

# Sainik School

## Entrance Exam

### Solved Paper-2024

#### (Class-VI)

#### ENGLISH LANGUAGE

- Choose the correct spelling from the given option:  
(a) Sanction (b) Sanctian  
(c) Sancison (d) Sanccion
- Choose the word opposite in meaning to the given word.  
Forgiveness  
(a) Restore (b) Decline  
(c) Withdraw (d) Revenge
- Choose the correct article from the given option.  
He is \_\_\_\_\_ honest officer.  
(a) a (b) an  
(c) the (d) No error
- Identify the tense of the following sentence:  
The Sun sets in the West.  
(a) Present Indefinite  
(b) Past Indefinite  
(c) Future Indefinite  
(d) Present Perfect Tense
- Fill in the blank:  
The \_\_\_\_\_ of these products \_\_\_\_\_ good.  
(a) quality, is (b) quality, are  
(c) quality, were (d) qualities, is  
Read the following passage carefully and answer the questions given below:  
It is believed that a pashmina shawl is as warm as six sweaters! It is very thin yet very warm. The goats from which the soft Pashmina wool is collected, are found on very high altitudes of 5000 metres, In winter, the temperature here drops below 0°C (-40°C). A coat of warm hair grows on the goat's body which protects it from extreme cold. The goats shed some of their hair (fur) in summer. This hair is so fine that six of these would be as thick as one hair of yours!

The fine hair cannot be woven, on machines and so weavers of Kashmir, make these shawls by hand. This is a long and difficult process. After almost 250 hours of weaving, one plain pashmina shawl is made. Imagine how long it would a make a shawl with embroidery.

Choose the correct option to fill in the blank:

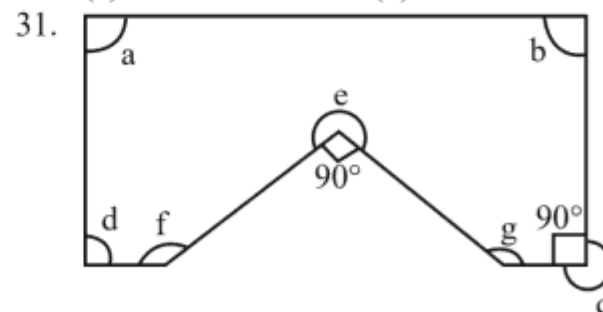
- It is believed that a pashmina shawl is as warm as \_\_\_\_\_.  
(a) three sweaters! (b) six sweaters!  
(c) nine sweaters! (d) eleven sweaters!
- Choose the correct statement:  
(a) The goats shed some of their hair (fur) in summer.  
(a) The goat shed some of their hair (fur) in winter.  
(c) The goat shed some of their hair (fur) in rainy season.  
(d) The goat shed some of their hair (fur) in spring.
- Choose the correct option:  
After almost \_\_\_\_\_ of weaving, one plain pashmina shawl is made.  
(a) 100 hours (b) 150 hours  
(c) 200 hours (d) 250 hours
- "A coat of warm hair grows on the goat's body which protects it from extreme cold."  
Identify the part of speech for 'hair' from the given sentence.  
(a) Verb (b) Noun  
(c) Pronoun (d) Adjective
- Choose the opposite of 'thick'.  
(a) warn (b) soft  
(c) thin (d) fine
- Identify the adjective from given options –  
(a) High (b) Found  
(c) Birds (d) Remains

12. Fill in the blank with correct degree of Comparison:  
I have — money in my pocket.  
(a) Not so more (b) More  
(c) Most (d) Many
13. Choose the word that is opposite of real \_\_\_\_\_.  
(a) Reward (b) Imaginary  
(c) Wise (d) Modern
14. Choose the correct spelling-  
(a) Receive (b) Recieve  
(c) Receve (d) Receive
15. Choose the correct option to improve the sentence and replace it with underlined word –  
'Did there bus come on time?'  
(a) their (b) theirs  
(c) their's (d) No improvement
16. Choose the correct option to improve the sentence.  
'Ram left the house before. Shyam got there'.  
(a) will leave (b) leaves  
(c) had left (d) has left
17. Fill in the blank with suitable question tag-  
'I needn't ask him, \_\_\_\_\_?'  
(a) can I (b) am I  
(c) aren't I (d) need I
18. Complete the sentence with the correct form of verb –  
The train \_\_\_\_\_ suddenly.  
(a) is stop (b) stopped  
(c) was stopping (d) has stop
19. Choose the sentence having intransitive verb.  
(a) Boys fly kites  
(b) Birds fly  
(c) Karim ran a race  
(d) He burnt his diary
20. Fill in the blank with suitable conjunction.  
I do not know \_\_\_\_\_ he has gone or not.  
(a) whether (b) if  
(c) through (d) yet
21. Complete the sentence with suitable article –  
Ram is \_\_\_\_\_ student whom we all expect to get less than 35% marks.  
(a) a (b) the  
(c) that (d) an
22. Fill in the blank with correct preposition-  
The speaker is going \_\_\_\_\_ the subject.  
(a) from (b) off  
(c) to (d) within

23. Fill in the blank with correct word.  
'Akbar's army \_\_\_\_\_ castle of Chittorgarh'.  
(a) Cease (b) Seize  
(c) Seized (d) Sees
2. Choose the correct meaning of "Beat the air" –  
(a) To make useless efforts  
(b) To be victorious  
(c) To be defeated  
(d) To defy
25. Choose the word opposite in meaning from the given option:  
THREAT  
(a) MENACE (b) THOUGHTFUL  
(c) SAFETY (d) PROSPER

### MATHEMATICS

26.  $6 \text{ kg} + 3 \text{ kg } 700 \text{ g} =$  \_\_\_\_\_  
(a) 6 kg 300 g (b) 5.6 kg  
(c) 5 kg 300 g (d) 6.7 kg
27. The side of a cube formed by melting a solid cuboid with dimension 3 cm X 8 cm X 9 cm is:  
(a) 6 cm (b) 4 cm  
(c) 3 cm (d) 5 cm
28. Eight small cubes each having edge 2 cm are arranged to form a large cube. The volume of the large cube (in  $\text{cm}^3$ ) is:  
(a) 48 (b) 60  
(c) 64 (d) 72
29. If the cost of 420 oranges is ₹ 2,520 then the cost of 8 dozen oranges, is:  
(a) 480 (b) 528  
(c) 540 (d) 576
30. If 16 bags cost ₹ 1,520, then the cost of 3 bags will be:  
(a) ₹ 240 (b) ₹ 255  
(c) ₹ 270 (d) ₹ 285



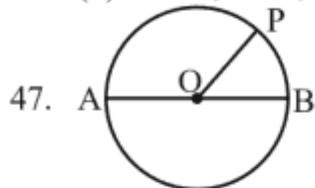
Which of the angles in the given figure is / are equal to three right angles?

- (a)  $\angle e$  and  $\angle c$  only  
(b)  $\angle c$  only  
(c)  $\angle e$  only  
(d)  $\angle e$ ,  $\angle c$ ,  $\angle f$  and  $\angle g$  only

32. Name the type of an angle whose measure is  $26^\circ$  more than the difference between the angles  $146^\circ$  and  $82^\circ$ .  
 (a) Acute angle (b) Obtuse angle  
 (c) Right angle (d) Reflex angle
33. Two angles of a triangle are  $40^\circ$  and  $50^\circ$ , respectively. Name the triangle based on sides and angles.  
 (a) Scalene and acute angled triangle  
 (b) Scalene and right-angled triangle  
 (c) Isosceles and obtuse angled triangle  
 (d) Scalene and obtuse angled triangle
34. Which of the following fractions will be at the third place from the left, when these fractions are arranged in ascending order?  
 $\frac{2}{3}, \frac{5}{6}, \frac{7}{8}, \frac{9}{14}$   
 (a)  $\frac{2}{3}$  (b)  $\frac{5}{6}$   
 (c)  $\frac{7}{8}$  (d)  $\frac{9}{14}$
35. Arrange the fractions  $\frac{2}{9}, \frac{2}{5}, \frac{2}{11}, \frac{2}{7}$  descending order:  
 (a)  $\frac{2}{11}, \frac{2}{7}, \frac{2}{9}, \frac{2}{5}$  (b)  $\frac{2}{5}, \frac{2}{7}, \frac{2}{9}, \frac{2}{11}$   
 (c)  $\frac{2}{9}, \frac{2}{5}, \frac{2}{11}, \frac{2}{7}$  (d)  $\frac{2}{11}, \frac{2}{9}, \frac{2}{7}, \frac{2}{5}$
36. The largest among the fractions  $\frac{5}{9}, \frac{4}{11}, \frac{7}{12}$  and  $\frac{6}{13}$   
 (a)  $\frac{5}{9}$  (b)  $\frac{4}{11}$   
 (c)  $\frac{7}{12}$  (d)  $\frac{6}{13}$
37. What should be added to  $\frac{5}{13}$  to get  $\frac{13}{5}$ ?  
 (a)  $\frac{1}{65}$  (b)  $\frac{1}{36}$   
 (c)  $\frac{144}{65}$  (d)  $\frac{9}{17}$
38. Three cloth pieces of length 7 m, 7.5 m and 9.5 m respectively are cut in pieces of identical maximum length. The length of each small piece (in cm), is:  
 (a) 25 (b) 30  
 (c) 40 (d) 50
39. The LCM and HCF of two numbers are 150 and 25, respectively. If one of the numbers is 75, then the other number is:  
 (a) 29 (b) 32  
 (c) 40 (d) 50
40. A shopkeeper bought a table and a chair for ₹ 1,900 and ₹ 600, respectively. He sold both the items to Ankit with 15% profit. How much Ankit paid for the table and the chair?  
 (a) ₹ 2,515 (b) ₹ 2,590  
 (c) ₹ 2,785 (d) ₹ 2,875
41. In an examination Divya scored 340 marks out of 400 marks. The percentage of marks, she scored is:  
 (a) 60% (b) 76%  
 (c) 80% (d) 85%
42. The number whose 20% is equal to 10, is:  
 (a) 30 (b) 40  
 (c) 50 (d) 56
43. If 46% of a number is 115, then what is 150% of the number?  
 (a) 300 (b) 275  
 (c) 415 (d) 375
44. A metallic rod was heated to a temperature of  $120^\circ\text{C}$ . Later, its temperature reduced by  $34^\circ\text{C}$  and then its temperature was raised by  $45^\circ\text{C}$ . What is the present temperature of the rod?  
 (a)  $165^\circ\text{C}$  (b)  $154^\circ\text{C}$   
 (c)  $131^\circ\text{C}$  (d)  $79^\circ\text{C}$
45. A vessel is heated to a temperature of  $62^\circ\text{C}$ . The temperature of the vessel in degree Fahrenheit is:  
 (a)  $143.6^\circ\text{F}$  (b)  $94^\circ\text{F}$   
 (c)  $66.4^\circ\text{F}$  (d)  $30^\circ\text{F}$
46. Match List-I with List-II:  
 List I  
 A. Half of a circle  
 B. Half of the longest Chord of a circle  
 C. The line segment which Divides a circle in two equal parts  
 D. All diameters of a circle intersect At a point  
 List II  
 I. Diameter  
 II. Centre of circle  
 III. Semi-circle  
 IV. Radius

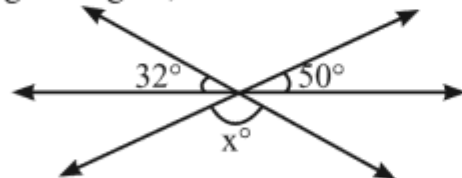
Choose the correct option from the below:

- (a) A-III, B-I, C-II, D-IV
- (b) A-III, B-IV, C-I, D-II
- (c) A-II, B-III, C-IV, D-I
- (d) A-IV, B-III, C-II, D-I



In the given figure O is the centre of the circle.  
If  $AB = 8$  cm then the length of  $OP$  is:

- (a) 6 cm
  - (b) 4 cm
  - (c) 3 cm
  - (d) 5 cm
48. Jaspal purchased an old car for ₹ 1,18,000 and spent ₹ 7,000 on its maintenance. If he sold the car for ₹ 1,40,000, then his profit percentage is:
- (a) 10%
  - (b) 11%
  - (c) 12%
  - (d) 12.5%
49. The supplementary angle of the complementary angle of one tenth of a right angle will be:
- (a)  $99^\circ$
  - (b)  $88^\circ$
  - (c)  $81^\circ$
  - (d)  $101^\circ$
50. The supplementary angle of three times of the half of a right angle is:
- A. Acute angle
  - B. Obtuse angle
  - C. Right angle
  - D. Half of a right angle
- (a) Only A
  - (b) Only C
  - (c) Only A and D
  - (d) Only B and C
51. In the given figure, the value of  $x$  is



- (a) 82
  - (b) 90
  - (c) 100
  - (d) 98
52. The sum of the greatest 4-digit number and the smallest 3-digit number is:
- (a) 10000
  - (b) 10110
  - (c) 10099
  - (d) 10999
53. The difference between the greatest and the smallest 5-digit numbers formed using the digits 0, 2, 5, 3 and 1, is:
- (a) 45555
  - (b) 44444
  - (c) 43205
  - (d) 42975
54. Which of the following numbers is divisible by 3?
- (a) 518932
  - (b) 117342
  - (c) 213454
  - (d) 337625

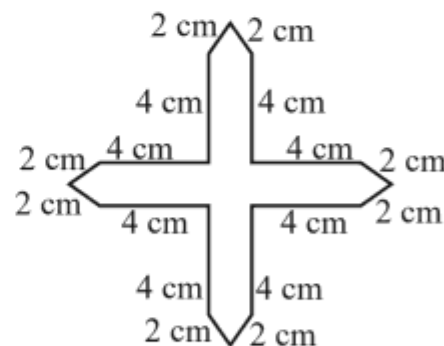
55.  $144 \div 9 \times 2 + 6 - 4 =$  \_\_\_\_\_

- (a) 10
- (b) 2
- (c) 34
- (d) 64

56. Jayesh and Mohan started a business by investing ₹ 28,000 and ₹ 35,000, respectively. At the end of the year Mohan received ₹ 6,250 as his share in the profit. The total profit in the business, is:

- (a) ₹ 9,200
  - (b) ₹ 10,000
  - (c) ₹ 11,250
  - (d) ₹ 12,250
57. In a 20 kg mixture of yellow pulse and black pulse, there is 4 kg black pulse. The ratio of black pulse and yellow pulse in the mixture, is:
- (a) 1: 5
  - (b) 1: 4
  - (c) 4: 15
  - (d) 1: 6
58. Joseph borrowed ₹ 25,000 on simple interest at the rate of 6% per annum for 4 years. How much did he pay at the end of 4 years?
- (a) ₹ 30,000
  - (b) ₹ 31,000
  - (c) ₹ 31,800
  - (d) ₹ 31,920
59. In how many years will a sum of ₹ 1,800 become ₹ 2,610 on simple interest at the rate of 9% per annum?
- (a) 4
  - (b) 5
  - (c) 6
  - (d)  $4\frac{1}{2}$

60. The perimeter of the given figure, is:



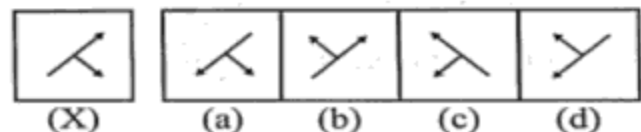
- (a) 32 cm
  - (b) 40 cm
  - (c) 48 cm
  - (d) 52 cm
61. Pinky runs around a square field of side 50 m and takes 6 rounds. Shruti runs around a rectangular field of length 160m and breadth 120m and takes 2 rounds. Who covers more distance and how much more (in m)?
- (a) Shruti, 80m
  - (b) Pinky, 80m
  - (c) Shruti, 65m
  - (d) Pinky, 40m



