## SSC CHSL Tier-I 2023 Memory Based Paper (Based on 2nd Aug 2023 Exam)

Q1. Select the most appropriate option to fill in the blank in the given sentence.
If I had helped him, he $\qquad$ .
(a) would not be drowned
(b) will not be drowned
(c) will not have drowned
(d) would not have drowned

Q2. Select the option that will improve the segment in bold of the given sentence.
In case no improvement is needed, select 'No improvement.'
Anand bought a book to read it.
(a) to be read.
(b) to read within.
(c) for reading.
(d) No improvement

Q3. Select the most appropriate ANTONYM of the highlighted word in the context of its meaning in the sentence.
As the surprise guest, he delivered an extempore performance that left the audience amazed and entertained.
(a) Rehearsed
(b) Exacerbate
(c) Soliloquy
(d) Obstreperous

Q4. Select the correct passive form of the given sentence.
Shalu has ordered new copies of the album.
(a) New copies of the album have being ordered by Shalu.
(b) New copies of the album has been ordered by Shalu.
(c) New copies of the album has ordered by Shalu.
(d) New copies of the album have been ordered by Shalu.

Q5. Select the option that can be used as a one-word substitute for the given group of words.
Having or showing an excessively high opinion of one's appearance, abilities, or worth
(a) Superior
(b) Vain
(c) Otiose
(d) Domineering

Q6. Select the most appropriate meaning of the highlighted idiom that can be substituted in the following sentence.
He was murdered in cold blood.
(a) in cold weather
(b) deliberately
(c) when blood was cold
(d) regretfully

Q7. Select the most appropriate synonym of the given word. Meagre
(a) Scared
(b) Abundant
(c) Bountiful
(d) Sparse

Q8. Select the correct passive form of the given sentence. The manager explained the latest assignment to Lana.
(a) The latest assignment was explained to Lana by the manager.
(b) The latest assignment had explained to Lana by the manager.
(c) The latest assignment had been explained to Lana by the manager.
(d) The latest assignment had been explain to Lana by the manager.

Q9. Parts of the following sentence have been given as options. Select the option that contains an error.
She is passionately painting a vibrant colours of the breathtaking sunset.
(a) She is passionately
(b) breathtaking sunset.
(c) No error
(d) painting a vibrant colours of the

Q10. Select the INCORRECTLY spelt word.
(a) Peircing
(b) Sleek
(c) Pie
(d) Itch

Q11. Select the most appropriate meaning of the highlighted idiom in the given sentence.
"Just add a bit of cheese to your pasta and Bob's your uncle!" Reena suggested to me over dinner last night.
(a) It becomes easily and quickly achievable
(b) It changes the appearance
(c) It ruins everything
(d) It changes nothing

Q12. Select the most appropriate synonym of the given word. Pompous
(a) Pretentious
(b) Fast
(c) Confine
(d) Antipathy

Q13. Sentences of a paragraph are given below in jumble order. Arrange the sentences in the correct order to from a meaningful and coherent paragraph.
A. Shalini was scrolling down the phone screen while waiting for her friend.
B. Her friend brought a bouquet for Shalini from the market place.
C. When her friend arrived, they went to the market place.
D. The market place was thronging with people.
(a) BACD
(b) DACB
(c) ABCD
(d) ACDB

Q14. The question below consists of a set of labeled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.
P. Many deadwood beetle species recycle the nutrients of woodlands.
Q. Some deadwood beetles are predators or parasitoids to other insect species and restrict population growth of potential pests.
R. Others have recently been found to be pollinators.
S. Working alongside fungi, bacteria and other invertebrates, they break down dead wood and return the nutrients back to the soil.
(a) PSQR
(b) RPSQ
(c) PRQS
(d) QPRS

Q15. Select the most appropriate ANTONYM of the given word.
Fundamental
(a) Significant
(b) Essential
(c) Punctual
(d) Trivial

Q16. Select the option that expresses the given sentence in passive voice.
Robin rolled the marble through a small plastic pipe.
(a) The marble was rolled by Robin in a small plastic pipe.
(b) A small plastic pipe was rolled through a marble by Robin.
(c) The marble was rolled through a small plastic pipe by Robin.
(d) The marble through a small plastic pipe was being rolled by Robin.

Q17. Identify the segment in the given sentence which contains the grammatical error.
If he had studied harder, he will have passed the exam with flying colours.
(a) If he had studied harder,
(b) he will have passed the exam
(c) with flying colours.
(d) no error

Q18. Select the most appropriate option to fill in the blank in the given sentence.
As you sow $\qquad$ shall you reap.
(a) when
(b) show
(c) like
(d) so

Q19. Select the option that will improve the segment in bold of the given sentence.
In case no improvement is needed, select 'No improvement.'
There is any other option but to proceed with caution.
(a) no other
(b) none others
(c) neither
(d) No improvement

Q20. Select the INCORRECTLY spelt word.
(a) Gallantry
(b) Incessant
(c) Obnoxious
(d) Liabilty

Directions (21-25): In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Cotton is one of the most widely grown crops in the world and plays a significant role in the global textile industry. It is a (1) ___ crop, cultivated for its soft, fluffy fibers that are used to make fabrics, clothes, and various other products. Cotton farming requires suitable (2) $\qquad$ , including well-drained soil and a warm climate.
In agriculture, cotton is classified as a (3) $\qquad$ crop, as it is rotated with other plants to improve soil fertility and reduce pests. However, the intensive use of chemical pesticides and fertilizers in conventional cotton farming has raised concerns about its impact on the environment and human health.
To address these issues, many farmers are transitioning to (4)
$\qquad$ cotton farming practices. Organic cotton is grown without synthetic chemicals, promoting biodiversity and reducing the ecological footprint. Additionally, (5) initiatives are being introduced to ensure fair wages and better working conditions for cotton farmers.

Q21. Select the most appropriate option for blank no. 1.
(a) valiant
(b) perennial
(c) versatile
(d) valuable

Q22. Select the most appropriate option for blank no. 2.
(a) climate
(b) whether
(c) locate
(d) regional

Q23. Select the most appropriate option for blank no. 3.
(a) cash
(b) cashmere
(c) cashless
(d) cash crop

Q24. Select the most appropriate option for blank no. 4.
(a) conventional
(b) sustainable
(c) renew
(d) traditional

Q25. Select the most appropriate option for blank no. 5.
(a) economic
(b) cultural
(c) social
(d) environmental

Q26. ऐसी आकृति चुनें जो आकृति $(Z)$ के खुलने पर सबसे अधिक मिलतीजुलती हो।


Q27. कौन सी उत्तर आकृति प्रश्न आकृति के पैटर्न को पूरा करेगी?

(a)

(b)

(c)

(d)


Q28. यदि एक दर्पण को रेखा MN पर रखा जाए, तो उत्तर आकृतियों में से कौन सी आकृति दी गई आकृति का सही प्रतिबिम्ब है?

(a)

(b)

(c)

(d)


Q29. यदि INTELLIGENT को RMGVOORTVMG के रूप में कूटबद्ध किया जाता है, तो EXCELLENT को किस प्रकार लिखा जायेगा?
(a) VCXWOOVMG
(b) VBXVOOVMG
(c) VCXVOOVMG
(d) VCYVOOVMG

Q30. उस विकल्प का चयन करें जो तीसरे पद से उसी तरह संबंधित है, जिस प्रकार दूसरा पद पहले पद से संबंधित है।
PLEASE: 58 :: SORRY:
(a) 95
(b) 94
(c) 97
(d) 96

Q31. नीलम, सुरेश की पत्नी है। उनकी दो पुत्रियाँ निशा और नैंसी हैं। सुरेश राम कृष्ण और रीना के दामाद हैं। नीलम, रीना से किस प्रकार संबंधित है?
(a) माँ
(b) बहन
(c) पुत्री
(d) नीस

Q32. उस विकल्प का चयन करें जो तीसरे पद से उसी तरह संबंधित है, जिस प्रकार दूसरा पद पहले पद से संबंधित है।
त्वचा: स्पर्श :: नाक:
(a) सुनना
(b) गंध
(c) नथनी
(d) पसीना

Q33. उस सेट का चयन करें, जिसमें संख्याएँ उसी प्रकार संबंधित हैं जैसे निम्नलिखित सेट की संख्याएँ दी गयी हैं।
$(45,9,25)$
$(64,8,64)$
(a) $(25,25,1)$
(b) $(56,14,25)$
(c) $(9,3,16)$
(d) $(30,5,35)$

Q34. उस विकल्प का चयन करें जो तीसरे पद से उसी प्रकार संबंधित है जैसे दूसरा पद पहले पद से संबंधित है।
SPRUCE: VSUXFH :: ECONOMY:
(a) HFRQRPA
(b) HFRQRPB
(c) HFRPRPB
(d) HERQRPB

Q35. उस शब्द का चयन करें जो ? के स्थान पर आएगा।
$23,24,28,37,53,78$,?
(a) 100
(b) 118
(c) 102
(d) 114

Q36. लुप्त पद ज्ञात कीजिये.
240, 242, 245, 250, 257,?
(a) 266
(b) 268
(c) 267
(d) 265

Q37. विषम ज्ञात कीजिये.
(a) EJOTY
(b) AFKPU
(c) DINSX
(d) TYDIM

Q38. ज्ञात कीजिये.
(a) पंडित स्वपन चौधरी
(b) उस्ताद अल्लाह रक्खा
(c) उस्ताद जाकिर हुसैन
(d) पंडित रविशंकर

Q39. उस सेट का चयन करें जिसमें संख्याएँ उसी तरह से संबंधित नहीं हैं, जिस प्रकार कि निम्नलिखित सेट की संख्याएं दी गयी हैं।
$(10,27,307)$
$(5,29,179)$
(a) $(15,20,335)$
(b) $(25,10,285)$
(c) $(6,8,62)$
(d) $(21,6,151)$

Q40. अक्षरों के उस संयोजन का चयन करें जो दिए गए अक्षर के अंतराल में व्यवस्थित होने पर श्रृंखला को पूरा करेगा।
F_N C_FA__ F_N_Y
(a) AYNCYAF
(b) AYNCYAC
(c) AYNCYAY
(d) AYNCYAA

Q41. निम्नलिखित शब्दों को उसी प्रकार व्यवस्थित करें जैसे वे शब्दकोश में रखे गए हैं। जब हम शब्दकोश में व्यवस्थित करते हैं, तो कौन सा शब्द चौथे स्थान पर आता है।

1. Perfectly
2. Perform
3. Percentage
4. Performance
5. Perfect
(a) Perfect
(b) Performance
(c) Perfectly
(d) Perform

Q42. समीकरण को सही बनाने के लिए निम्नलिखित समीकरण में किन दो चिहनों को आपस में बदला जाना चाहिए?
$105 \times 5 \div 3-29+75=109$
(a) $\div$ और $\times$
(b) और $\div$
(c) + और $\times$
(d) + और -

Q43. एक पंक्ति में A बाईं ओर से 11 वें स्थान पर है और B दाईं ओर से 10 वें स्थान पर है। यदि वे आपस में स्थान बदल लेते हैं तो $A$ बाएं से 18 वां हो जाता है। उस पंक्ति में कितने व्यक्ति हैं?
(a) 28
(b) 29
(c) 27
(d) 31

Q44. यदि 23 मार्च 1997 को शुक्रवार है, तो 23 मार्च 1996 को सप्ताह का दिन कौन सा था?
(a) बुधवार
(b) गुरुवार
(c) शुक्रवार
(d) शनिवार

Q45. त्रिभुजों की संख्या ज्ञात कीजिये.

(a) 18
(b) 16
(c) 17
(d) 19

Q46. एक घन में उन विपरीत युग्मों का चयन करें, जो दी गई शीट को रेखाओं के साथ मोड़कर बनाए जा सकते हैं।

(a) A और B
(b) B और F
(c) Y और W
(d) Y और B

Q47. तीन कथन दिए गए हैं जिनके बाद चार निष्कर्ष क्रमांक $1,2,3$ और 4 दिए गए हैं। कथनों को सत्य मानते हुए, भले ही वे सामान्यतः ज्ञात तथ्यों से भिन्न प्रतीत होते हों, निर्णय लें कि कौन सा निष्कर्ष तार्किक रूप से कथनों का अनुसरण करता है।

## कथन:

कुछ बोट याच हैं
सभी याच शिप हैं
सभी शिप बसें हैं

## निष्कर्ष:

I. कुछ बसें याच हैं
II. कुछ बसें बोट हैं
III. कुछ शिप बोट हैं
(a) केवल पहला अनुसरण करता है
(b) सभी निष्कर्ष अनुसरण करते हैं
(c) केवल दूसरा अनुसरण करता है
(d) केवल पहला और दूसरा अनुसरण करते हैं

Q48. यदि + का अर्थ $x, x$ का अर्थ $\div,-$ का अर्थ + , और $\div$ का अर्थ - है, तो नीचे दिए गये समीकरण का मान क्या होगा?
$12 \div 48 \times(3+4)-6 \times 2=$
(a) 11
(b) 10
(c) 9
(d) 7

Q49. कागज के एक टुकड़े को मोड़कर छेद किया जाता है जैसा कि नीचे प्रश्र आकृतियों में दिखाया गया है। दिए गए उत्तर आकृतियों से बताइए कि खोलने पर यह कैसा दिखाई देगा?

(a)

(b)

(c)

(d)


Q50. P, Q R, S और T एक पंक्ति में खड़े हैं। $\mathrm{S}, \mathrm{R}$ के दायें से तीसरे स्थान पर बैठा है। $Q$ क्रमशः $P$ के दायें और $T$ के बायें बैठा है। $S$ पंक्ति के अंत में बैठा है। $P$ के सन्दर्भ में $T$ का स्थान क्या है?
(a) बाएं से तीसरा
(b) दायें से दूसरा
(c) दायें से तीसरा
(d) बाएं से दूसरा

Q51. यदि $x+\frac{1}{x}=7$ है, तो $x^{2}+\frac{1}{x^{2}}$ का मान ज्ञात कीजिए-
(a) 51
(b) 47
(c) 45
(d) 49

Q52. यदि $\sin A+\sin ^{2} A=1$ है, तो $\cos ^{2} A+\cos ^{4} A=$ ?
(a) 1
(b) 0
(c) -1
(d) 2

Q53. $A$ एक कार्य को 15 दिनों में कर सकता है, $B$ उसी कार्य को 25 दिनों में कर सकता है। $A$ और $B$ ने 5 दिनों तक एक साथ कार्य किया। अब, शेष कार्य B और C द्वारा 4 दिनों में पूरा किया गया। C अकेले संपूर्ण कार्य कितने दिनों में पूरा कर सकता है?
(a) $\frac{350}{19}$
(b) $\frac{200}{19}$
(c) $\frac{300}{23}$
(d) $\frac{200}{23}$

Q54. यदि $\cot A=\frac{9}{17}$ है, तो $\operatorname{cosec}^{2} A$ का मान ज्ञात कीजिए-
(a) $\frac{81}{289}$
(b) $\frac{289}{81}$
(c) $\frac{267}{289}$
(d) $\frac{370}{289}$

Q55. यदि $5 x+3 y=15$ और $2 x y=6$ है, तो $5 x-3 y$ का मान ज्ञात कीजिए-
(a) $5 \sqrt{5}$
(b) $3 \sqrt{5}$
(c) $4 \sqrt{5}$
(d) $7 \sqrt{5}$

Q56. एक शंकु के आधार की परिधि $27 \pi$ सेमी है, और शंकु की ऊंचाई 24 सेमी है। इसका आयतन (घन सेमी में) ज्ञात कीजिए।
(a) $2729 \pi$
(b) $1458 \pi$
(c) $9027 \pi$
(d) $1897 \pi$

Q57. दो संकेंद्री वृत्तों की त्रिज्याएं 12 सेमी और 13 सेमी हैं। बड़े वृत्त की जीवा की लंबाई ज्ञात कीजिए, जो छोटे वृत्त की स्पर्श रेखा भी है।
(a) 25 सेमी
(b) 5 सेमी
(c) 20 सेमी
(d) 10 सेमी

Q58. दो व्यक्ति $A$ और $B, 1.2$ किमी के एक वृत्ताकार ट्रैक पर विपरीत दिशा में दौड़ना प्रारंभ करते हैं। A की चाल 45 किमी/घंटा है और B की चाल 27 किमी/घंटा है। वे पहली बार ट्रैक पर कब मिलेंगे?
(a) 1.2 मिनट के बाद
(b) 1.5 मिनट के बाद
(c) 1 मिनट के बाद
(d) 2 मिनट के बाद

Q59. 6 सेमी त्रिज्या वाले एक वृत्त के बाहर एक बिंदु $P$ से, वृत्त पर एक स्पर्श रेखा PA खींची गई है। यदि वृत्त के केंद्र से $P$ की दूरी 10 सेमी है, तो स्पर्श रेखा PA की लंबाई ज्ञात कीजिए।
(a) 9 सेमी
(b) 8 सेमी
(c) 10 सेमी
(d) 8.5 सेमी

Q60. एक निश्चित राशि पर वार्षिक रूप से संयोजित ब्याज की $10 \%$ दर से 1 वर्ष और 9 महीने के लिए चक्रवृद्धि ब्याज 1460 रुपये है। वह राशि ज्ञात कीजिए।
(a) 6980 रुपये
(b) 7500 रुपये
(c) 8000 रुपये
(d) 8200 रुपये

Q61. इनमें से कौन सी संख्या 11 से विभाज्य है?
(a) 13168
(b) 12453
(c) 13541
(d) 11398

Q62. महेश की आय 45000 रुपये है और उसका व्यय 33000 रुपये है। यदि उसकी आय में $22 \%$ की वृद्धि होती है और व्यय में $11 \%$ की वृद्धि होती है, तो बचत में \% वृद्धि ज्ञात कीजिए।
(a) $54.35 \%$
(b) $53 \%$
(c) $52.25 \%$
(d) $55 \%$

Q63. कितने वर्षों में $6 \%$ ब्याज पर साधारण ब्याज, मूलधन का $40 \%$ हो जाएगा?
(a) $6 \frac{2}{3}$
(b) $5 \frac{2}{3}$
(c) $6 \frac{1}{3}$
(d) $5 \frac{1}{3}$

Q64. यदि $2 x+\frac{2}{x}=5$ है, तो $x^{3}+\frac{1}{x^{3}}+2$ का मान ज्ञात कीजिए-
(a) $\frac{25}{8}$
(b) $\frac{56}{9}$
(c) $\frac{79}{5}$
(d) $\frac{81}{8}$

Q65. $\frac{\cos x}{\sec x-1}+\frac{\cos x}{\sec x+1}=$ ?
(a) $2 \cot ^{2} x$
(b) $2 \operatorname{cosec}^{2} x$
(c) $2 \tan ^{2} x$
(d) $2 \sec ^{2} x$

Q66. 45 और 25 का तीसरा समानुपाती ज्ञात कीजिए।
(a) $\frac{138}{9}$
(b) $\frac{120}{7}$
(c) $\frac{125}{9}$
(d) $\frac{126}{7}$

Q67. एक पेन पर क्रय मूल्य से $80 \%$ अधिक मूल्य अंकित किया गया। यदि दी गई छूट $48 \%$ है, तो हानि $\%$ ज्ञात कीजिए।
(a) $6.2 \%$ की हानि
(b) $6.4 \%$ की हानि
(c) $6.6 \%$ की हानि
(d) $6.8 \%$ की हानि

Q68. एक टोपी पर $10 \%$ की छूट देने के बाद, एक दुकानदार $20 \%$ का लाभ अर्जित करता है। अंकित मूल्य और क्रय मूल्य का अनुपात ज्ञात कीजिए।
(a) $4: 3$
(b) $3: 4$
(c) $5: 2$
(d) $2: 5$

Q69. एक बेईमान दुकानदार 1000 ग्राम के स्थान पर 920 ग्राम के बाट का उपयोग करता है। उसका लाभ प्रतिशत ज्ञात कीजिए।
(a) $8.83 \%$
(b) $8.92 \%$
(c) $8.69 \%$
(d) $8.76 \%$

Q70. एक इमारत 11.25 मीटर लंबी है, एक पेड़ 3.15 मीटर लंबा है और एक व्यक्ति 1.8 मीटर लंबा है। व्यक्ति इस प्रकार खड़ा है कि पेड़, व्यक्ति और इमारत के बीच में है। उनके शीर्ष एक सीधी रेखा में हैं। इमारत और पेड़ के पाद के बीच की दूरी 45 मीटर है, व्यक्ति और इमारत के बीच की दूरी ज्ञात कीजिए।
(a) 8.2 मीटर
(b) 7.5 मीटर
(c) 8.4 मीटर
(d) 7.8 मीटर

Q71. नीचे दी गई सारणी चार वस्तुओं का क्रय मूल्य और विक्रय मूल्य दर्शाती है।

| वस्तुएं | क्रय मूल्य | विक्रय मूल्य |
| :--- | :--- | :--- |
| D | 550 | 450 |
| E | 750 | 700 |
| F | 650 | 450 |
| G | 950 | 650 |

$\mathrm{D}, \mathrm{E}$ और F का कुल क्रय मूल्य, $\mathrm{E}, \mathrm{F}$ और G के कुल विक्रय मूल्य का कितना प्रतिशत है?
(a) 108.33 प्रतिशत
(b) 105.37 प्रतिशत
(c) 118.37 प्रतिशत
(d) 101.33 प्रतिशत

Q72. नीचे दिया गया रेखा आलेख 6 कंपनियों द्वारा रेफ्रिजरेटर का उत्पादन दर्शाता है।


कंपनी C 1 द्वारा रेफ्रिजरेटर के उत्पादन का कंपनी C 6 द्वारा रेफ्रिजरेटर के उत्पादन से अनुपात क्या है?
(a) $1: 3$
(b) $4: 1$
(c) $1: 2$
(d) $2: 1$

Q73. नीचे दिया गया वृत्त आलेख पांच महीनों के दौरान एक कंपनी द्वारा बेची गई कारों की कुल संख्या को दर्शाता है।
इन 5 महीनों में बेची गई कारों की कुल संख्या 5400 है। जनवरी और अप्रैल में बेची गई कारों की कुल संख्या, मई में बेची गई कारों की संख्या से कितनी अधिक है?

## मई <br> बेची गई कारों की कुल संख्या


(a) 2258
(b) 2200
(c) 2100
(d) 2160

Q74. एक वर्ग का क्षेत्रफल 1156 वर्ग सेमी है। उस आयत की लंबाई और चौड़ाई के बीच संबंधित अनुपात क्या है जिसकी लंबाई, वर्ग की भुजा से दोगुनी है और जिसकी चौड़ाई, वर्ग की भुजा से 14 सेमी कम है?
(a) $17: 5$
(b) $16: 7$
(c) $21: 19$
(d) $19: 5$

Q75. सरल कीजिए: $60 \%$ of $870-\sqrt{\mathbf{1 4 4 4}}+18 \times 19$
(a) 842
(b) 786
(c) 826
(d) 700

Q76. 1956 में रुक्मणि देवी अरुंडले को कौन सा पुरस्कार दिया गया था?
(a) पद्म श्री
(b) पद्म विभूषण
(c) पद्म भूषण
(d) भारत रत्र

Q77. बिहू नृत्य किस भारतीय राज्य से सम्बंधित है?
(a) केरल
(b) पंजाब
(c) असम
(d) राजस्थान

Q78. बेरीबेरी का प्राथमिक कारण क्या है?
(a) विटामिन B1 (थियामिन) की कमी
(b) विटामिन B12 की कमी
(c) विटामिन C की कमी
(d) विटामिन D की कमी

Q79. बर्फ में नमक मिलाने से क्या प्रभाव पड़ता है?
(a) यह बर्फ के हिमांक को बढ़ाता है।
(b) इसके कारण बर्फ कम तापमान पर पिघलती है।
(c) इसके कारण बर्फ उच्च तापमान पर पिघलती है।
(d) इसका बर्फ पर कोई प्रभाव नहीं पड़ता है।

Q80. भारत की पहली पंचवर्षीय योजना का प्राथमिक फोकस निम्नलिखित में से क्या था?
(a) औद्योगीकरण
(b) कृषि
(c) रक्षा और सुरक्षा
(d) शिक्षा और स्वास्थ्य

Q81. मुंडारी नृत्य मुख्य रूप से किस भारतीय राज्य में किया जाता है?
(a) पंजाब
(b) गुजरात
(c) पश्चिम बंगाल
(d) झारखंड

Q82. भारत के G20 अध्यक्ष पद के लिए वर्तमान शेरपा कौन हैं?
(a) पीयूष गोयल
(b) अमिताभ कांत
(c) संजय भट्टाचार्य
(d) तरुण दास

Q83. भारतीय संविधान का निम्नलिखित में से कौन सा अनुच्छेद शोषण के विरुद्ध अधिकार की गारंटी देता है?
(a) अनुच्छेद 23
(b) अनुच्छेद 24
(c) अनुच्छेद 23 और अनुच्छेद 24 दोनों
(d) उपरोक्त में से कोई नहीं

Q84. 1909 में भौतिकी में नोबेल पुरस्कार किसे प्रदान किया गया था?
(a) अल्बर्ट ए माइकलसन
(b) गुग्लिल्मो मार्कोनी
(c) विल्हेम कॉनराड रॉन्टगन
(d) मैक्स प्लैंक

Q85. प्रधानमंत्री कौशल विकास योजना कब शुरू की गई थी?
(a) 2014
(b) 2015
(c) 2016
(d) 2017

Q86. भारतीय संविधान का अनुच्छेद 368 किससे संबंधित है?
(a) मौलिक अधिकार
(b) राज्य के नीति निदेशक तत्त्व
(c) संविधान में संशोधन
(d) आपातकालीन प्रावधान

Q87. 1861 में विधवा पुनर्विवाह संघ की स्थापना किसने की?
(a) राजा राम मोहन राय
(b) ईश्वर चंद्र विद्यासागर
(c) एमजी रानाडे
(d) स्वामी विवेकानन्द

Q88. एकल टेनिस कोर्ट की चौड़ाई कितनी होती है?
(a) 27 फीट
(b) 30 फीट
(c) 25 फीट
(d) 35 फीट

Q89. अदिति अशोक निम्नलिखित में से किस खेल से सम्बंधित हैं?
(a) क्रिकेट
(b) टेनिस
(c) गोल्फ
(d) बैडमिंटन

Q90. पोटेशियम और अल्कोहल के बीच अभिक्रिया का उपोत्पाद क्या है?
(a) हाइड्रोजन गैस
(b) ऑक्सीजन गैस
(c) कार्बन डाइऑक्साइड
(d) नाइट्रोजन गैस

Q91. शिव कुमार शर्मा किस संगीत वाद्ययंत्र से सर्वाधिक प्रसिद्ध हैं?
(a) तबला
(b) सितार
(c) संतूर
(d) बांसुरी

Q92. आईपीएल 2023 में ऑरेंज कैप किसने जीती?
(a) शुबमन गिल
(b) फाफ डु प्लेसिस
(c) जोस बटलर
(d) डेविड वार्नर

Q93. भारत के संविधान का अनुच्छेद 76 $\qquad$ के कार्यालय से संबंधित है।
(a) भारत के राष्ट्रपति
(b) भारत के प्रधानमंत्री
(c) भारत के मुख्य न्यायाधीश
(d) भारत के अटॉर्नी जनरल

Q94. भारत के किस राज्य में सर्वाधिक एल्युमीनियम प्रगलन होता है?
(a) महाराष्ट्र
(b) ओडिशा
(c) तमिलनाडु
(d) केरल

Q95. आरबीआई द्वारा वर्तमान रेपो दर क्या है?
(a) $6.50 \%$
(b) $6.25 \%$
(c) $5.75 \%$
(d) $5.50 \%$

Q96. मेंडलीफ की आवर्त सारणी पहली बार कब प्रस्तावित की गई थी?
(a) 1869
(b) 1879
(c) 1889
(d) 1899

Q97. हाल ही में यूपी सरकार ने किस जनजाति को अनुसूचित जनजाति श्रेणी में शामिल किया है?
(a) गोंड
(b) बेट्टा-कुरुबा
(c) बिंझिया
(d) नारिकुरावन और कुरीविकरन

Q98. निम्नलिखित में से कौन सी एक व्यावसायिक फसल है?
(a) चावल
(b) गेहूं
(c) कपास
(d) जौ

Q99. 1025 ई. में महमूद गजनवी ने किस मंदिर पर आक्रमण किया था?
(a) काशी विश्वनाथ मंदिर
(b) सोमनाथ मंदिर
(c) जगन्नाथ मंदिर
(d) बृहदेश्वर मंदिर

Q100. कोणार्क सूर्य मंदिर का निर्माण किस वंश के शासक ने करवाया था?
(a) गुप्त राजवंश
(b) मौर्य राजवंश
(c) पूर्वी गंग राजवंश
(d) चोल राजवंश

## S1. Ans.(d)

Sol. The sentence is using the past unreal conditional tense, which is used to talk about a hypothetical or unreal situation in the past.

- In this type of sentence, the first part expresses a condition that did not happen, and the second part explains the result or outcome of that unreal condition.
- The correct answer is (d) "would not have drowned."
- In this context, the speaker did not actually help him in the past, and the consequence of not helping is that "he would not have drowned." This means that if the speaker had provided assistance, the person would not have ended up drowning.


## S2. Ans.(c)

Sol. In this sentence, "to read it" serves as an infinitive phrase that explains the purpose of Anand's book purchase. However, it can be made more concise and natural by using the prepositional phrase "for reading."

- Option (c) suggests the improvement: "Anand bought a book for reading."
- In this improved sentence, "for reading" conveys the same meaning as "to read it" but in a more straightforward and idiomatic way.
- It clarifies that Anand bought the book for the purpose of reading it. This option eliminates the need for the pronoun "it" and the infinitive form "to read," making the sentence cleaner and more efficient.


## S3. Ans.(a)

Sol. Extempore means something done without preparation, impromptu, or on the spur of the moment.

- The antonym of 'Extempore' is 'Rehearsed,' which means something that has been prepared or practiced beforehand.
- Antonyms: Rehearsed, Prepared, Planned, Deliberate.
- Synonyms: Impromptu, spontaneous, unprepared.

Meanings of the other given words:

- Exacerbate: To make a problem, situation, or feeling worse.
- Soliloquy: A speech given by a character in a play while talking to oneself or revealing their thoughts.
- Obstreperous: Noisy, unruly, or difficult to control.


## S4. Ans.(d)

Sol. Active Voice- It denotes that the noun or pronoun that acts as the subject in the sentence is the doer of the action. In other words, the subject performs the action or acts upon the verb.
Passive Voice- represents that the subject is one acted upon by the action or verb in the sentence. It can also be said that the passive voice indicates that the subject in the sentence is no longer active but passive.

- The sentence is an example of active voice with present perfect tense having the form:
- Sub + has/have + V3 + obj.
- When it is converted into passive voice, following rule must be followed:
- Obj. + has/have + been + V3 + by + sub.


## S5. Ans.(b)

Sol. Meaning of the given words:

- Vain means having or showing an excessively high opinion of one's appearance, abilities, or worth.
- Superior means higher in rank, status, or quality.
- Otiose means serving no practical purpose or result.
- Domineering means asserting one's will over another in an arrogant way, which is related to having an excessively high opinion of oneself.
- Thus, the option that can be used as a one-word substitute for the given group of words "Having or showing an excessively high opinion of one's appearance, abilities, or worth" is (b) Vain.


## S6. Ans. (b)

Sol. The most appropriate meaning of the highlighted idiom "in cold blood" in the given sentence is (b) deliberately.

- The idiom "in cold blood" is used to describe an action that is done deliberately and without any emotion, mercy, or remorse.
- Use in a sentence- This is just another attempt to excuse the cold-blooded murder of an innocent woman.


## S7. Ans. (d)

Sol. "Meagre" means lacking in quantity or quality, thin, inadequate, or sparse.

- Sparse - thinly scattered, scanty, or lacking abundance.
- Therefore, the correct answer is (d) Sparse.
- Antonyms: Abundant, Bountiful.
- Synonyms: Scant, sparse, inadequate, thin.

Meanings of the given words:

- Abundant: Present in large quantities; opposite in meaning to "meagre."
- Bountiful: Generously given or giving; opposite in meaning to "meagre."
- Sparse: Thinly scattered, scanty, or lacking abundance; synonym of "meagre."


## S8. Ans.(a)

Sol. Active Voice- It denotes that the noun or pronoun that acts as the subject in the sentence is the doer of the action. In other words, the subject performs the action or acts upon the verb.
Passive Voice- represents that the subject is one acted upon by the action or verb in the sentence. It can also be said that
the passive voice indicates that the subject in the sentence is no longer active but passive.

- The sentence is an example of active voice having form:
- $\quad$ Sub $+V_{2}+$ obj.
- When it is converted into passive voice, following rule must be followed:
- Obj. + was/were + V3 + by + obj.


## S9. Ans.(d):

Sol. In the original sentence, the article "a" was used before "vibrant colours," which indicated that she was painting some vibrant colours of a general breathtaking sunset. However, by replacing "a" with "the," the sentence now refers to specific vibrant colours of a particular breathtaking sunset.

- Using "the" makes the phrase more specific and indicates that she is painting the exact, particular set of vibrant colours that belong to the specific breathtaking sunset she is witnessing or referring to. The definite article "the" is used to refer to something specific or already mentioned in the context.
- So, the revised sentence "She is passionately painting the vibrant colours of the breathtaking sunset" gives a stronger sense of specificity, emphasizing that she is focused on a particular scene and the specific colours of that particular sunset.


## S10. Ans.(a):

Sol. The incorrectly spelt word is 'Piercing' which means 'having or showing shrewdness or keen intelligence.'
All other words are spelt correctly and their meanings are as follows:

- Sleek- (of hair, fur, or skin) smooth and glossy.
- Pie- a baked dish of fruit, or meat and vegetables, typically with a top and base of pastry.
- Itch- an uncomfortable sensation on the skin that causes a desire to scratch.


## S11. Ans.(a):

Sol. The correct answer is (a) It becomes easily and quickly achievable.

- The idiom "Bob's your uncle" is a British expression used to describe how a seemingly difficult task can be completed easily and quickly, usually by performing a simple action.
- In this case, adding a bit of cheese to the pasta is the simple action that will make the dish easily and quickly achievable.


## S12. Ans.(a)

Sol. Pompous: Displaying excessive self-importance, arrogance, or grandiosity.

- Pretentious: Trying to impress others with an appearance of greater importance, talent, or culture than is actually possessed.
- Therefore, the correct answer is (a) Pretentious.
- Antonyms: Humble, Modest, Unassuming.
- Synonyms: Pretentious, Arrogant, Grandiose, Overbearing.
Meanings of the other given words:
- Fast: Quick or rapid; unrelated to the meaning of "Pompous."
- Confine: To keep within limits or restrict; unrelated to the meaning of "Pompous."
- Antipathy: A strong feeling of dislike or aversion; unrelated to the meaning of "Pompous."


## S13. Ans.(d)

Sol. The first sentence (A) establishes that Shalini is waiting for her friend and she is scrolling down her phone screen while waiting.

- The next sentence (C) states that when her friend arrived, they both went to the market place.
- Sentence D follows and gives the description of the market place being thronged with people.
- Finally, the last sentence (B) mentions that Shalini's friend brought a bouquet for her from the market place.
- Therefore, the correct order of sentences to form a coherent and meaningful paragraph is ACDB.


## S14. Ans.(a)

Sol. Sentence P talks about how many deadwood beetle species recycle the nutrients of woodlands.

- Sentence $S$ then provides additional information that working alongside fungi, bacteria and other invertebrates, they break down dead wood and return the nutrients back to the soil.
- Sentence Q talks about some deadwood beetles being predators or parasitoids to other insect species and restricting population growth of potential pests.
- Finally, sentence R provides additional information about others being pollinators.
- Therefore, the correct order is option (a) is PSQR.


## S15. Ans.(d)

Sol. "Fundamental" means forming the base, core, or essential part of something.

- The most appropriate antonym for "Fundamental" is (d) Trivial, which means of little value or importance.


## Meanings of the other words

- Significant: This term refers to something that is noteworthy, important, or of consequence. A significant event, detail, or change is one that is very noticeable or influential.
- Essential: Something that is absolutely necessary or extremely important is deemed essential. It is often used to describe something that is a crucial or integral part of something else.
- Punctual: Being punctual means arriving or doing something at the expected or planned time. It is often associated with reliability and respect for other people's time.


## S16. Ans.(c)

Sol. Active Voice- It denotes that the noun or pronoun that acts as the subject in the sentence is the doer of the action. In other words, the subject performs the action or acts upon the verb.
Passive Voice- represents that the subject is one acted upon by the action or verb in the sentence. It can also be said that the passive voice indicates that the subject in the sentence is no longer active but passive.

- The sentence is an example of active voice having form:
- $\quad$ Sub $+V_{2}+$ obj.
- When it is converted into passive voice, following rule must be followed:
- Obj. + was/were + V3 + by + obj.


## S17. Ans. (b)

Sol. The segment in the given sentence which contains the grammatical error is option (b) he will have passed the exam.

- The sentence should be "If he had studied harder, he would have passed the exam with flying colours."
- The reason for this is that the "if" clause is in the past perfect tense, so the main clause should be in the conditional perfect tense. In other words, "would have" is the correct form to use in this case, not "will have".


## S18. Ans.(d)

Sol. The word that should be filled in the blank is 'so' to make the sentence grammatically and contextually correct.

- Hence option (d) is the correct choice.
- The given statement is an idiom- as you sow so you reap.
- As you sow so you reap- means that the way you behave in life will affect the treatment you will receive from others.


## S19. Ans.(a)

Sol. In the sentence "There is any other option but to proceed with caution", the use of "any other" is incorrect.

- The term "any other" would suggest that there might be multiple alternative options, which contradicts the use of "but to proceed with caution", implying there's only one course of action.
- So, the correct phrase to use in this sentence is "no other", which indicates that there is only one option available.


## S20. Ans.(d)

Sol. The correct spelling is 'Liability'.
Meaning of the given words:

- Gallantry- courageous behavior, especially in battle.
- Incessant - Never stopping.
- Obnoxious - Unpleasant.
- Liability- Legally responsible.


## S21. Ans.(d)

Sol. The correct option is (d) valuable.

- Valuable: having considerable monetary worth; costing or bringing a lot of money.
- In the given passage, cotton is described as a crop that plays a significant role in the global textile industry, making it a "valuable" crop.
The other options do not appropriately describe the overall significance of cotton.
- Perennial: lasting or existing for a long or apparently infinite time; enduring or continually recurring.
- Versatile: able to adapt or be adapted to many different functions or activities.
- None of these words fit the context of the sentence.


## S22. Ans.(a)

Sol. The correct option is (a) climate.

- Climate: the weather conditions prevailing in an area in general or over a long period.
- In the context of the passage, the requirements for cotton farming are being discussed. Climate, including welldrained soil and a warm environment, is a key aspect that impacts the growth of crops.


## S23. Ans.(a)

Sol. The correct option is (a) cash.

- Cash crop: a crop produced for its commercial value rather than for use by the grower.
- The passage is discussing the categorization of cotton in agriculture, and it is accurately classified as a "cash" crop because it is grown primarily for sale rather than for the farmer's own use.
- Cashmere: fine, soft wool, originally that from the Kashmir goat.
- Cashless: (of a business or system) operating only by means of money transfer.
- None of these words fit the context of the sentence.


## S24. Ans.(b)

Sol. The correct option is (b) sustainable.

- Sustainable: conserving an ecological balance by avoiding depletion of natural resources.
- In the context of the passage, farmers are transitioning to a different type of cotton farming practice due to concerns about environmental and health impacts. "Sustainable" cotton farming practices, which aim to minimize harm to the environment, are the most appropriate in this context.
- Conventional: based on or in accordance with what is generally done or believed.
- Renew: capable of being renewed.
- Traditional: existing in or as part of a tradition; longestablished.
- None of these words fit the context of the sentence as well as "sustainable" does.


## S25. Ans.(c)

Sol. The correct option is (c) social.

- Social: relating to society or its organization.
- In the context of the passage, initiatives are being introduced to ensure fair wages and better working conditions for cotton farmers. These are primarily "social" initiatives, as they deal with societal matters like wages and working conditions.
- Cultural: relating to the ideas, customs, and social behavior of a society.
- Economic: relating to economics or the economy.
- Environmental: relating to the natural world and the impact of human activity on its condition.
- None of these words fit the context of the sentence as well as "social" does.

S26. Ans. (a)
S27. Ans.(c)
S28. Ans.(d)

S29. Ans.(c)
Sol. Logic: Opposite letters are coded of the given word.
S30. Ans.(a)
Sol. Logic: Sum of the alphabet's place value.

## S31. Ans.(a)

Sol.


Neelam is the daughter of Reena.
S32. Ans.(b)
Sol. As skin senses touch, in the same way, nose senses smell.

## S33. Ans.(a)

Sol. Logic: $3^{\text {rd }}$ no. $=\left(\frac{1 \text { st number }}{2 \text { nd number }}\right)^{2}$

## S34. Ans. (b)

Sol. Logic: +3 series

## S35. Ans.(d)

Sol. Difference between the numbers= square of consecutive counting numbers i.e., $1,4,9,16, \ldots .$.

S36. Ans. (b)
Sol. Difference of prime numbers series
$+2,+3,+5,+7, \ldots .$.
S37. Ans.(d)
Sol. Except option (d), the difference between the alphabets is 5.

S38. Ans.(d)
Sol. Except Pandit Ravi Shankar, all others are Tabla Player.

S39. Ans.(d)
Sol. Logic: $3^{\text {rd }}$ number $=\left(1^{\text {st }}\right.$ number $\times 2 n d$ number $)+\left(1^{\text {st }}\right.$ number+ 2nd number)

S40. Ans.(b)
Sol. FANCYFANCYFANCY

## S41. Ans.(d)

Sol. The correct sequence is : $\mathbf{3 5 1 2 4}$
Hence, Perform comes at $4^{\text {th }}$ place.
S42. Ans.(a)
Sol. $105 \times 5 \div 3-29+75=109$
Change $\div$ \& ' $x$ '
$\Rightarrow 105 \div 5 \times 3-29+75=109$
$\Rightarrow 21 \times 3-29+75=109$
$\Rightarrow 63-29+75=109$
$\Rightarrow 138-29=109$
$\Rightarrow 109=109$

## S43. Ans. (c)

Sol. Total person $=17+9+1=27$

## S44. Ans.(b)

Sol. Since, 1996 is a leap year but $23^{\text {rd }}$ March 1996 to $23^{\text {rd }}$ March 1997 doesn't contain 29 feb, so there is only 1 odd day in an ordinary leap year.
Hence, day of the week on 23 rd March, 1996= Friday - 1= Thursday.

S45. Ans.(b)
Sol. There are 16 triangles.

S46. Ans.(d)
Sol. Opposite Pairs of the given dice are:
A and W, B and Y, C and F
S47. Ans.(b)
Sol.


## S48. Ans.(a)

Sol. $12 \div 48 \times(3+4)-6 \times 2$
$=12-48 \div(4 \times 3)+6 \div 2$
$=12-48 \div 12+3$
$=12-4+3=11$

S49. Ans.(a)
S50. Ans.(c)
Sol.


## S51. Ans.(b)

Sol. $x+\frac{1}{x}=7$
$\mathrm{x}^{2}+\frac{1}{x^{2}}=\left(x+\frac{1}{x}\right)^{2}-2$
$=(7)^{2}-2=49-2=47$

## S52. Ans.(a)

Sol. $\sin \mathrm{A}+\operatorname{Sin}^{2} \mathrm{~A}=1$
$\sin A=1-\sin ^{2} A=\cos ^{2} A$,
Now,
$\cos ^{2} \mathrm{~A}+\cos ^{4} \mathrm{~A}=\sin \mathrm{A}+\sin ^{2} \mathrm{~A}=1$

## S53. Ans.(c)

Sol. let the total work be 75 units.


Work done by A and B in 5 days $=(5+3) \times 5$
$=8 \times 5=40$ units
Work remaining $=35$ units
It is complete by $B$ and $C$ in 4 days
C's 4 days work $=35-3 \times 4$
$=35-12=23$ units
Time taken by C to complete the work alone
$=\frac{75}{\frac{23}{4}}$
$=\frac{300}{23}$ days

## S54. Ans.(d)

Sol. $\cot \mathrm{A}=\frac{9}{17}$
$\operatorname{cosec}^{2} \mathrm{~A}=1+\cot ^{2} \mathrm{~A}=\frac{(289+81)}{289}$
$=\frac{370}{289}$

## S55. Ans.(b)

Sol. $5 \mathrm{x}+3 \mathrm{y}=15, \quad 2 \mathrm{xy}=6$
$25 \mathrm{x}^{2}+9 \mathrm{y}^{2}+30 \mathrm{xy}=225$
$25 \mathrm{x}^{2}+9 \mathrm{y}^{2}+90=225$
$25 x^{2}+9 y^{2}=135$
$(5 x-3 y)^{2}=25 x^{2}+9 y^{2}-30 x y$
$=135-30 \times 3$
$=135-90$
$(5 x-3 y)^{2}=45$
$5 x-3 y=\sqrt{45}=3 \sqrt{5}$

S56. Ans.(b)
Sol. $2 \pi r=27 \pi$
$\mathrm{r}=\frac{27}{2} \mathrm{~cm}$
$\mathrm{h}=24 \mathrm{~cm}$
$\mathrm{v}=\frac{1}{3} \pi \mathrm{r}^{2} \mathrm{~h}$
$=\frac{1}{3} \times \pi \times \frac{729}{4} \times 24$
$=1458 \mathrm{mcm}^{3}$
S57. Ans.(d)
Sol.

$\mathrm{OA}=\sqrt{13^{2}-12^{2}}$
$=\sqrt{25}=5 \mathrm{~cm}$
OC $=10 \mathrm{~cm}$
S58. Ans.(c)
Sol. $\mathrm{t}=\frac{1200}{(45+27) \times \frac{5}{18}}=\frac{1200 \times 18}{72 \times 5}=60 \mathrm{sec}=1 \mathrm{~min}$
S59. Ans.(b)
Sol.


## S60. Ans.(c)

Sol. 1 year interest rate $=10 \%$
For 9 months $=\frac{10}{12} \times 9=\frac{15}{2} \%$
Net interest $=10 \%+\frac{15}{2} \%+\frac{10 \times \frac{15}{2} \%}{100}$
$=10 \%+\frac{15}{2} \%+\frac{3}{4} \%$
$=\frac{73}{4} \%$ interest
Sum $=\frac{1460}{73} \times 4 \times 100=$ Rs. 8000

S61. Ans.(c)
Sol. The given number can only be completely divided by 11 if the difference of the sum of digits at odd position and sum of digits at even position in a number is 0 or 11 .

## S62. Ans.(c)

Sol.
New Income $=\frac{122}{100} \times 45000$

$$
\begin{aligned}
& =122 \times 450 \\
& =54900
\end{aligned}
$$

New expenditure $=\frac{111}{100} \times 33000$

$$
=\text { Rs. 36,630 }
$$

Earlier saving = Rs. 12000
New Saving = Rs. 18270

$$
\begin{aligned}
\% & =\frac{6270}{12000} \times 100 \\
& =\frac{627}{12}=52.25 \%
\end{aligned}
$$

## S63. Ans.(a)

Sol. SI $=\frac{P \times R \times T}{100}$
$\frac{40}{100} P=\frac{P \times 6 \times T}{100}$
$\mathrm{T}=\frac{40}{6}=\frac{20}{3}=6 \frac{2}{3}$ years
S64. Ans.(d)
Sol. $2 x+\frac{2}{x}=5$
$x+\frac{1}{x}=\frac{5^{x}}{2}$
$x^{3}+\frac{1}{x^{3}}=\left(x+\frac{1}{x}\right)\left(x^{2}+\frac{1}{x^{2}}-1\right)$
$=\left(\frac{5}{2}\right)\left\{\frac{25}{4}-3\right\}$
$=\frac{5}{2} \times \frac{13}{4}=\frac{65}{8}$
$x^{3}+\frac{1}{x^{3}}+2=\frac{65}{8}+2$

$$
=\frac{65+16}{8}=\frac{81}{8}
$$

## S65. Ans.(a)

Sol. $\cos x\left\{\frac{\sec x+1+\sec x-1}{\sec ^{2} x-1}\right\}=\cos x \times \frac{2 \sec x}{\tan ^{2} x}$ $=2 \cot ^{2} x$

## S66. Ans.(c)

Sol. Let it be $x$
$x=\frac{25 \times 25}{45}=\frac{125}{9}$
S67. Ans.(b)
Sol. $\frac{C P}{M R P}=\frac{100-D}{100-L \%}$
$\frac{5}{9}=\frac{100-48}{100-L \%}$
$100-L \%=\frac{52 \times 9}{5}$
$L \%=\frac{500-468}{5}=\frac{32}{5} \%$
$=6.4 \%$ Loss.

S68. Ans.(a)
Sol. $\frac{M R P}{C P}=\frac{100+P \%}{100-D \%}=\frac{120}{90}=\frac{4}{3}=4: 3$
S69. Ans.(c)
Sol. Profit $\%=\frac{80}{920} \times 100=8.69 \%$
S70. Ans.(b)
Sol.

$11.25-3.15=8.1 \mathrm{~m}$
$3.15-1.8=1.35 \mathrm{~m}$
8.1----------45
$1.35=\frac{45}{8.1} \times 1.35=7.5 \mathrm{~m}$
S71. Ans.(a)
Sol. Total cost price of D,E and F=550+750+650=1950
Total selling price of $\mathrm{E}, \mathrm{F}$ and $\mathrm{G}=700+450+650=1800$
Required percentage $=\frac{1950}{1800} \times 100=108.33 \%$
S72. Ans.(d)
Sol. Ratio $=\frac{100}{50}=\frac{2}{1}=2: 1$
S73. Ans.(d)
Sol. Cars sold in January and April=24\%+28\%=52\%
Cars sold in May $=12 \%$
Difference $=40 \%=\frac{40}{100} \times 5400=2160$

## S74. Ans.(a)

Sol. Side of square $=\sqrt{1156}=34 \mathrm{~cm}$
Length of rectangle $=68 \mathrm{~cm}$
Breadth $=20 \mathrm{~cm}$
Ratio=68: $20=17: 5$

## S75. Ans.(c)

Sol. $60 \%$ of $870-\sqrt{1444}+18 \times 19$
$=\frac{60}{100} \times 870-38+342$
$=522-38+342$
$=826$
S76. Ans.(c)
Sol. The correct answer is option (c) Padma Bhushan.
Rukmini Devi Arundale was an Indian theosophist, dancer and choreographer of the Indian classical dance form of Bharatanatyam, and an activist for animal welfare.

She was the first woman in Indian history to be nominated as a member of the Rajya Sabha, the upper house of the Parliament of India.
Rukmini Devi features in India Today's list of '100 People Who Shaped India'. She was awarded the Padma Bhushan in 1956, and the Sangeet Natak Akademi Fellowship in 1967.

## S77. Ans.(c)

Sol. Bihu dance is an indigenous folk dance from the Indian state of Assam. It is related to the Bihu festival and is an important part of Assamese culture. Hence, option (c) is the correct answer.

## S78. Ans.(a)

Sol. Beriberi is primarily caused by a deficiency in Vitamin B1, also known as Thiamine. It is not related to deficiencies in Vitamins B12, C, or D.

## S79. Ans. (b)

Sol. Adding salt to ice causes the ice to melt at a lower temperature. This is a process known as freezing point depression. When salt is added to ice, it lowers the freezing point of the ice-water mixture, causing it to melt at a lower temperature. Hence, option (b) is the correct answer.

## S80. Ans.(b)

Sol. The First Five-Year Plan of India, which spanned from 1951 to 1956, primarily focused on the development of the agricultural sector and rural areas.
The plan aimed to correct the country's agricultural imbalance and increase agricultural production to achieve self-sufficiency.

## S81. Ans.(d)

Sol. The Mundari dance is primarily performed in the Indian state of Jharkhand. The Munda people, who perform this dance, are mainly found in this region.
The Mundari dance is a traditional dance performed by the Munda people, an Adivasi ethnic group of India. They are found mainly in the region of Jharkhand, but also in parts of Bihar, West Bengal, Odisha, and Chhattisgarh.

## S82. Ans.(b)

Sol. Amitabh Kant is the current Sherpa for India's G20 Presidency. He was appointed in September 2022. Kant is a former CEO of NITI Aayog and has a long career in public policy. He is a strong advocate for India's interests on the global stage.
The Sherpa for India's G20 Presidency is the personal representative of the Prime Minister who is responsible for preparing the G20 summit. The Sherpa is responsible for coordinating with the other G20 countries and for developing the agenda for the summit.

## S83. Ans.(c)

Sol. The correct answer is (c). Articles 23 and 24 of the Indian Constitution guarantee the Right against Exploitation.

Article 23 prohibits human trafficking, making it an offence punishable by law, and also prohibits forced labour or any act of compelling a person to work without wages where he was legally entitled not to work or to receive remuneration for it.

- However, it permits the State to impose compulsory service for public purposes, including conscription and community service. The Bonded Labour System (Abolition) Act, 1976, has been enacted by Parliament to give effect to this Article.
Article 24 prohibits the employment of children below the age of 14 years in factories, mines and other hazardous jobs.
- Parliament has enacted the Child Labour (Prohibition and Regulation) Act, 1986, providing regulations for the abolition of, and penalties for employing, child labour, as well as provisions for rehabilitation of former child labourers.


## S84. Ans.(b)

Sol. The Physics Nobel Prize in 1909 was awarded to Guglielmo Marconi for his contributions to the development of wireless telegraphy. Marconi was an Italian inventor and electrical engineer who is credited with the invention of the radio. His work laid the foundation for modern communication systems.
He shared the 1909 Nobel Prize in Physics with Karl Ferdinand Braun "in recognition of their contributions to the development of wireless telegraphy".

## S85. Ans. (b)

Sol. PM Kaushal Vikas Yojana was launched on 15 July 2015, on the occasion of World Youth Skills Day.

## S86. Ans.(c)

Sol. Article 368 of the Indian Constitution deals with the amendment of the Constitution.
For a Constitutional amendment under Article 368, a majority of two-thirds of the members present and voting, as well as more than half of the total membership of the house, is required.

## S87. Ans.(c)

Sol. The Widow Remarriage Association in 1861 was founded by M.G Ranade. The association was established to promote the remarriage of Hindu widows, which was a significant social issue at the time. M.G Ranade was a distinguished Indian scholar, social reformer, and author who made substantial contributions to the improvement of women's rights in India.
The first Widow Remarriage Association was founded by Vishnu Shastri Pandit in the year 1850.

## S88. Ans.(a)

Sol. The width of a singles tennis court is 27 feet (or 8.23 meters). This is according to the standards set by the United States Tennis Association (USTA). Hence, option (a) is the correct answer.

## More Details:

A tennis court is $78 \mathrm{ft}(23.77 \mathrm{~m})$ in length. The courts used for singles matches are 27 ft ( 8.23 m ) wide, while doubles courts are $36 \mathrm{ft}(10.97 \mathrm{~m}$ ) wide. The court's service line is $21 \mathrm{ft}(6.4 \mathrm{~m})$ from the net.
The total area of a tennis court is usually $260.87 \mathrm{~m}^{2}$-the total playing area of a doubles court. A singles court, which is often marked within the doubles court has a total playing area of $195.65 \mathrm{~m}^{2}$.

## S89. Ans.(c)

Sol. Aditi Ashok is an Indian professional golfer from Bangalore. She plays on the Ladies European Tour and LPGA Tour. She made her Olympic Games debut at the 2016 Summer Olympics and also qualified for the 2020 Summer Olympics in Tokyo, representing India in golf. Hence, option (c) is the correct answer.

## S90. Ans.(a)

Sol. When an alkali metal like potassium reacts with an alcohol, it usually results in the formation of alkoxides and hydrogen gas. Hence, option (a) is the correct answer.
Upon contact with water, acids or alcohols, potassium produces an exothermic reaction involving release of flammable hydrogen gas.

## S91. Ans.(c)

Sol. Shiv Kumar Sharma is a renowned Indian music composer and santoor player. He is credited with making the santoor a popular Classical instrument. Hence, option (c) is the correct answer.

## S92. Ans.(a)

Sol. Gujart Titans Shubman Gill won the Orange Cap in IPL 2023. He scored 890 runs in 17 innings.

## S93. Ans.(d)

Sol. Article 76 of the Indian Constitution provides for the appointment of the Attorney General of India. The Attorney General is the chief legal advisor to the Government of India and its primary advocate in the Supreme Court of India.
They are appointed by the President of India and must be a person qualified to be appointed as a Judge of the Supreme Court. Hence, option (d) is the correct answer.

## S94. Ans.(b)

Sol. The state with the maximum aluminium smelting in India is Odisha. The state is home to several large aluminium smelting plants, including the NALCO smelter in Angul and the Vedanta Aluminium smelter in Jharsuguda.
These plants contribute significantly to the state's aluminium production, making it the leading state in India for aluminium smelting.
The raw material of aluminium is bauxite. It is found abundantly in Orissa which is the largest aluminium producing state.

## S95. Ans.(a)

Sol. The current repo rate stands at $6.50 \%$ as per the recent update and the reverse repo rate stands at $3.35 \%$.
The repo rate is the rate at which the RBI lends money to commercial banks. The repo rate was last changed on June 8, 2023.

The repo rate is the interest rate at which the Reserve Bank of India (RBI) provides financial assistance to commercial banks by lending them money.

## S96. Ans.(a)

Sol. Mendeleev's periodic table was first proposed in 1869. Dmitri Mendeleev, a Russian chemist, created his periodic table of chemical elements based on increasing atomic weight, which allowed him to predict the properties of elements yet to be discovered. Hence, option (a) is the correct answer.

## S97. Ans.(a)

Sol. The UP government recently included the Gond community residing in 13 districts of Uttar Pradesh, under the ST list from the Scheduled Caste list. This includes the five subcategories of the Gond community (Dhuria, Nayak, Ojha, Pathari, and Rajgond).
The Gond are a tribal community found in central India. They are the largest tribal community in India, with a population of over 10 million.

## S98. Ans.(c)

Sol. A commercial crop is typically grown to be sold for profit, rather than used by the farmer directly. While all of the options listed can be commercial crops depending on the context, cotton is often grown as a commercial crop because of its wide use in the textile industry. Hence, option (c) is the correct answer.

## S99. Ans.(b)

Sol. Mahmud of Ghazni is known for his attack on the Somnath Temple in 1025 AD, which was one of the richest temples of that time.
The temple was located in the Prabhas Patan near Veraval in Saurashtra on the western coast of the Gujarat peninsula. This attack was one of the seventeen looting expeditions led by Mahmud of Ghazni in the Indian subcontinent.

## S100. Ans.(c)

Sol. The Konark Sun Temple was built in the 13th century CE by King Narasimhadeva I of the Eastern Ganga Dynasty.
The temple is dedicated to the Hindu sun god Surya. It is located in the village of Konark, in the state of Odisha, India.

- The temple is one of the most renowned temples in India and is a World Heritage Site. It is considered a classic illustration of the Odisha style of Architecture or Kalinga Architecture.

