा।
Ques 75. ANS (A) Solution:


Ques 76. ANS (A) Solution: Solution: Verbs and prepositions are followed by objective case of a pronoun. Use "between you and me".

Ques 77. ANS (B) Solution: Solution: Use "only few persons were present there" Few is a quantifier used with plural countable nouns. Without the article "a", few emphasizes a small number of something. Adding the article removes the emphasis- a few means "some". While, adding the definite article "the" means not many, but all of those..
Ques 78. ANS (C) Solution: Solution: The two basic rules about tag questions are: If the statement is negative, the tag must be positive. If the statement is positive the tag must be negative. Here, the sentence is in negative form so use positive tag. Also, since the helping verb used in the sentence is "shall" hence option (c) is the best choice to improve the given sentence.

Ques 79. ANS (B) Solution: Solution: In spite of and despite have a similar meaning to although or even though. They express a contrast between two things. They are both more common in writing than in speaking. Despite is a little more formal than in spite of. We usually use 'in spite of' and 'despite' with a noun.

Ques 80. ANS (C) Solution: Solution: Subvert: to attempt to undercut or overthrow a person or group's authority. Redeem: compensate for the faults or bad aspects of. Endorse: declare one's public approval or support of.

Ques 81. ANS (B) Solution: Solution: Here article "the" is used only before the first subject so it denotes a single subject. Therefore, use singular helping verb "is" here.

Ques 82. ANS (B) Solution:
Ques 83. ANS (D) Solution:
Ques 84. ANS (A) Solution: Solution: Use past tense of verb rise here.
Ques 85. ANS (A) Solution:
Ques 86. ANS (D) Solution:
Ques 87. ANS (C) Solution: Solution: In vogue - in the current fashion or style.
Ques 88. ANS (A) Solution: Solution: In Vain: without success or a result.
Ques 89. ANS (A) Solution: Solution: Hive: a place in which people are busily occupied. Sty: a very dirty or untidy house or room; a pigsty. Creche: a nursery where babies and young children are cared for during the working day.

Ques 90. ANS (A) Solution: Solution: Nadir: the lowest or most unsuccessful point in a situation. Deficit: the amount by which something, especially a sum of money, is too small. Spick and span: neat, clean, and well looked after.

Ques 91. ANS (A) Solution: Solution: Fleeting: lasting for a very short time. Transient: lasting only for a short time; impermanent. Tranquil: free from disturbance; calm. Tepid: (especially of a liquid) only slightly warm; lukewarm.

Ques 92. ANS (C) Solution: Solution: Guile: sly or cunning intelligence Chicanery: the use of deception or subterfuge to achieve one's purpose.

Ques 93. ANS (D) Solution: Solution: Unholy: sinful; wicked. Venerate: regard with great respect; revere. Pity: the feeling of sorrow and compassion caused by the sufferings and misfortunes of others. Pave: cover (a piece of ground) with flat stones or bricks; lay paving over.

Ques 94. ANS (A) Solution: Solution: Lax: not sufficiently strict, severe, or careful.
Ques 95. ANS (D) Solution: Solution: Vacuum is the correct spelling. Vacuum: space entirely devoid of matter.
Ques 96. ANS (A) Solution:
Ques 97. ANS (B) Solution:
Ques 98. ANS (C) Solution:
Ques 99. ANS (C) Solution:
Ques 100. ANS (A) Solution:

