## All India Mock BPSC TRE 3.0 Class 1 to 5 02-Mar-2024

Directions (1-2) : Fill in the blanks with suitable articles like ' $a$ ', 'an' and 'the' :

Q1. I have so many $\qquad$ good friends.
(a) a
(b) an
(c) the
(d) More than one of the above
(e) None of the above

Q2. I want to build $\qquad$ very big house.
(a) a
(b) an
(c) the
(d) More than one of the above
(e) None of the above

Q3. Which of the following is not a part of a garden?
(a) Flowers
(b) Grass
(c) Wardrobe
(d) More than one of the above
(e) None of the above

Q4. Which of the following is a part of railway station?
(a) Platform
(b) Overbridge
(c) Arrival-Departure
(d) More than one of the above
(e) None of the above

Q5. The sixth letter in the alphabet after J will be
(a) G
(b) P
(c) 0
(d) More than one of the above
(e) None of the above

Q6. In a zoo, $\qquad$ live in cages.
(a) birds
(b) animals
(c) snakes
(d) More than one of the above
(e) None of the above

Q7. Daughter's daughter is
(a) sibling
(b) niece
(c) cousin
(d) More than one of the above
(e) None of the above

Q8. My siblings are my
(a) cousins
(b) brothers and sisters
(c) in-laws
(d) More than one of the above
(e) None of the above

Q9. 'समुज्वल' शब्द में किस उपसर्ग का प्रयोग हुआ है?
(a) सम
(b) सन्
(c) सम्
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q10. निम्नलिखित में से कौन-सा शब्द 'अ' उपसर्ग-युक्त है?
(a) अथाह
(b) अनपढ़
(c) अनिष्ट
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q11. निम्नलिखित में से कौन-सा 'आ' प्रत्यय-युक्त है?
(a) धार्मिक
(b) असली
(c) प्यारा
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q12. 'जिसमें दोनों पद प्रधान होते हैं' वह कौन-सा समास है?
(a) अव्ययीभाव
(b) द्वंद्व
(c) बहुव्रीहि
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q13. 'जल्मांध' शब्द में कौन-सा समास है?
(a) तत्पुरुष
(b) कर्मधारय
(c) द्विगु
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q14. स्वर संधि के कितने मुख्य प्रकार हैं?
(a) चार
(b) पाँच
(c) छः
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q15. ‘अतीव’ का संधि-विच्छेद होगा
(a) अति+इव
(b) अ+तीव
(c) अती+व
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q16. ‘प्रत्युत्तर’ शब्द में कौन-सी संधि है?
(a) वृद्धि संधि
(b) अयादि संधि
(c) यण संधि
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q17. 'मनोरंजन' शब्द का संधि -विच्छेद होगा
(a) मनः+रंजन
(b) मनोः+रंजन
(c) मन+रंजन
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q18. विराम-चिन्ह ';' को क्या कहते हैं?
(a) अल्प-विराम
(b) अर्ध-विराम
(c) योजक-चिन्ह
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q19. हिन्दी शब्दकोश में, निम्नलिखित में से कौन-शब्द सबसे पहले आता है?
(a) शिष्टाचार
(b) श्लाघा
(c) श्रेय
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q20. ‘व्यास' शब्द का विलोम है
(a) समास
(b) समर्थन
(c) प्रावधान
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q21. हिन्दी में प्रचलित विदेशी भाषा और उसके शब्द का कौनसा युग्म सही नहीं है?
(a) अरबी-अदब
(b) तुर्की-अमरूद
(c) फारसी-आज़ादी
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q22. मगही' किस उपभाषा की बोली है?
(a) बिहारी
(b) पूर्वी हिन्दी
(c) पहाड़ी
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q23. "पाठक के भावबोध को सरल और सुबोध बनाने के लिए का प्रयोग होता है।" इस वाक्य में रिक्त स्थान के लिए उचित शब्द क्या होगा?
(a) प्रश्न-चिन्हों
(b) योजक-चिन्हों
(c) विराम-चिन्हों
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q24. कौन-सा विकल्प विराम -चिन्ह का भेद नही है?
(a) अर्ध-विराम
(b) मध्य-विराम
(c) अंत्य-विराम
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q25. कौन-सा हजारी प्रसाद द्विवेदी का निबंध नहीं है?
(a) अशोक के फूल
(b) मजदूरी और प्रेम
(c) कुटज
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q26. उपन्यास और उपन्यासकार का कौन-सा युग्म सही नहीं है?
(a) जुलूस-फणीश्वरनाथ रेणु
(b) अँधेरे बंद कमरे-नरेश मेहता
(c) नई पौध-कमलेश्वर
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q27. वह शब्द -शक्ति जिससे द्वारा सीधे कथन,साक्षात् संकेतित या मुख्य अर्थ का ज्ञान होता है, उसे कहते हैं
(a) अभिधा
(b) लक्षण
(c) व्यंजना
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q28. ध्वनि-सिद्धांत के प्रतिपादक आचार्य हैं
(a) विश्वनाथ
(b) आनंदवर्धन
(c) पण्डितराज जगन्नाथ
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q29. निम्नलिखित कथनों, स्थापना (अ) और तर्क (ब) पर विचार कीजिए और नीचे दिए गए कूट से सही विकल्प का चयन कीजिए: स्थापना (अ): कला का उदय जीवन से है।
तर्क (ब): कला जीवन को जीने योग्य बनाकर उसे ऊँचा उठाती है।
कूट:
(a) (अ) सही है और (ब) गलत है
(b) (अ) और (ब) दोनों सही हैं
(c) (अ) गलत है और (ब) सही है
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

Q30. निम्नलिखित कथनों, स्थापना (अ) और तर्क (ब) पर विचार कीजिए और नीचे दिए गए कूट से सही विकल्प का चयन कीजिए: स्थापना (अ): राष्ट्रीयता एक पुनीत भावना है। तर्क (ब): परिवर्तनशीलता कभी भी सृष्टि का शाश्वत नियम नहीं रही है।
कूटः
(a) (अ) सही है और (ब) गलत है
(b) (अ) और (ब) दोनों सही हैं
(c) (अ) गलत है और (ब) सही है
(d) उपर्युक्त में से एक से अधिक
(e) उपर्युक्त में से कोई नहीं

## Q31.

The difference of $1 \frac{3}{16}$ and its reciprocal is equal to
(a) $4 / 3$
(b) $15 / 16$
(c) $105 / 304$
(d) More than one of the above
(e) None of the above

Q32. If $\left(\frac{a}{b}\right)^{x-1}=\left(\frac{b}{a}\right)^{x-3}$, then the value of $x$ is
(a) 1
(b) 2
(c) $7 / 2$
(d) More than one of the above
(e) None of the above

Q33. A fruit seller had some apples. He sells $40 \%$ apples and still has 420 apples and still has 420 apples. Originally, he had
(a) 700 apples
(b) 588 apples
(c) 672 apples
(d) More than one of the above
(e) None of the above

Q34.
Afraction which bears the same ration to $\frac{1}{27}$ that $\frac{3}{11}$ does to $\frac{5}{9}$ is equal to
(a) $1 / 11$
(b) 55
(c) $1 / 55$
(d) More than one of the above
(e) None of the above

Q35. If the annual rate of simple interest increase from $10 \%$ to $12 \frac{1}{2} \%$ a man's yearly income increases by Rs.1,250. His principal (in Rs.) is
(a) 45,000
(b) 50,000
(c) 65,000
(d) More than one of the above
(e) None of the above

Q36. The perimeter of a circles is equal to the perimeter of a square, then their areas are in the ratio
(a) $4: 1$
(b) $11: 7$
(c) $14: 11$
(d) More than one of the above
(e) None of the above

Q37. What is the volume of a cube (in cubic cm) whose diagonal measures $4 \sqrt{3} \mathrm{~cm}$ ?
(a) 8
(b) 64
(c) 16
(d) More than one of the above
(e) None of the above

Q38. One of the factors of $\left(x^{3}+1\right)(x-1)$ is
(a) $x^{2}+1$
(b) $x^{2}-1$
(c) $x-1$
(d) More than one of the above
(e) None of the above

Q39. The root of the equation $x^{2}-4=0$ is
(a) 2
(b) -2
(c) 4
(d) More than one of the above
(e) None of the above

Q40. If $3 x+y=5$ and $x-y=3$, then
(a) $x=2, y=-1$
(b) $x=-2, y=-1$
(c) $x=-2, y=1$
(d) More than one of the above
(e) None of the above

Q41. Which one of the following cannot be the square of a natural number?
(a) 32761
(b) 81225
(c) 42437
(d) More than one of the above
(e) None of the above

## Q42.

If $1.5 x=0.04 y$, then the value of $\left(\frac{y-x}{y+x}\right)$ is
(a) $\frac{730}{77}$
(b) $\frac{73}{77}$
(c) $\frac{71}{77}$
(d) More than one of the above
(e) None of the above

Q43. $\sqrt{\frac{0.204 \times 42}{0.04 \times 3.4}}$ is equal to
(a) 0.06
(b) 0.6
(c) 6
(d) More than one of the above
(e) None of the above

Q44. If $x \%$ of $y$ is 100 and $y \%$ of $z$ is 200 , then find the relation between x and z .
(a) $z=\frac{x}{2}$
(b) $z=2 x$
(c) $z=4 x$
(d) More than one of the above
(e) None of the above

Q45. The height of an equilateral triangle is 10 cm . its area is
(a) $30 \mathrm{~cm}^{2}$
(b) $\frac{100}{3} \mathrm{~cm}^{2}$
(c) $\frac{100}{\sqrt{3}} \mathrm{~cm}^{2}$
(d) More than one of the above
(e) None of the above

Q46. Which of the following is a monomial?
(a) $4 x^{2}$
(b) $a+6$
(c) $a+6+c$
(d) More than one of the above
(e) None of the above

Q47. Which of the following is used in metal extraction?
(a) Coke
(b) Petroleum
(c) Coal tar
(d) More than one of the above
(e) None of the above

Q48. The colored light that refracts most while passing through a prism is
(a) yellow
(b) violet
(c) blue
(d) More than one of the above
(e) None of the above

Q49. The resistance of conductor is directly proportional to its
(a) area of cross-section
(b) density
(c) length
(d) More than one of the above
(e) None of the above

Q50. What is the main chemical component present on the rubbing surface of a matchbox?
(a) Potassium chlorate
(b) Phosphorous
(c) Graphite
(d) More than one of the above
(e) None of the above

Q51. Which of the following is suitable for alcoholic beverages?
(a) Methanol
(b) Hexenol
(c) Ethanol
(d) More than one of the above
(e) None of the above

Q52. The efficiency of fuel is expressed in terms of its
(a) density
(b) calorific value
(c) volume
(d) More than one of the above
(e) None of the above

Q53. Food cans are coated with tin and not with zinc because
(a) zinc is costlier than tin
(b) zinc has a higher melting point than tin
(c) zinc is more reactive than tin
(d) More than one of the above
(e) None of the above

Q54. Which of the following is not a traditional irrigation method?
(a) Moat system
(b) Chain pump system
(c) Drip system
(d) More than one of the above
(e) None of the above

Q55. The number of sex chromosomes in a human kidney cell is
(a) one pair
(b) two pairs
(c) three pairs
(d) More than one of the above
(e) None of the above

Q56. The hearing range of human ear is
(a) 20 Hz to 20000 Hz
(b) less than 20 Hz
(c) more than 20000 Hz
(d) More than one of the above
(e) None of the above

Q57. Which of the following has the highest energy?
(a) Blue light
(b) Red light
(c) Yellow light
(d) More than one of the above
(e) None of the above

Q58. Which substance is used for making pencil lead?
(a) Sulphur
(b) Silicon
(c) Graphite
(d) More than one of the above
(e) None of the above

Q59. A ray of light is incident at an angle of $30^{\circ}$ on a mirror, the angle between normal and reflected ray is
(a) $30^{\circ}$
(b) $60^{\circ}$
(c) $45^{\circ}$
(d) More than one of the above
(e) None of the above

Q60. The contraction and expansion movement of the walls of the food pipe is called
(a) translocation
(b) transpiration
(c) peristaltic movement
(d) More than one of the above
(e) None of the above

Q61. Which parts of the brain control blood pressure?
(a) Spinal cord, skull, hypothalamus
(b) Cord, skull cerebrum
(c) Pons, medulla, cerebellum
(d) More than one of the above
(e) None of the above

Q62. Which of the following produces least friction?
(a) Sliding friction
(b) Rolling friction
(c) Static friction
(d) More than one of the above
(e) None of the above

Q63. The Chairman of NABARD is
(a) K. Sitaraman
(b) Bhavesh Gupta
(c) Shaji K. V.
(d) More than one of the above
(e) None of the above

Q64. The Chairperson of ONGC is
(a) Dr. Alka Mittal
(b) Dr. Madhuri Mittal
(c) Dr. Madhuri Gil
(d) More than one of the above
(e) None of the above

Q65. The Prime Minister of Italy is
(a) Giorgia masquani
(b) Georgia Meloni
(c) Genolia Melony
(d) More than one of the above
(e) None of the above

Q66. As per $5^{\text {th }}$ Tiger Census in 2022, the number of tigers in India is
(a) 3167
(b) 3267
(c) 3067
(d) More than one of the above
(e) None of the above

Q67. Biparjoy, a phenomena of 2022, was
(a) mid-latitude cyclone
(b) sea storm
(c) tropical cyclone
(d) More than one of the above
(e) None of the above

Q68. The new name of Mid-Day Meal Scheme is
(a) PM Poshan Scheme
(b) PM Mid-Day Poshan Scheme
(c) Nation Poshan Scheme
(d) More than one of the above
(e) None of the above

Q69. The organizing place of Thawe Mahotsav, 2023 was
(a) Bhagalpur (Bihar)
(b) Manger (Bihar)
(c) Patna (Bihar)
(d) More than one of the above
(e) None of the above

Q70. State Icon of Bihar is
(a) Pallavi Thakur
(b) Maithili Mishra
(c) Maithili Thakur
(d) More than one of the above
(e) None of the above

Q71. The total budget of Jal Jeevan Mission is
(a) Rs. 70,000 crore
(b) Rs.72,000 crore
(c) Rs. 75,000 crore
(d) More than one of the above
(e) None of the above

Q72. The name of the Clusteroiented Rural Development Scheme is
(a) Deendayal Upadhyaya Rurban Mission
(b) Dr. Shyama Prasad Mukherjee Rurban Mission
(c) Atal Bihari Vajpayee Rurban Mission
(d) More than one of the above
(e) None of the above

Q73. The author of the book, the Chipko Movement: A People's History is
(a) Shekhar Pathak
(b) Shekhar Joshi
(c) Shekhar Pandy
(d) More than one of the above
(e) None of the above

Q74. The World Brail Lipi Day is celebrated on
(a) 9 January
(b) 8 January
(c) 4 January
(d) More than one of the above
(e) None of the above

Q75. The true fact about Bharat Gaurav Torist Train is that
(a) it was inaugurated on $16^{\text {th }}$ April, 2023
(b) it was started from New Delhi Railway Station
(c) it was inaugurated on $25^{\text {th }}$ December, 2022
(d) More than one of the above
(e) None of the above

Q76. First State of India that started keeping DNA database of unidentified dead bodies is
(a) Himachal Pradesh
(b) Goa
(c) Madhya Pradesh
(d) More than one of the above
(e) None of the above

Q77. The host nation of ASEAN Summit, 2023 is
(a) Malaysia
(b) Thailand
(c) Indonesia
(d) More than one of the above
(e) None of the above

Q78. The host nation of Petersburg Climate Dialogue, 10 May, 2023
(a) Poland
(b) Germany
(c) Italy
(d) More than one of the above
(e) None of the above

Q79. The Sun is a
(a) yellow star
(b) red star
(c) white star
(d) More than one of the above
(e) None of the above

Q80. How many latitudes are there on the globe drawn at 1 degree interval?
(a) 179
(b) 180
(c) 181
(d) More than one of the above
(e) None of the above

Q81. The average height of Kosi plain from mean sea level is
(a) 300 m
(b) 150 m
(c) 30 m
(d) More than one of the above
(e) None of the above

Q82. One the basis of fossils, which is the origin place of man?
(a) Rift Valley of Africa
(b) Central Asia
(c) Jerusalem
(d) More than one of the above
(e) None of the above

Q83. Cultural contact between two communities is called
(a) enculturation
(b) acculturation
(c) cultural realm
(d) More than one of the above
(e) None of the above

Q84. Baruani Oil Refinery Plant is situated in which district of Bihar?
(a) Saharsa
(b) Begusarai
(c) Madhubani
(d) More than one of the above
(e) None of the above

Q85. Tehri Dam Project is associated with
(a) determinism
(b) possibilism
(c) scientific determinism
(d) More than one of the above
(e) None of the above

Q86. Which of the following is shifting cultivation in Orissa?
(a) Poda
(b) Penda
(c) Bewar
(d) More than one of the above
(e) None of the above

Q87. Tent of nomads in Baluchistan is called
(a) Kizashi
(b) Long
(c) Kloof
(d) More than one of the above
(e) None of the above

Q88. In which district of Bihar silk textile production is maximum?
(a) Madhubani
(b) Bhagalpur
(c) Aurangabad
(d) More than one of the above
(e) None of the above

Q89. With decreasing population, the man-land ratio
(a) decreases
(b) increases
(c) remains constant
(d) More than one of the above
(e) None of the above

Q90. In which district of Bihar Maize crop production is maximum?
(a) Saran
(b) Siwan
(c) Muzaffarpur
(d) More than one of the above
(e) None of the above

Q91. Where was Kunwar Singh, a leader of the Revolt of 1857, related to?
(a) Gwalior
(b) Meerut
(c) Jagdishpur
(d) More than one of the above
(e) None of the above

Q92. Who established the Indian Association in 1876?
(a) W. C. Bonnerjee
(b) Sisir Kumar Ghosh
(c) Surndranath Banerjee
(d) More than one of the above
(e) None of the above

Q93. Who first raised the National Flag outside India?
(a) Lala Lajpat Rai
(b) Madam Bhikaji Cama
(c) Rash Behari Bose
(d) More than one of the above
(e) None of the above

Q94. Which paper was edited by Abul Kalam Azad?
(a) Zamindar
(b) Comrade
(c) Al-Hilal
(d) More than one of the above
(e) None of the above

Q95. Who was the author of Mahatma Gandhi and BiharSome Reminiscences?
(a) Dr. Rajendra Prasad
(b) Jayaprakash Narayan
(c) Karpoori Thakur
(d) More than one of the above
(e) None of the above

Q96. Who presided over the first Session of the All India Kisan Sabha?
(a) Narendra Dev
(b) Sahajanand Saraswati
(c) Sampurnanand
(d) More than one of the above
(e) None of the above

Q97. When was the Patna Women's College founded?
(a) 1938
(b) 1940
(c) 1941
(d) More than one of the above
(e) None of the above

Q98. Which portfolio did Dr. Rajendra Prasad hold in the interim government?
(a) Finance
(b) Defence
(c) Food and Agrinulture
(d) More than one of the above
(e) None of the above

Q99. In which year All India Women's Conference was founded?
(a) 1923
(b) 1925
(c) 1927
(d) More than one of the above
(e) None of the above

Q100. The day of Bengal Partition-16 ${ }^{\text {th }}$ October, 1905 was observed as the day of
(a) Boycott
(b) Hartal (strike)
(c) Shok (mourn)
(d) More than one of the above
(e) None of the above

Q101. During which movement 'Bihar Vidhyapeeth' was established?
(a) Swadeshi Movement
(b) Non-Cooperation Movement
(c) Civil Disobedience Movemen
(d) More than one of the above
(e) None of the above

Q102. Who invited Mahatma Gandhi to come to Chapmparan in $1917 ?$
(a) Raj Kumar Shukla
(b) J. B. Kripalani
(c) Dr. Rajendra Prasad
(d) More than one of the above
(e) None of the above

Q103. The book named The Wheels of History was written by whom?
(a) lokmanya Bal Gangadhar Tilak
(b) Ram Manohar Lohia
(c) Jayaprakash Narayan
(d) More than one of the above
(e) None of the above

Q104. Which of the following is correct about he attitude of Muslim League in relation to the independence of India?
(a) It rejected the proposals of Cripps Mission in 1942 on the ground that their demand of Pakistan was not accepted.
(b) it rejected Wavell Plan in 1945 as it might weaken their claim independent Pakistan.
(c) It rejected Cabinet Mission Proposals and took resort to direct action in 1946.
(d) More than one of the above
(e) None of the above

Q105. Which of the following is correct about the Fundamental Rights in India?
(a) They are the unique declaration of balance between the Constitutional supremacy and the authority of Legislature.
(b) They create a balance between the rights of people and the security of nation.
(c) They not only decide the political and legal equality, but the social equation also.
(d) More than one of the above
(e) None of the above

Q106. With respect to the conviction of offence in India, which of the following statements is correct?
(a) The provision of double jeopardy is not found in the Constitution of India.
(b) The protection from penalty greater than the offence is found in the Constitution.
(c) The judicial and the departmental actions may be taken against a government servant for the same offence in the country.
(d) More than one of the above
(e) None of the above

Q107. With reference of the Federalism in India, which of the following statements is correct?
(a) 'A Quasi Federal State' is the result of Indian Federalism in the country.
(b) Indian Federalism sets up a single polity in the country.
(c) Indian Federalism is not horizontal with strong unitary base.
(d) More than one of the above
(e) None of the above

Q108. India has the integrated judiciary because
(a) there found one fundamental law and justice in India with the Supreme Court at the apex and the High Courts below it
(b) the judges of the High Courts are appointed by the President
(c) the High Courts are constituted as the sub-part of the Central Government
(d) More than one of the above
(e) None of the above

Q109. Pressure Groups in India suffer from which of the following?
(a) By culturalism
(b) By lack of ideological commitments
(c) By lack of autonomous role in the politics of the country
(d) More than one of the above
(e) None of the above

Q110. Which type of rights is 'The Freedom of Silence' in India?
(a) The Legal Rights
(b) The Social Rights
(c) The Fundamental Rights
(d) More than one of the above
(e) None of the above

Q111. Match List -I with List -II and select the correct answer using the codes given below the Lists:

| List-I <br> (Provisions) |  |  |  | List -II |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (Related Articles of the Constitution of India) |
| A. Just and humane conditions of work |  |  |  | 1. Article 43 |
| B. Living wages for workers |  |  |  | 2. 42 |
| C. Uniform | vil Cod |  |  | 3. Article49 |
| D. Protection of places and objects of national importance |  |  |  | 4. Article 44 |
| Codes: |  |  |  |  |
| A | B | C | D |  |
| (a) 2 | 1 | 4 | 3 |  |
| A | B | C | D |  |
| (b) 3 | 2 | 4 | 1 |  |
| A | B | C | D |  |
| (c) ${ }^{1}$ | 3 | 2 | 4 |  |
| (d) More than one of the above |  |  |  |  |
| (e) No | of | a |  |  |

Q112. Which of the following is the main aim of District Planning Committees in India?
(a) The unification of plans of Panchayats and Nagar Palikas
(b) The preparation of model planning of the district
(c) The development of unified attitude among Panchayats
(d) More than one of the above
(e) None of the above

Q113. The motto of Doordarshan is
(a) Bhaujan Hitay: Bahujan Sukhay
(b) Satyma Shivam Sundaram
(c) Satyameva Jayate
(d) More than one of the above
(e) None of the above

Q114. Bhagwan Mahavir Wildlife Sanctuary is located in
(a) Rajasthan
(b) Madhya Pradesh
(c) Goa
(d) More than one of the above
(e) None of the above

Q115. Deendayal Upadhyaya is famous for
(a) Commounism
(b) Capitalism
(c) Integral humanism
(d) More than one of the above
(e) None of the above

Q116. Who led the movement of Khudai Khidmatgar?
(a) Khwaja Moinuddin Chishti
(b) khan Abdul Ghaffar Khan
(c) Sir Syed Ahmad Khan
(d) More than one of the above
(e) None of the above

Q117. Janjatiya Gaurav Divas was started from
(a) 15 August, 2015
(b) 26 January, 2019
(c) 15 November, 2021
(d) More than one of the above
(e) None of the above

Q118. Which State is the largest producer of pearl millet
(Bajra)?
(a) Haryana
(b) Rajasthan
(c) Punjab
(d) More than one of the above
(e) None of the above

Q119. The type of rocks which contain fossils are called
(a) sedimentary rocks
(b) metamorphic rocks
(c) igneous rocks
(d) More than one of the above
(e) None of the above

Q120. Oxbow lakes are found in
(a) glaciers
(b) river valleys
(c) deserts
(d) More than one of the above
(e) None of the above

Q121. The World Water Day is celebrated on
(a) January 22
(b) February 22
(c) March 22
(d) More than one of the above
(e) None of the above

Q122. Home State of one-horned rhino is
(a) Gujarat
(b) Kerala
(c) Assam
(d) More than one of the above
(e) None of the above

Q123. The largest bauxite producer is
(a) Africa
(b) Brazil
(c) Australia
(d) More than one of the above
(e) None of the above

Q124. Golden fibre refers to
(a) tea
(b) cotton
(c) jute
(d) More than one of the above
(e) None of the above

Q125. Which are main factors that cause change in the population?
(a) Birth, death and marriage
(b) Birth, death and migration
(c) Birth, death and life expectancy
(d) More than one of the above
(e) None of the above

Q126. The unfavorable alteration of environment due to human activities is termed as
(a) ecological disturbance
(b) catastrophe
(c) ecological degradation
(d) More than one of the above
(e) None of the above

Q127. Black lung disease is associated with
(a) farmers
(b) coal miners
(c) textile industry workers
(d) More than one of the above
(e) None of the above

Q128. What is oil slick?
(a) Boiled oil
(b) Cooled oil
(c) Thin film of oil in seawater
(d) More than one of the above
(e) None of the above

Q129. What is the animal symbol of WWF (World Wildlife Fund)?
(a) Red Panda
(b) Giant Panda
(c) Tiger
(d) More than one of the above
(e) None of the above

Q130. In comparison to pure water, boiling point of impure water
(a) is same
(b) increases
(c) decreases
(d) More than one of the above
(e) None of the above

Q131. Ozone holes are more pronounced at the
(a) equator
(b) tropic of Cancer
(c) tropic of Capricorn
(d) More than one of the above
(e) None of the above

Q132. Soaps and detergents are the source of organic pollutants like
(a) glycerol
(b) polyphosphates
(c) sulfonated hydrocarbons
(d) More than one of the above
(e) None of the above

Q133. The most hazardous metal pollutant of automobile exhausts is
(a) mercury
(b) cadmium
(c) lead
(d) More than one of the above
(e) None of the above

Q134. The main reason why vegetables take longer to cook in boiling water at high altitudes, is
(a) water boils at a high temperature at high altitude
(b) the temperature of the boiling water decreases with increasing altitude
(c) there is less oxygen in the air at high altitude
(d) More than one of the above
(e) None of the above

Q135. Arrange the words given below in a meaningful sequence:

1. Punishment
2. Police
3. Crime
4. Justice
5. Judgement

Select the correct answer using the codes given below.
(a) 31245
(b) 12354
(c) 32451
(d) More than one of the above
(e) None of the above

Q136. Which one among the following cannot be formed with the letters of the word 'COMPATIBILITY'>
(a) MYOPIC
(b) IMPLICIT
(c) TITLE
(d) More than one of the above
(e) None of the above

Q137. Ramesh is taller than Mohit but not as tall as Rajiv. Kamlesh is taller than Shyam but not as tall as Mohit. Who among them is tallest?
(a) Rajiv
(b) Mohit
(c) Kamlesh
(d) More than one of the above
(e) None of the above

Q138. In a certain code TEA $=33$ and $E A T=67$, then to which one of the following ATE is equal in the same code?
(a) 90
(b) 82
(c) 56
(d) More than one of the above
(e) None of the above

Q139. As 'Glass' is related to 'Sand', $n$ the same way to which one among the following 'Paper' is related?
(a) Mirror
(b) Stone
(c) Window
(d) More than one of the above
(e) None of the above

Q140. Examine the following three figures in which the numbers used follow a specific pattern:


What is the missing number (?) in the third figure?
(a) 8
(b) 6
(c) 3
(d) More than one of the above
(e) None of the above

Q141. How many rectangles are there in the figure given below?

(a) 18
(b) 16
(c) 10
(d) More than one of the above
(e) None of the above

Q142. Between 6 and 7 O'clock, the two hands of a clock will be together at
(a) 6 past $32 \frac{5}{7}$ minutes
(b) 6 past $32 \frac{8}{11}$ minutes
(c) 6 past $32 \frac{9}{11}$ minutes
(d) More than one of the above
(e) None of the above

Q143. If $9^{*} 7=32,13^{*} 7=120$ and $17^{*} 9=208$, then what is the value of $19 * 11$ ?
(a) 180
(b) 220
(c) 240
(d) More than one of the above
(e) None of the above

Q144. Find the missing number from the following series:
5, 17, 37, 65, $\qquad$ 145
(a) 101
(b) 95
(c) 99
(d) More than one of the above
(e) None of the above

Q145. Choose the word which is least similar to the other words in the group.
(a) Rose
(b) Marigold
(c) Lotus
(d) More than one of the above
(e) None of the above

Q146. Choose the missing term out of the given alternatives:
AZ, GT, MN, ?, YB
(a) SH
(b) KF
(c) TS
(d) More than one of the above
(e) None of the above

Q147. If in a certain language 'REMOTE' is coded as 'ROTEME', then which code would be coded as 'SLOWLY'?
(a) SLYLWO
(b) SWLLOY
(c) SYLLWO
(d) More than one of the above
(e) None of the above

Q148. If you are a manager and one of your employees is not working properly, as a manager you would
(a) talk to him and try to find out his problem
(b) fire him
(c) give him two weeks to improve
(d) More than one of the above
(e) None of the above

Q149. In a class of 60 students, where girls are twice that of boys, A ranked seventeenth from the top. If there are 9 girls ahead of A, then how many boys are after A in ranks?
(a) 7
(b) 12
(c) 23
(d) More than one of the above
(e) None of the above

Q150. Choose the odd one out.
(a) NH 6
(b) FL18
(c) XQ7
(d) More than one of the above
(e) None of the above

## S1. Ans.(e)

Sol. The correct answer is "None of the above" because the sentence does not require an article before "so many good friends." The phrase "so many" already quantifies the noun "good friends," making the use of articles unnecessary in this context.

## S2. Ans. (a)

Sol. The correct answer is "a" because "very big house" begins with a consonant sound, and "a" is used before words that begin with a consonant sound. The indefinite article "a" is appropriate here to indicate that the speaker wants to build one house of unspecified identity.

## S3. Ans.(c)

Sol. "Wardrobe" is not a part of a garden, making it the correct answer. Gardens typically include elements related to nature and outdoor spaces, such as flowers and grass, but not indoor furniture like wardrobes.

## S4. Ans.(d)

Sol. "More than one of the above" is correct because a railway station includes a platform, an overbridge, and areas for arrival and departure among its parts. These elements are integral to the functioning and structure of a railway station.

## S5. Ans.(b)

Sol. The sixth letter after J is P. Counting forward from J (which is the 10th letter of the alphabet): K (11), L (12), M (13), N (14), $O$ (15), $P(16)$, makes $P$ the correct answer.

## S6. Ans.(d)

Sol. "More than one of the above" is correct because in a zoo, birds, animals, and snakes can all live in cages. Zoos commonly use cages to house various types of animals for safety and viewing purposes.

## S7. Ans.(e)

Sol. The correct answer is "None of the above" because a daughter's daughter is a granddaughter, which is not among the options provided.

## S8. Ans.(b)

Sol. My siblings are my "brothers and sisters." This term specifically refers to the children of one's parents, making it the correct choice for describing the relationship between siblings.

S9. Ans.(c)
Sol. 'समुज्वल' शब्द में प्रयुक्त उपसर्ग 'सम्' है। 'सम्' उपसर्ग का प्रयोग शब्द के अर्थ में सम्पूर्णता, अच्छाई, या अधिकता को दर्शाने के लिए होता है। 'समुज्वल' शब्द में 'सम्' उपसर्ग के साथ 'उज्वल' शब्द का संयोग होता है, जिसका अर्थ होता है बहुत अधिक उज्वल या प्रकाशित। इस प्रकार, यह उपसर्ग शब्द के मूल अर्थ को बढ़ाता है और इसे अधिक प्रभावशाली बनाता है।

## S10. Ans.(a)

Sol. 'अथाह' शब्द में 'अ' उपसर्ग युक्त है। 'अ' उपसर्ग का प्रयोग अक्सर नकारात्मक अर्थ देने के लिए होता है, लेकिन 'अथाह' शब्द में यह अर्थ को 'असीम' या 'बहुत अधिक' की ओर ले जाता है, जो कि नकारात्मकता से भिन्र है। इस प्रकार, 'अथाह' का अर्थ होता है जिसकी कोई सीमा न हो।

## S11. Ans.(c)

Sol. 'प्यारा' शब्द में 'आ' प्रत्यय युक्त है। 'आ' प्रत्यय का प्रयोग अक्सर विशेषण बनाने के लिए होता है, जैसे 'प्यार' शब्द में 'आ' जोड़कर 'प्यारा' बनता है, जिसका अर्थ होता है प्रिय या आकर्षक। इस प्रकार, यह शब्द के अर्थ को विस्तार देता है और उसे और अधिक व्यक्तिगत बनाता है।

## S12. Ans.(b)

Sol. द्वंद्व समास वह समास होता है जिसमें दोनों पद प्रधान होते हैं। इस प्रकार के समास में दोनों शब्दों का महत्व समान होता है और वे एक साथ मिलकर एक नया अर्थ प्रकट करते हैं। उदाहरण के लिए, 'रोटी-पानी' में रोटी और पानी दोनों का समान महत्व है। इस प्रकार, द्वंद्व समास उस समास को दर्शाता है जहाँ दोनों पद समान रूप से प्रधान होते हैं।

- अव्ययीभाव समास में पहला पद अव्यय होता है और दूसरा पद प्रधान होता है।
- बहुव्रीहि समास में दोनों पदों से बाहर कोई तृतीय वस्तु प्रधान होती है।


## S13. Ans.(a)

Sol. 'जल्मांध' शब्द में 'तत्पुरुष' समास है। 'जल' और 'अंध' दो शब्दों का सम्मिलन होकर 'जल्मांध' बना है, जहाँ 'जल' प्रथम पद है और 'अंध' द्वितीय पद है। तत्पुरुष समास में, दो शब्दों के बीच एक कारक संबंध होता है, और पहला शब्द दूसरे शब्द का विशेषण बन जाता है। 'जल्मांध' शब्द में, 'जल' एक विशेषण के रूप में कार्य कर रहा है जो 'अंध' की विशेषता बताता है, इसलिए यह तत्पुरुष समास का उदाहरण है।

S14. Ans.(b)
Sol. स्वर संधि के पाँच मुख्य प्रकार हैं। स्वर संधि तब होती है जब दो स्वर आपस में मिलते हैं, और इसमें दीर्घ संधि, गुण संधि, वृद्धि संधि, यण संधि और अयादि संधि शामिल हैं। ये संधियाँ संस्कृत और हिन्दी व्याकरण में वर्णों के मेल के नियमों को बताती हैं। प्रत्येक संधि का अपना विशिष्ट नियम होता है जिसके अनुसार स्वरों का मेल होता है।

## S15. Ans.(a)

Sol. 'अतीव' का संधि-विच्छेद 'अति+इव' होता है। यहाँ 'अति' और 'इव' दो स्वरों का मेल है, जो गुण संधि का एक उदाहरण है। 'अति' का अर्थ होता है बहुत अधिक और 'इव' का अर्थ होता है जैसे। जब ये दोनों शब्द मिलते हैं, तो 'अतीव' शब्द बनता है जिसका अर्थ होता है बहुत अधिक जैसे। इस प्रकार, संधि-विच्छेद के माध्यम से शब्दों के अर्थ को समझने में मदद मिलती है।

## S16. Ans.(c)

Sol. 'प्रत्युत्तर' शब्द में 'यण संधि' है। यण संधि तब होती है जब किसी शब्द के अंत में आए स्वर के बाद दूसरे शब्द का प्रारंभिक स्वर आता है, और इस प्रक्रिया में व्यंजन का परिवर्तन होता है। 'प्रति' और 'उत्तर' शब्दों के मेल से 'प्रत्युत्तर' बनता है, जहाँ 'प्रति' के अंतिम इकाई 'इ' के बाद 'उत्तर' का प्रारंभिक 'उ' आता है और 'इ' और 'उ' के मेल से 'य' का निर्माण होता है।

## S17. Ans.(a)

Sol. 'मनोरंजन' शब्द का संधि-विच्छेद 'मनः+रंजन' है। यहाँ 'मनः' और 'रंजन' दो शब्दों का सम्मिलन होकर 'मनोरंजन' बना है, जहाँ 'मनः' का अर्थ होता है मन और 'रंजन' का अर्थ होता है खुशी या आनंद। इस प्रकार, 'मनोरंजन' का अर्थ होता है मन को खुशी या आनंद देने वाला।

## S18. Ans.(b)

Sol. विराम-चिन्ह ';' को 'अर्ध-विराम' कहते हैं। अर्ध-विराम का प्रयोग वाक्यों में ऐसे स्थान पर किया जाता है जहाँ पूर्ण विराम से कम और अल्पविराम से अधिक विराम की आवश्यकता होती है। इसका उपयोग वाक्यों के भागों को अलग करने के लिए किया जाता है, जो संबंधित होते हैं लेकिन पूरी तरह से अलग विचार व्यक्त करते हैं।

## S19. Ans.(a)

Sol. हिन्दी शब्दकोश में, 'शिष्टाचार' शब्द 'श्लाघा' और 'श्रेय' से पहले आता है। शब्दकोश में शब्दों को उनके प्रारंभिक अक्षरों के क्रमानुसार व्यवस्थित किया जाता है, और 'शिष्टाचार' 'श' अक्षर से शुरू होता है जो 'श्ल' और 'श्र' से पहले आता है।

S20. Ans.(a)
Sol. 'व्यास' शब्द का विलोम 'समास' है। 'व्यास' का अर्थ होता है किसी वृत्त या चक्र के केंद्र से उसके परिधि तक की दूरी को दो बार मापना, जबकि 'समास' शब्द भाषाविज्ञान में दो या दो से अधिक शब्दों के संयोजन से नया अर्थ निकालने की प्रक्रिया को दर्शाता है। यहाँ विलोम के संदर्भ में 'समास' शब्द का उपयोग विशेष रूप से विपरीत अर्थ में नहीं है, बल्कि विषय विशेषता के आधार पर दिया गया है।

## S21. Ans.(b)

Sol. हिन्दी में प्रचलित विदेशी भाषा और उसके शब्द के युग्म में तुर्की-अमरूद सही नहीं है। अरबी भाषा से 'अदब', फारसी से 'आज़ादी' जैसे शब्द हिन्दी में प्रचलित हैं और इनका समावेश हिन्दी भाषा में व्यापक रूप से हुआ है। 'अमरूद' शब्द का संबंध तुर्की भाषा से नहीं है। वास्तव में, अमरूद के लिए सही सांस्कृतिक और भाषाई संदर्भ पुर्तगाली हो सकता है, क्योंकि यह फल पोर्तुगाल के माध्यम से भारत में आया था। इस प्रकार, विदेशी भाषा और उसके शब्द के युग्म के संदर्भ में तुर्की-अमरूद विकल्प अशुद्ध है।

## S22. Ans.(a)

Sol. 'मगही' बिहारी उपभाषा की एक बोली है। यह मुख्य रूप से बिहार के मगध क्षेत्र में बोली जाती है, जिसमें पटना, गया, और झारखंड के कुछ हिस्से शामिल हैं। मगही भाषा की अपनी विशिष्टताएं हैं और यह हिन्दी की अन्य बोलियों जैसे मैथिली, भोजपुरी आदि के समान ही बिहारी भाषा परिवार का हिस्सा है। इस तरह, मगही का संबंध बिहारी उपभाषा से है, जो इसे पूर्वी हिन्दी या पहाड़ी उपभाषाओं से भिन्न बनाता है।

## S23. Ans.(c)

Sol. "पाठक के भावबोध को सरल और सुबोध बनाने के लिए विराम-चिन्हों का प्रयोग होता है।" विराम-चिन्ह वाक्यों में विचारों को स्पष्टता प्रदान करने, भावों को उचित रूप से व्यक्त करने और पाठकों को वाक्य के भाव को बेहतर ढंग से समझने में मदद करते हैं। विराम-चिन्हों का सही प्रयोग वाक्य के अर्थ को और अधिक स्पष्ट बनाता है और पाठकों को पठन के दौरान उचित विराम देने में सहायता करता है।

## S24. Ans.(d)

Sol. विराम-चिन्ह के भेद में 'अर्ध-विराम', 'मध्य-विराम', और 'अंत्य-विराम' शामिल नहीं हैं। वास्तव में, हिन्दी व्याकरण में 'मध्यविराम' जैसा कोई विशिष्ट विराम-चिन्ह नहीं होता। विराम-चिन्हों में पूर्ण विराम, अल्पविराम, अर्धविराम, प्रश्नवाचक चिन्ह, विस्मयादिबोधक चिन्ह आदि शामिल होते हैं। इसलिए, विकल्प 'अर्ध-विराम', 'मध्य-विराम', और 'अंत्य-विराम' में से 'मध्य-विराम' विराम-चिन्ह का भेद नहीं है, जिससे यह प्रश्न के उत्तर के रूप में 'उपर्युक्त में से एक से अधिक' हो जाता है।

S25. Ans. (b)
Sol. 'मजदूरी और प्रेम' हजारी प्रसाद द्विवेदी का निबंध नहीं है। हजारी प्रसाद द्विवेदी एक प्रसिद्ध हिन्दी साहित्यकार थे, जिन्होंने कई निबंध, कहानियाँ, और उपन्यास लिखे। 'अशोक के फूल' और 'कुटज' उनके द्वारा लिखे गए निबंध हैं, जो उनकी साहित्यिक कृतियों के संग्रह में शामिल हैं। 'मजदूरी और प्रेम' उनके द्वारा लिखित निबंधों में से नहीं है।

S26. Ans. (d)
Sol. उपन्यास और उपन्यासकार के युग्म में दिए गए विकल्पों में 'जुलूस' फणीश्वरनाथ रेणु, 'अँधेरे बंद कमरे' नरेश मेहता, और 'नई पौध' कमलेश्वर के रूप में सही नहीं हैं। वास्तव में, 'जुलूस' फणीश्वरनाथ रेणु का उपन्यास है, लेकिन 'अँधेरे बंद कमरे' और 'नई पौध' उपन्यासों के उपन्यासकार के रूप में दिए गए नाम गलत हैं। इसलिए, उपर्युक्त में से एक से अधिक युग्म सही नहीं हैं, जिसका अर्थ है कि सही उत्तर 'उपर्युक्त में से एक से अधिक' होगा।

S27. Ans.(a)
Sol. शब्द-शक्ति जिसके द्वारा सीधे कथन, साक्षात् संकेतित या मुख्य अर्थ का ज्ञान होता है, उसे 'अभिधा' कहा जाता है। 'अभिधा' शब्द-शक्ति शाब्दिक अर्थ या प्रत्यक्ष अर्थ को व्यक्त करती है, जो किसी वाक्य या शब्द से सीधे संबंधित होता है। 'लक्षण' और 'व्यंजना' अन्य प्रकार की शब्द-शक्तियाँ हैं, जो परोक्ष अर्थ या भावनाओं और विचारों को व्यक्त करने के लिए प्रयोग की जाती हैं।

## S28. Ans.(b)

Sol. ध्वनि-सिद्धांत के प्रतिपादक आचार्य 'आनंदवर्धन' हैं। ध्वनिसिद्धांत साहित्यिक आलोचना का एक महत्वपूर्ण सिद्धांत है, जो काव्य में भावों और अर्थों की सूक्ष्मता और गहराई को व्यक्त करने की क्षमता पर जोर देता है। 'आनंदवर्धन' ने ध्वनि-सिद्धांत के माध्यम से साहित्य में अभिव्यक्ति की सूक्ष्मताओं और गहनताओं पर प्रकाश डाला, जिससे काव्य में अनेकार्थता और गूढ़ता की व्याख्या संभव हो सकी।

## S29. Ans. (b)

Sol. कला का उदय जीवन से है और कला जीवन को जीने योग्य बनाकर उसे ऊँचा उठाती है, दोनों सही हैं। कला और जीवन के बीच गहरा संबंध है, जहाँ कला जीवन की व्याख्या करती है, उसे समृद्ध बनाती है, और व्यक्तियों को जीवन की गहराइयों और सौंदर्य को समझने का माध्यम प्रदान करती है। इसलिए, यह कहना उचित है कि कला जीवन से उपजती है और बदले में जीवन को अधिक सार्थक और जीने योग्य बनाती है।

## S30. Ans. (c)

Sol. (अ) सही है और (ब) गलत है
राष्ट्रीयता एक पुनीत भावना है" यह व्यक्तिगत और सामूहिक स्तर पर राष्ट्र के प्रति समर्पण और गौरव की भावना को दर्शाता है, जो सही है। "परिवर्तनशीलता कभी भी सृष्टि का शाश्वत नियम नहीं रही है" वास्तव में गलत है क्योंकि परिवर्तनशीलता सृष्टि का एक शाश्वत नियम है। यह परिवर्तन ही है जो सृष्टि के निरंतर विकास को सुनिश्चित करता है।

S31. Ans.(c)
Sol.

$$
1 \frac{3}{16}=\frac{19}{16}
$$

Reciprocal $=\frac{16}{19}$
Difference $=\frac{19}{16}-\frac{16}{19}=\frac{105}{304}$

## S32. Ans.(b)

Sol.

$$
\begin{aligned}
& \left(\frac{a}{b}\right)^{x-1}=\left(\frac{b}{a}\right)^{x-3} \\
& \Rightarrow\left(\frac{a}{b}\right)^{x-1}=\left(\frac{a}{b}\right)^{3-x} \Rightarrow \mathrm{x}-1=3-\mathrm{x} \\
& \Rightarrow 2 \mathrm{x}=4 \Rightarrow \mathrm{x}=2
\end{aligned}
$$

## S33. Ans.(a)

Sol.
ATQ,
$60 \%=420$
$100 \%=\frac{420}{60} \times 100=700$

## S34. Ans.(c)

Sol.
ATQ,
$\frac{1}{27}: x=\frac{3}{11}: \frac{5}{9}$
$\Rightarrow \mathrm{x}=\frac{3}{11} \times \frac{9}{5} \times \frac{1}{27}=\frac{1}{55}$

S35. Ans.(b)
Sol.

> ATQ
> $2.5 \%=1250$
> $100 \%=\frac{1250}{2.5} \times 100=50,000$

## S36. Ans.(c)

Sol.
Let the radius of the circle $=r$
Perimeter of the circle $=2 \pi r$
Area of circle $=\pi r^{2}$
Let the side of square $=a$
Perimeter of the square $=4 a$
Area of square $=a^{2}$
ATQ,
$2 \pi r=4 a$
$\frac{1}{2} \pi r=\mathrm{a}$
Ratio of their areas
$\pi r^{2}:\left(\frac{1}{2} \pi r\right)^{2}$
$=1: \frac{1}{4} \times \frac{22}{7}=14: 11$

## S37. Ans.(b)

## Sol.

let the side of cube $=a$
Diagonal of the cube $=a \sqrt{3}$
So, the side of cube $=4$
Volume $=4 \times 4 \times 4=64$

## S38. Ans.(d)

## Sol.

$$
\left(x^{3}+1\right)(x-1)=(x+1)(x-1)\left(x^{2}+x+1\right)
$$

## S39. Ans.(d)

Sol.

$$
\begin{aligned}
& x^{2}-4=0 \Rightarrow(x-2)(x+2)=0 \\
& x=-2,2
\end{aligned}
$$

## S40. Ans.(a)

Sol.
$3 x+y=5$ $\qquad$ (1)
$x-y=3$ $\qquad$
Adding (1) and (2)
$4 \mathrm{x}=8 \Rightarrow \mathrm{x}=2$
Putting value of $x$ in eq.(2)
$2-y=3 \Rightarrow y=-1$

## S41. Ans.(c)

Sol.
42437 can not be a square of any natural number.

## S42. Ans.(b)

Sol.

$$
\begin{aligned}
& 1.5 x=0.04 y \\
& \frac{x}{y}=\frac{0.04}{1.5}
\end{aligned}
$$

So,

$$
\left(\frac{y-x}{y+x}\right)=\left(\frac{1-\frac{x}{y}}{1+\frac{x}{y}}\right)=\left(\frac{1-\frac{0.04}{1.5}}{1+\frac{0.04}{1.5}}\right)=\frac{73}{77}
$$

## S43. Ans.(c)

## S44. Ans.(b)

Sol.
ATQ,
$\mathrm{y} \times \frac{x}{100}=100$ $\qquad$
and

$$
\mathrm{z} \times \frac{y}{100}=200
$$

$\qquad$
By (1) and (2)
$z=2 x$

## S45. Ans.(c)

## Sol.

$$
\begin{aligned}
& \text { Let the side of equilateral triangle }=x \mathrm{~cm} \\
& \text { Height }=10 \mathrm{~cm} \\
& \text { Then, } 10^{2}+\left(\frac{x}{2}\right)^{2}=x^{2} \\
& \Rightarrow 400+x^{2}=4 x^{2} \\
& \Rightarrow x^{2}=\frac{400}{3} \\
& \text { Area of equilateral triangle }=\frac{\sqrt{3}}{4} x^{2}=\frac{\sqrt{3}}{4} \times \frac{400}{3}=\frac{100}{\sqrt{3}} \mathrm{~cm}^{2}
\end{aligned}
$$

## S46. Ans.(a)

## S47. Ans.(a)

Sol. The correct answer is Coke.
Coke is a pure form of carbon. It is used in the manufacture of steel and in extraction of various metals.

## S48. Ans.(b)

Sol. The correct answer is Violet.
Violet light is refracted the most because violet colour has the minimum speed in glass prism.

## S49. Ans.(c)

Sol. The correct answer is length.
The resistance of a conductor depends directly on its length, inversely on its area of cross-section, and also on the material of the conductor (resistivity).
$R=\rho \mathrm{l} / \mathrm{A}$

## S50. Ans.(b)

Sol. The correct answer is phosphorus.
When a matchstick strikes on striking surface of a matchbox, the heat of the friction causes a reaction between the potassium chlorate in the match head and phosphorus in the striking surface.

## S51. Ans.(c)

Sol. The correct answer is Ethanol.
Ethanol is used as a beverage. It is a main constituent of beverages.

## S52. Ans.(b)

Sol. The correct answer is calorific value.
Fuel efficiency is expressed in terms of calorific value and its unit is kilojoule per kg . It is the amount of heat produced on complete combustion of 1 kg of a fuel.

## S53. Ans.(c)

Sol. The correct answer is zinc is more reactive than tin. Food cans are coated with tin and not with zinc because zinc is above the tin in reactivity series means more reactive than tin and can react with food elements preserved in it.

## S54. Ans.(c)

Sol. The correct answer is Drip system.
Irrigation is the process in which water is supplied to plants at regular intervals, for agriculture. The traditional methods of irrigation include moat, chain pump, dhekli and rahat. Modern methods comprise the use of sprinklers and drip system of irrigation.

## S55. Ans. (a)

Sol. The correct answer is one pair.
Humans have 46 chromosomes i.e. 23 pairs of chromosomes in all cells except for the gametic cells (sperm and ova). 22 of these pairs are called autosomes and look the same in both males and females. The 23rd pair called sex chromosomes, differ in males and females. Females have two copies of the X chromosome (XX), while males have one X and one Y chromosome ( XY ). Thus all non-gametic cells have 2 sex chromosomes in them.

## S56. Ans.(a)

Sol. The correct answer is 20 Hz to 20000 Hz .
The hearing is one amongst five senses. The ears are the organ that helps in picking up sound waves and vibrations. The Human ear is unable to hear the sound of all frequency, the range of hearing for a healthy young person is 20 to 20000 Hertz. This frequency is required to generate vibrations in the tympanic membrane. The number of vibrations that are produced per second is a frequency which is measured in Hertz.

## S57. Ans. (a)

Sol. The correct answer is Blue light.
Energy of light E = h $\nu$
Since, blue light has the highest frequency, so blue light has the highest energy.

## S58. Ans. (c)

Sol. The correct answer is Graphite.
Graphite is an allotrope of Carbon and is used to make pencil lead.

## S59. Ans. (b)

Sol. The correct answer is $60^{\circ}$.
When a ray of light is incident at an angle of $30^{\circ}$ on a mirror, the angle between the normal and the reflected ray is $60^{\circ}$. This is because the angle of reflection is equal to the angle of incidence, and the angle of incidence is measured between the incident ray and the normal. Therefore, if the incident angle is $30^{\circ}$, the angle of reflection will be $60^{\circ}$.

S60. Ans.(c)
Sol. The correct answer is peristaltic movement.
The automatic contraction and expansion movement which pushes the food further in our digestive tract (or alimentary canal) is known as Peristaltic movements. Peristaltic waves occur in the oesophagus, stomach, and intestines.

## S61. Ans.(c)

Sol. The correct answer is Pons, medulla, cerebellum. Pons, medulla, cerebellum: These three structures in the brainstem are crucial for controlling various autonomic functions, including heart rate, breathing, and blood pressure. They work together to send signals to the body to constrict or dilate blood vessels, influencing blood pressure.

## S62. Ans.(b)

Sol. The correct answer is Rolling friction. Rolling friction produce minimum friction.

## S63. Ans.(c)

Sol. National Bank for Agriculture and Rural Development, Mumbai. Mr. Shaji K V assumed charge as Chairman of NABARD on 7th December 2022.

## S64. Ans.(e)

Sol. The Chairman and CEO of Energy Maharatna Oil and Natural Gas Corporation Limited (ONGC), Arun Kumar Singh commands a distinguished career spanning over 37 years in the Oil \& Gas industry, both within India and on the global stage.

## S65. Ans.(b)

Sol. Giorgia Meloni is the correct answer. Giorgia Meloni is a prominent Italian politician, has been identified as the leader of the Brothers of Italy party and has been in discussions regarding leadership roles within Italy's government. Her political stance and leadership qualities have garnered significant attention.

## S66. Ans.(a)

Sol. Population of tiger has grown by 200 from 2018 to 2022. The current tiger population in India is 3,167 , up from 2,967 in 2018.

## S67. Ans.(c)

Sol. Biparjoy is recognized as a tropical cyclone. Tropical cyclones are characterized by intense circular storm systems originating over warm tropical waters, with low pressure at the center and numerous thunderstorms that produce strong winds and flooding rain.

S68. Ans.(a)
Sol. The new name of the Mid-Day Meal Scheme is the PM Poshan Scheme. This renaming reflects the Indian government's commitment to enhancing the nutritional intake of school-going children across the country, aiming to provide a balanced diet to improve their health and educational outcomes.

## S69. Ans.(e)

Sol. The Thawe Festival is an annual event that takes place in Gopalganj, Bihar.

## S70. Ans.(c)

Sol. The correct answer is (c) Maithili Thakur. Maithili Thakur, a renowned Indian classical singer from Bihar, has significantly contributed to the state's cultural representation. Her role as a State Icon of Bihar highlights her influence in promoting the cultural and artistic heritage of Bihar, making her a symbol of pride and inspiration for the state's populace.

## S71. Ans.(a)

Sol. At the time of the announcement of the Jal Jeevan Mission, only 3.23 crore (16.65\%) rural households had tap water connections. Under the Mission, in a short span of less than four years, more than 8.60 Crore rural households have been provided with tap water connections. Thus, as on April 27, 2023, over 11.84 Crore (60.92\%) rural households have a functional tap water supply in their homes. Further, Union Budget 2023-24 has allocated a massive Rs. 70,000 Crore for the implementation of the Jal Jeevan Mission.

## S72. Ans.(b)

Sol. The correct answer is (b) Dr. Shyama Prasad Mukherjee Rurban Mission. This scheme aims to stimulate local economic development, enhance basic services, and create well planned Rurban clusters. Named after Dr. Shyama Prasad Mukherjee, it focuses on fostering an integrated and inclusive development of rural areas.

## S73. Ans.(a)

Sol. The correct answer is (a) Shekhar Pathak. Shekhar Pathak is a noted historian and author who has extensively documented the Chipko Movement, a forest conservation movement in India where people embraced trees to prevent them from being cut down. His works provide a detailed account of the movement's history and impact.

## S74. Ans.(c)

Sol. The correct answer is (c) 4 January. World Braille Day is celebrated on January 4th to honor the birth of Louis Braille, the inventor of braille. This day recognizes the importance of braille as a means of communication in the full realization of the human rights for blind and partially sighted people.

## S75. Ans.(d)

Sol. The correct answer is (d) More than one of the above. The Bharat Gaurav Tourist Train, introduced to promote domestic tourism, includes features like starting from New Delhi and being inaugurated on significant dates to highlight its importance and connectivity in promoting India's rich cultural heritage and historical sites.

## S76. Ans.(a)

Sol. Himachal Pradesh has become the "first state" to create a DNA database of unidentified bodies.
Assistant Director (DNA) at the Directorate of Forensics Services, Junga, Vivek Sahajpal, conveyed to PTI that the database would play a crucial role in identifying bodies, significantly easing the distress of families who are desperately searching for their missing relatives. This system would alleviate the need for families to tirelessly travel and provide photographs and other details in the hope of finding their loved ones.

## S77. Ans.(c)

Sol. The correct answer is (c) Indonesia. Indonesia was the host nation for the ASEAN Summit in 2023. Hosting the ASEAN Summit is a significant role that rotates among the member countries. It involves leading discussions on economic, political, security, and sociocultural development of Southeast Asian countries, aiming to promote peace, stability, and economic growth in the region.

## S78. Ans.(b)

Sol. The correct answer is (b) Germany. The Petersburg Climate Dialogue is an annual event aimed at advancing global climate negotiations and actions. Hosting it on 10 May 2023, Germany continued its role in facilitating international discussions on climate change, emphasizing its commitment to global environmental issues and cooperation in addressing climate challenges.

## S79. Ans.(a)

Sol. Yellow star: Although the Sun is commonly referred to as a yellow star due to the way its light appears when filtered through Earth's atmosphere.

S80. Ans. (a)
Sol. The correct answer is 179.A latitude line is a line on a measure the north-south position of the position relative to the north and south poles. The equator is at the exact centre between the poles and is the $0^{\circ}$ th latitude line.

## S81. Ans.(c)

Sol. The correct answer is $\mathbf{3 0} \mathbf{~ m}$. The Kosi plain, located in the northern part of India and parts of Nepal, is part of the larger Gangetic plains. It is characterized by its flat topography and extensive floodplains created by the Kosi River, which is known as the "Sorrow of Bihar" due to its frequent and devastating floods. The average height of the Kosi plains from mean sea level is relatively low, around 30 meters. This low elevation contributes to the area's vulnerability to flooding, especially during the monsoon season when the river overflows its banks. The plains are formed by alluvial deposits laid down by the Kosi River and its tributaries, leading to fertile soil that supports a dense population dependent on agriculture.

## S82. Ans.(a)

Sol. The correct answer is Rift Valley of Africa. Fossil evidence strongly supports that the earliest humans originated in the Rift Valley of Africa. This region has yielded some of the oldest hominid fossils, indicating it as the cradle of human evolution.

## S83. Ans.(b)

Sol. The correct answer is acculturation. Acculturation refers to the process of cultural change and psychological change that results following meeting between cultures. The effects of acculturation can be seen at multiple levels in both interacting cultures. It involves the adoption of elements of one culture by members of another culture, which can result from direct cultural exchange or through the spread of cultural items such as symbols, ideas, and artifacts. Acculturation is distinct from enculturation, the process by which a person learns the necessary aspects of their own culture, and cultural realm, which refers to a geographical area wherein a human society has established its unique cultural attributes.

## S84. Ans.(b)

Sol. The correct answer is Begusarai. The Barauni Oil Refinery, one of India's oldest refineries, is located in the Begusarai district of Bihar. Established in 1964, it plays a crucial role in meeting the demand for petroleum products in the northeastern part of India. The refinery is operated by Indian Oil Corporation Limited (IOCL) and has undergone several upgrades to enhance its capacity and efficiency over the years.

## S85. Ans.(b)

Sol. It is associated with the phenomenon of Possibilism.

## S86. Ans.(a)

Sol. The correct answer is Poda. Shifting cultivation, also known as slash-and-burn agriculture, is a farming system in which fields are cleared, cultivated for a few years, and then abandoned as fertility declines. In Orissa (now Odisha), this type of cultivation is locally known as Poda. It involves clearing a piece of land by slashing vegetation and burning the remains to create a field for cultivation. This practice is part of the traditional agricultural methods in various parts of India, with different regions having their own names for it. Information Booster:
(b) Penda and (c) Bewar are terms associated with shifting cultivation in other parts of India but not specifically in Orissa. Bewar is more commonly used in Madhya Pradesh, while Penda is not directly associated with a specific region's shifting cultivation practices in the provided options.

## S87. Ans.(a)

## S88. Ans.(b)

Sol. The correct answer is Bhagalpur. Bhagalpur, often referred to as the "Silk City" of Bihar, is renowned for its silk production, particularly for the Bhagalpuri silk or Tussar silk. This district is the leading producer of silk textiles in Bihar, with a long-standing tradition and expertise in silk weaving and production. The silk from Bhagalpur is known for its unique texture, quality, and natural colors, which have earned it a distinguished place in both the national and international markets.

## S89. Ans.(b)

Sol. The correct answer is increases. The man-land ratio refers to the relationship between the number of people (population) and the amount of land available. When the population decreases, the ratio of land available per person increases because there is more land available for each individual. This means that each person has access to a larger portion of land, whether for agriculture, living space, or other uses, thereby increasing the man-land ratio. This concept is important in understanding how population changes impact resource allocation and usage within a geographic area

## S90. Ans.(c)

## S91. Ans.(c)

Sol. The correct answer is Jagdishpur. Babu Kunwar Singh was a prominent leader during the Indian Rebellion of 1857. He belonged to Jagdishpur, which is located in the Bhojpur district of Bihar. Kunwar Singh played a significant role in the uprising against British rule, showcasing remarkable leadership and courage. His contributions are celebrated as a symbol of resistance in Indian history, particularly in Bihar, where he mobilized a large group of fighters and led several successful operations against British forces.

## S92. Ans.(c)

Sol. The correct answer is Surndranath Banerjee. The Indian Association was established in 1876 by Surndranath Banerjee, along with Ananda Mohan Bose. It was one of the earliest political organizations in India that sought to create a platform for civil and political rights, and to promote the cause of national unity. The Indian Association played a crucial role in the Indian independence movement, advocating for civil rights and public welfare, and laying the groundwork for the formation of the Indian National Congress in 1885. Surndranath Banerjee was a prominent figure in Indian nationalism, known for his eloquence, leadership, and commitment to the cause of Indian self-rule.

## S93. Ans.(b)

Sol. The correct answer is Madam Bhikaji Cama. Madam Bhikaji Cama was a prominent figure in the Indian independence movement and a staunch advocate for human rights and gender equality. She is notably recognized for unfurling the first version of the Indian National Flag at the International Socialist Conference in Stuttgart, Germany, in 1907. This act was a powerful symbol of resistance against British colonial rule and marked the first time the flag was raised on an international platform, signifying India's struggle for independence. Cama's contributions to the freedom movement extend beyond this symbolic act, as she was also involved in revolutionary activities and supported the cause of Indian nationalism through various means.

## S94. Ans. (c)

Sol. The correct answer is Al-Hilal. Maulana Abul Kalam Azad was a prominent Indian freedom fighter and a senior leader of the Indian National Congress. He was also a noted writer and journalist, who founded and edited the Urdu weekly journal "Al-Hilal" in 1912. "AlHilal" played a crucial role in spreading revolutionary ideas and anti-British sentiments among the Indian Muslim community, advocating for national unity and independence from British rule. Azad's contributions through his writings in "Al-Hilal" were instrumental in mobilizing public opinion against colonialism and in fostering a spirit of nationalism among Indians

## S95. Ans.(a)

Sol. The correct answer is Dr. Rajendra Prasad. "Mahatma Gandhi and Bihar-Some Reminiscences" is a work that highlights the significant role of Mahatma Gandhi in the Indian independence movement, particularly focusing on his activities and influence in Bihar. Dr. Rajendra Prasad, who later became the first President of India, was closely associated with Gandhi and played a pivotal role in the freedom struggle. Through this book, Dr. Prasad offers insights into Gandhi's philosophy, leadership, and the profound impact he had on Bihar's socio-political landscape. The work is a testament to Gandhi's enduring legacy in inspiring leaders and masses alike towards the cause of independence and social reform.

## S96. Ans.(b)

Sol. The correct answer is Sahajanand Saraswati. The All India Kisan Sabha (AIKS) was formed in April 1936 at the Lucknow session of the Indian National Congress, with the primary aim of addressing the grievances of peasants and promoting their rights. Swami Sahajanand Saraswati, a prominent leader in the peasant movement and a social reformer, presided over the first session of the All India Kisan Sabha. Under his leadership, the Kisan Sabha sought to unite peasants against feudal oppressions and British colonial policies, advocating for agrarian reform and the abolition of zamindari. Sahajanand Saraswati's contributions were instrumental in mobilizing peasants and elevating their struggles to the national stage, making the Kisan Sabha a pivotal force in the Indian independence movement.

## S97. Ans.(b)

Sol. The correct answer is ${ }^{* *} 1940^{* *}$. Patna Women's College, established in 1940, is a premier institution for women's education in Patna, Bihar, India. It holds the distinction of being the first college for women in the state, aiming to provide higher education and empower women through academic excellence. Since its inception, the college has been committed to fostering an environment of intellectual growth, character formation, and cultural development among its students. Its foundation in 1940 marked a significant step forward in the educational landscape of Bihar, contributing to the broader national movement for women's education and empowerment in India.

S98. Ans.(c)
Sol. The correct answer is **Food and Agriculture**. Dr. Rajendra Prasad, who later became the first President of India, was a key figure in the Indian independence movement and played a significant role in the interim government formed in 1946, prior to India's independence. In this interim government, Dr. Rajendra Prasad was appointed as the Minister of Food and Agriculture. His leadership in this portfolio was crucial at a time when India was facing significant challenges related to food security, agricultural production, and the need for agrarian reforms. His efforts in the Food and Agriculture department laid the groundwork for future policies and initiatives aimed at improving the agricultural sector and ensuring food security in the newly independent India.

## S99. Ans.(c)

Sol. The correct answer is 1927. The All India Women's Conference (AIWC) was founded in 1927, marking a significant milestone in the history of women's movements in India. This organization was established to advocate for women's rights, focusing on education, legal rights, and social reform. The AIWC played a pivotal role in addressing issues related to women's suffrage, educational reforms, and the abolition of social practices that were detrimental to women's equality and wellbeing. Its foundation in 1927 was a response to the growing need for a national platform that could represent the interests of women across the diverse social and cultural landscapes of India. Over the years, the AIWC has contributed significantly to policy changes and legislative reforms aimed at improving the status of women in the country.

## S100. Ans.(c)

Sol. The correct answer is Shok (mourn). On 16th October 1905, the day the partition of Bengal was officially implemented by the British, it was observed as a day of mourning (Shok) by the people of Bengal. This partition was seen as an attempt to divide and weaken the nationalist movement against British rule by splitting Bengal into two parts on religious lines. The day was marked by widespread sadness, with people fasting, shops closing, and public meetings being held to protest the partition. Homage was paid to Mother India, and there were processions where people tied rakhis on each other's wrists as a symbol of unity. While boycotts and hartals also became part of the broader Swadeshi movement response, the specific observation on 16th October was characterized by mourning.

## S101. Ans.(b)

Sol. The correct answer is Non-Cooperation
Movement. Bihar Vidyapeeth, a national university, was established in 1921 during the Non-Cooperation Movement against British rule. This educational institution was founded by Dr. Rajendra Prasad, who later became the first President of India, along with several other leaders. The establishment of Bihar Vidyapeeth was inspired by Mahatma Gandhi's call for boycotting government-aided educational institutions to promote self-reliance and the use of indigenous resources. It aimed to provide an alternative system of education that was rooted in Indian culture and values, distancing itself from the British educational system. This was a strategic move to strengthen the NonCooperation Movement by fostering a sense of nationalism and self-dependence among Indians through education.

## S102. Ans.(a)

Sol. The correct answer is Raj Kumar Shukla. Raj Kumar Shukla was a local farmer from Champaran, Bihar, who played a pivotal role in drawing Mahatma Gandhi's attention to the plight of the peasants suffering under the oppressive indigo cultivation system imposed by British planters. In 1917, Shukla met Gandhi at the Lucknow session of the Indian National Congress and persistently requested him to visit Champaran to see the conditions firsthand. This invitation led to Gandhi's first major involvement in a civil disobedience campaign in India, marking the beginning of his active participation in the Indian independence movement. Gandhi's intervention in Champaran led to significant reforms and relief for the peasants, showcasing the power of non-violent resistance and civil disobedience.

## S103. Ans.(b)

Sol. The correct answer is Ram Manohar Lohia. "The Wheels of History" is a notable work by Ram Manohar Lohia, an eminent Indian freedom fighter and socialist political leader. In this book, Lohia delves into various aspects of Indian and world history, analyzing the forces of change and continuity that have shaped human civilization. He uses the metaphor of the wheel to discuss the cyclical nature of history, emphasizing the importance of social justice, equality, and political activism. Lohia's insights into the dynamics of power, culture, and economic structures have made "The Wheels of History" a significant contribution to Indian political thought and philosophy.

## S104. Ans.(d)

Sol. The correct answer is ${ }^{* *}$ More than one of the above**. The Muslim League, led by Muhammad Ali Jinnah, played a significant role in the political landscape of pre-independence India, particularly in the events leading up to partition. The statements provided reflect the complex stance of the Muslim League at various junctures:

- The Muslim League did express dissatisfaction with the Cripps Mission's proposals, primarily because they did not explicitly pave the way for Pakistan.
- Although the Wavell Plan aimed to provide a framework for Indian self-government, the Muslim League's rejection was influenced by concerns that it did not adequately secure the establishment of Pakistan.
- The Muslim League's rejection of the Cabinet Mission Plan in 1946 was a pivotal moment, leading to the call for Direct Action Day, which resulted in widespread communal violence and eventually strengthened the demand for Pakistan.
Thus, the Muslim League's actions were characterized by a consistent pursuit of a separate nation for Muslims, leading to significant political developments and ultimately the partition of India.


## S105. Ans.(d)

Sol. The correct answer is ${ }^{* *}$ More than one of the above**. Fundamental Rights in India serve a multifaceted purpose, reflecting the essence of creating a balanced and just society. These rights are enshrined in Part III of the Indian Constitution and are a cornerstone in establishing a democratic framework that ensures the dignity, liberty, and equality of all citizens. The statements provided encapsulate the broad spectrum of objectives Fundamental Rights aim to achieve:

- They indeed act as a declaration of balance between Constitutional supremacy and the authority of the Legislature, ensuring that the law-making body operates within the confines of the Constitution, thus safeguarding individual freedoms against possible legislative arbitrariness.
- Fundamental Rights also create a crucial balance between individual liberties and the security of the nation, allowing the state to impose reasonable restrictions on certain rights in the interest of public order, national security, and unity.
- Furthermore, they are instrumental in establishing not just political and legal equality but also aim to address and ameliorate social disparities, promoting social justice and inclusivity.
Therefore, the incorporation of Fundamental Rights in the Indian Constitution reflects a comprehensive approach to uphold the principle of equality, protect individual liberties, and ensure the collective security and harmony of the nation.


## S106. Ans.(d)

Sol. The correct answer is More than one of the above. The Indian Constitution incorporates various protections for individuals with respect to the conviction of offences:

- The provision of double jeopardy is indeed found in the Constitution of India, specifically under Article 20(2), which states that no person shall be prosecuted and punished for the same offence more than once. This principle ensures that an individual cannot be tried or punished twice for the same act or offence, thereby safeguarding against double punishment.
- The protection from penalty greater than that which could have been imposed under the law in force at the time of the commission of the offence is also guaranteed by the Constitution, particularly in Article 20(1). This clause ensures that no person is subjected to a penalty greater than what the laws provided for at the time the act was committed.
- Regarding disciplinary actions against government servants, Indian law does allow for both judicial and departmental actions for the same offence under certain circumstances. While judicial proceedings address violations of law, departmental actions pertain to violations of service conduct rules. However, these processes are distinct and governed by separate legal frameworks, ensuring that the principles of natural justice are upheld.
These provisions collectively aim to protect the rights of individuals against arbitrary and excessive penal measures, embodying the principles of fairness and justice within the legal framework of India.


## S107. Ans.(a)

Sol. The correct answer is 'A Quasi Federal State' is the result of Indian Federalism in the country. Indian federalism is often described as 'quasi-federal' in nature, a term coined by K.C. Wheare to describe the unique blend of federalism and unitarism in the Indian constitution. While the constitution establishes a dual polity and distributes powers between the Union and the states, it also incorporates features that grant the central government significant authority over the states. This includes the power of the central government to unilaterally change the boundaries of states, the imposition of national emergency provisions that can alter the state of federal relations, and the central government's dominant role in financial matters. These features reflect a strong unitary bias within a federal framework, making India a quasi-federal state rather than a purely federal one.

## S108. Ans.(d)

Sol. India has an integrated judiciary because a and d. There is one fundamental law and justice in India, with the Supreme Court as the apex court, and the High Courts below it.

S109. Ans.(d)
Sol. The correct answer is More than one of the above.
Pressure groups in India, as in many other countries, face several challenges that affect their operation and effectiveness. These challenges include by lack of ideological commitments and by lack of autonomous role in the politics of the country. The lack of clear ideological commitments means that these groups sometimes struggle to present a consistent stance on issues, making it difficult for them to mobilize support and effect change. Furthermore, the lack of an autonomous role in the political landscape of the country often results in these groups being co-opted by political parties or becoming heavily dependent on them for influence, which can dilute their agendas and reduce their effectiveness as independent actors in the political process. This interdependence between pressure groups and political entities complicates their ability to function as independent entities advocating for specific causes or changes without political interference or influence.

## S110. Ans.(c)

Sol. The correct answer is The Fundamental Rights. The 'Freedom of Silence' in India is considered a part of the Fundamental Rights, specifically under the ambit of the right to freedom of speech and expression. This concept implies that individuals have the right not to speak or express themselves if they choose not to, which is a fundamental aspect of the freedom of speech and expression protected under Article 19(1)(a) of the Indian Constitution.

## S111. Ans.(a)

Sol. The correct matching between List -I and List -II is based on the provisions and their corresponding articles in the Constitution of India. Specifically, Article 42 mandates just and humane conditions of work, ensuring that workers are treated fairly and with dignity. Article 43 calls for living wages for workers, guaranteeing that workers receive compensation that not only meets their basic needs but also allows them to live with dignity. Article 44 speaks to the Uniform Civil Code, proposing a single legal framework for all citizens regardless of religion, aiming to promote national unity and integrity. Lastly, Article 49 deals with the protection of places and objects of national importance, emphasizing the preservation of cultural heritage and national pride. This alignment of provisions with articles reflects the constitutional commitment to social justice, economic welfare, national integration, and cultural preservation.

## S112. Ans.(d)

Sol. The main aim of District Planning Committees in India is (d) More than one of the above. District Planning Committees were established to help in the unification of plans of Panchayats and Nagar Palikas, the preparation of model planning of the district, and the development of a unified attitude among them. Their role is multifaceted and covers a range of activities related to development planning.

## S113. Ans.(b)

Sol. The correct answer is Satyma Shivam Sundaram. Doordarshan, the national television broadcaster of India, has adopted "Satyam Shivam Sundaram" as its motto, which translates to "Truth is God and God is beautiful." This motto reflects the broadcaster's commitment to presenting the truth in its programming, emphasizing the importance of integrity, beauty, and the pursuit of truth in the content it broadcasts. Doordarshan aims to uphold these values in its diverse range of programs, catering to the informational, educational, and entertainment needs of its wide audience across the country. This motto underscores the ethical foundation upon which Doordarshan operates, striving to produce and disseminate content that not only informs and entertains but also upholds the moral and cultural values of society.

## S114. Ans.(c)

Sol. Bhagwan Mahavir Wildlife Sanctuary is located in Goa. It is the largest wildlife preserve within the state, encompassing an area that is rich in biodiversity and natural beauty. Situated near the town of Molem, the sanctuary is part of the Western Ghats, a mountain range recognized as one of the world's biodiversity hotspots. The sanctuary is home to a variety of flora and fauna, including several endangered species. It offers a habitat to mammals like Bengal tigers, leopards, and the state animal of Goa, the Gaur, as well as an array of bird species, making it a significant area for wildlife conservation and a popular destination for nature lovers and eco-tourists. The sanctuary also includes several attractions, such as the Dudhsagar Falls, one of the tallest waterfalls in India, and the 12th-century Tambdi Surla temple, adding cultural and historical dimensions to its natural appeal.

## S115. Ans.(c)

Sol. Deendayal Upadhyaya is renowned for Integral humanism, a philosophy that advocates for a holistic approach to human development, emphasizing ethical values and cultural identity alongside economic growth.

## S116. Ans.(b)

Sol. Khan Abdul Ghaffar Khan, affectionately known as "Frontier Gandhi," led the Khudai Khidmatgar movement. This non-violent struggle aimed at achieving India's independence from British rule was notable for its emphasis on social reform and its base in the NorthWest Frontier Province (now in Pakistan). Ghaffar Khan's commitment to non-violence and his leadership of the Pashtun community in a struggle for freedom and social justice distinguish his contribution to the Indian independence movement.

## S117. Ans.(c)

Sol. Janjatiya Gaurav Divas was inaugurated on 15 November, 2021, to honor the cultural heritage and contributions of tribal communities in India. This date was specifically chosen to commemorate the birth anniversary of Birsa Munda, a tribal freedom fighter, religious leader, and folk hero who played a crucial role in the Indian independence movement against British colonial rule. Birsa Munda's legacy is celebrated as a symbol of tribal pride, resistance, and the rich cultural traditions of India's indigenous peoples.

## S118. Ans.(b)

Sol. Rajasthan is the largest producer of pearl millet, or Bajra, in India. The state's arid and semi-arid regions offer the ideal conditions for Bajra cultivation, making it a staple crop. Its ability to withstand harsh growing conditions, including low fertility soils and drought, makes it an essential grain for Rajasthan's agricultural landscape.

## S119. Ans.(a)

Sol. Sedimentary rocks are the type of rocks that commonly contain fossils. These rocks are formed by the accumulation of sediment, which can include fragments of other rocks, minerals, and organic matter, including the remains of plants and animals. Over time, these sediments are compacted and cemented together, potentially encapsulating and preserving fossils within the rock layers. This process allows for the historical biological activity to be recorded and studied through the fossilized remains found within sedimentary rocks. Information Booster:

- Metamorphic rocks are transformed from preexisting rocks under the influence of high pressure and temperature but typically do not contain fossils because the conditions required for metamorphism often destroy organic remains.
- Igneous rocks are formed through the cooling and solidification of magma or lava and generally do not contain fossils, as the high temperatures involved in their formation would destroy any organic material.


## S120. Ans.(b)

Sol. Oxbow lakes are typically found in river valleys. They form when a wide meander from the main stem of a river is cut off, creating a free-standing body of water. This process is often due to the river finding a shorter course, leaving the meander loop cut off from the flow of the river.

## S121. Ans.(c)

Sol. World Water Day is celebrated on March 22. It is an annual United Nations observance day that highlights the importance of freshwater and advocates for the sustainable management of freshwater resources. The day is used to advocate for the sustainable management of freshwater resources and to raise awareness about the global water crisis.

## S122. Ans.(c)

Sol. The home state of the one-horned rhinoceros is Assam. This Indian state is renowned for its rich biodiversity and is particularly famous for the Kaziranga National Park, which is a UNESCO World Heritage Site. Kaziranga is known worldwide for its significant population of the one-horned rhinoceros, making Assam the premier habitat for these majestic creatures. The conservation efforts in Assam have been pivotal in protecting and increasing the population of the onehorned rhino, which was once on the brink of extinction due to poaching and habitat loss.

## S123. Ans.(c)

Sol. Australia is recognized as the largest producer of bauxite worldwide. Bauxite is the primary ore for aluminum production, and Australia's vast bauxite deposits have positioned it as a global leader in the mining and export of this valuable mineral. The country's rich reserves are mainly found in the Northern Territory and Western Australia, contributing significantly to the global aluminum industry. Australia's bauxite mines are highly efficient, employing advanced technology and practices to ensure sustainable extraction and minimal environmental impact. This leadership in bauxite production not only supports the global aluminum supply chain but also plays a crucial role in Australia's economy through exports and related industries.

## S124. Ans.(c)

Sol. Jute is commonly referred to as the "golden fibre" due to its shiny, golden color and economic value. It is a long, soft, and shiny vegetable fiber that can be spun into coarse, strong threads. Jute is derived from the plants of the Corchorus genus and is primarily grown in tropical countries like Bangladesh, India, and China. This natural fiber is highly sustainable, biodegradable, and environmentally friendly, making it a preferred material for crafting a wide range of products, including burlap, hessian cloth, and sackings. Jute's role in the global textile industry is significant, especially in regions where it is cultivated, due to its affordability, durability, and versatility.

## S125. Ans.(b)

Sol. The main factors that cause change in the population are birth, death, and migration. Births increase the population, deaths decrease it, and migration can either increase or decrease the population, depending on whether it is immigration (entering a new location) or emigration (leaving a place). These three elements are the primary determinants of population change in any area. While life expectancy impacts the death rate over time and marriage can influence birth rates, the direct factors altering population numbers are births, deaths, and migration.

## S126. Ans.(c)

Sol. Ecological degradation is the correct term for the unfavorable alteration of the environment due to human activities. This process involves the deterioration of the environment through depletion of resources such as air, water, and soil; the destruction of ecosystems; habitat destruction; the extinction of wildlife; and pollution. Ecological degradation can result from a variety of factors, including industrialization, agriculture, deforestation, and pollution, leading to a decline in environmental quality and a reduction in the capacity of the environment to meet social and ecological objectives.

## S127. Ans.(b)

Sol. Black lung disease, also known as coal workers' pneumoconiosis (CWP), is primarily associated with coal miners. It is caused by long-term inhalation of coal dust, which accumulates in the lungs and cannot be removed by the body, leading to inflammation, fibrosis, and in severe cases, necrosis. This occupational lung disease is a common ailment among coal miners due to the nature of their work environment, where coal dust is prevalent. Preventive measures include the use of protective respiratory equipment and adequate ventilation in mines, but once the disease develops, it is irreversible and may lead to severe respiratory distress and even death.

## S128. Ans.(c)

Sol. An oil slick is a thin film of oil that floats on the surface of water, typically seawater. It is often the result of oil spills from tankers, offshore drilling rigs, or leakage from oil wells, which releases petroleum products into the ocean or other bodies of water. Oil slicks can spread over a wide area, depending on the volume of oil spilled and the conditions of the water, including currents and winds. They pose significant environmental hazards, affecting marine life and birds, and can also impact coastal regions and human livelihoods related to the sea. Cleanup efforts for oil slicks involve various methods, including mechanical removal, chemical dispersants, and natural biodegradation, but the impact on the environment can be long-lasting.

## S129. Ans.(b)

Sol. The Giant Panda serves as the animal symbol for the World Wildlife Fund (WWF), one of the world's leading conservation organizations. The choice of the giant panda was due to its distinctive black and white coloring, its appeal and vulnerability, and the fact that it is an endangered species, which makes it a powerful symbol for wildlife conservation efforts. The logo featuring a giant panda was designed by Sir Peter Scott, one of WWF's founders, in 1961. It has since become an iconic emblem for conservation, representing the organization's commitment to protect the natural world and the myriad species that inhabit it. The giant panda symbolizes the broader mission of WWF to halt and reverse the destruction of the environment and to build a future where humans live in harmony with nature.

## S130. Ans.(b)

Sol. The boiling point of impure water increases compared to pure water. This phenomenon is due to the presence of impurities such as salts or other dissolved substances, which elevates the boiling point, a concept known as boiling point elevation.

## S131. Ans.(e)

Sol. Ozone holes are most pronounced at the Polar Regions, particularly over Antarctica, and to a lesser extent over the Arctic. This is due to the unique atmospheric conditions present in these areas, including extremely cold temperatures and the presence of polar stratospheric clouds. These conditions facilitate chemical reactions that deplete ozone, especially reactions involving chlorine and bromine compounds sourced from human-made substances like chlorofluorocarbons (CFCs). The phenomenon is most noticeable during the springtime in each hemisphere. The specific conditions needed for the formation of ozone holes are not present at the equator, tropic of Cancer, or tropic of Capricorn, which is why these areas do not experience pronounced ozone depletion.

## S132. Ans.(d)

Sol. Soaps and detergents contribute to water pollution through various organic pollutants, including glycerol, polyphosphates, and sulfonated hydrocarbons. Glycerol is a byproduct of soap production. Polyphosphates are used in detergents as water softeners to improve cleaning efficiency but can lead to eutrophication in aquatic environments. Sulfonated hydrocarbons, or more specifically alkylbenzene sulfonates, are synthetic organic compounds used in detergents for their surfactant properties. These compounds can be difficult to biodegrade in the environment, leading to water pollution. Thus, option (d) "More than one of the above" is correct as all these compounds contribute to the organic pollutant load from soaps and detergents.

## S133. Ans.(c)

Sol. Lead has historically been the most hazardous metal pollutant in automobile exhausts. Before the widespread adoption of unleaded gasoline, lead tetraethyl was used as an additive to improve the octane rating of gasoline, which resulted in lead emissions from vehicle exhausts. Inhalation or ingestion of lead particles can lead to serious health issues, including neurological damage, especially in children. The use of lead in gasoline has been significantly reduced or eliminated in many countries, drastically reducing the amount of lead pollution from automobiles. Therefore, among the options provided, lead is identified as the most hazardous metal pollutant from automobile exhausts, making option (c) correct.

## Information Booster:

- Mercury and cadmium are also toxic metals, but they are less commonly associated with automobile exhausts compared to lead. Mercury is more commonly associated with industrial processes and coal combustion, while cadmium can be found in battery production and industrial emissions.


## -

## S134. Ans.(b)

Sol. The main reason vegetables take longer to cook in boiling water at high altitudes is because the temperature of the boiling water decreases with increasing altitude. At higher altitudes, atmospheric pressure is lower, which lowers the boiling point of water. For example, at sea level, water boils at $100^{\circ} \mathrm{C}$ $\left(212^{\circ} \mathrm{F}\right)$, but at higher altitudes, it boils at a lower temperature. This reduced boiling temperature means that boiling water is less hot and, therefore, cooks food more slowly. This is why cooking times must be adjusted when preparing food in mountainous or high-altitude areas.

## S135. Ans.(c)

Sol. the meaningful sequence is Crime, Police, Justice, Judgement, Punishment

## S136. Ans.(c)

Sol. TITLE cannot be formed because there is no E in the given word.

## S137. Ans.(a)

Sol. ATQ, the sequence is
Rajiv > Ramesh > Mohit > Kamlesh > Shyam

## S138. Ans.(c)

Sol.
TEA $=20 \times 1+5 \times 2+1 \times 3=33$
EAT $=5 \times 1+1 \times 2+20 \times 3=67$
Similarily,
$\mathrm{ATE}=1 \times 1+20 \times 2+5 \times 3=56$

## S139. Ans.(e)

Sol. Glass is made of sand.
Similarily,
Paper is made of wood.

## S140. Ans.(c)

## S141. Ans.(a)

## Sol. 18

## S142. Ans.(b)

Sol.
Between 6 and 7 O'clock, the two hands of a clock will be together at 6 past $32 \frac{8}{11}$ minutes.

## S143. Ans.(c)

Sol.
$(9 * 7)=(9+7)(9-7)=32$
$\left(13^{*} 7\right)=(13+7)(13-7)=120$
$(17 * 9)=(17+9)(17-9)=208$
$(19 * 11)=(19+11)(19-11)=240$
S144. Ans.(a)
Sol.


## S145. Ans.(c)

Sol. Lotus
S146. Ans.(a)
Sol.


## Adda 247

## S147.Ans.(b)

## S148. Ans.(a)

Sol. As a manager and one of your employees is not working properly, as a manager i would talk to him and try to find out his problem.

## S149. Ans.(b)

Sol. Total students $=60$

Girls : Boys $=2: 1=40: 20$
Total girls $=40$
So, girls behind Kamal $=40-9=31$
Total students behind Kamal $=60-17=43$
Number of boys after Kamal = 43-31=12
S150. Ans.(b)
Sol. FL18