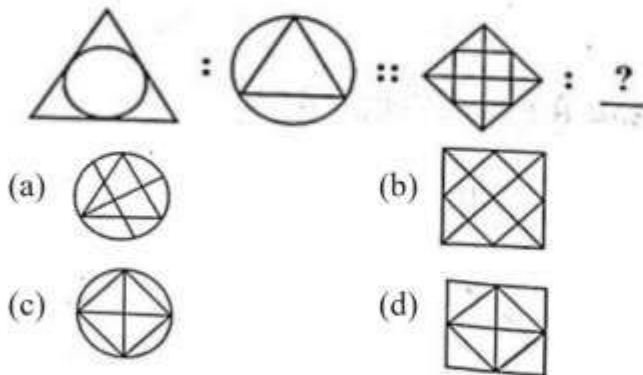
62. If the average of numbers 12, 15, 19, k and (k+5) is 13, then the value of k, is:  
 (a) 3 (b) 5  
 (c) 7 (d) 13.5
63. The average weight of five friends weighing 48 kg, 50 kg, 53 kg, 55 kg and 49 kg, is:  
 (a) 50 kg (b) 51 kg  
 (c) 52 kg (d) 53 kg
64. Read the given statements and choose the correct option:  
 Statement – I: Two distinct lines can intersect in more than one point.  
 Statement – II: More than two lines can pass through one point.  
 (a) Only statement I is true  
 (b) Only statement II is true  
 (c) Both the statements are true  
 (d) Both the statements are false
65. If  $x = 30$  and  $y = 120$ , then value of  $16 \left( \frac{x}{y} + 5 \right) + 1$  is:  
 (a) 85 (b) 84  
 (c) 21 (d) 117
66. The decimal form of fraction  $\frac{5}{8}$ , is:  
 (a) 0.58 (b) 0.62  
 (c) 0.625 (d) 0.652
67. The sum of all prime number, less than 21, is:  
 (a) 77 (b) 67  
 (c) 41 (d) 48
68. Which of the following statements are NOT correct?  
 A. Composite numbers are always even.  
 B. Prime numbers are always odd.  
 C. Sum of two prime numbers is always prime.  
 D. Product of two composite numbers is always composite.  
 (a) A and D only  
 (b) B and C only  
 (c) A, B and C only  
 (d) A, B, C and D
69. A party was given to 30 children. Pizzas, Burgers and Cold drinks were bought for ₹ 450, ₹ 300 and ₹ 270, respectively. Everything was shared equally among 30 children. The cost of items given to each child was:  
 (a) ₹ 30 (b) ₹ 32  
 (c) ₹ 34 (d) ₹ 35
70. What should be subtracted from the sum of 3509 and 2165 to get 4009?  
 (a) 3580 (b) 3530  
 (c) 2665 (d) 1665
71. Which of the following is the correct representations, using Roman Numerals of the number 199?  
 (a) ICC (b) CLXXXXIX  
 (c) CXCIX (d) ICCCD
72. A number written using Roman Numerals (XXI - XV) - VI + MCLXXIII is equal to  
 (a) MCLXXIII (b) MCLXVII  
 (c) MCL (d) MCXLIII
73. Harish drives his car at a speed of 45 km/hour. How much time (in minutes) will he take to drive 12 km?  
 (a) 9 (b) 12  
 (c) 16 (d) 20
74. Raman covers a distance of 24 km in 40 minutes. If he increases his speed by 4 km/hour, then how much time (in minutes) will he take to cover the same distance?  
 (a) 28 (b) 32  
 (c) 36 (d) 38
75. Amrita went to a market for purchasing stationery items for her son. She carried ₹ 500 with her. She paid ₹ 135.50 for the notebooks, ₹ 30.50 for pens, ₹ 3.75 for erasers, ₹ 48 for a box of colors and ₹ 142 for a Geometry box. How much money is left with her?  
 (a) ₹ 132.25 (b) ₹ 142  
 (c) ₹ 140.25 (d) ₹ 145.75

#### INTELLIGENCE TEST

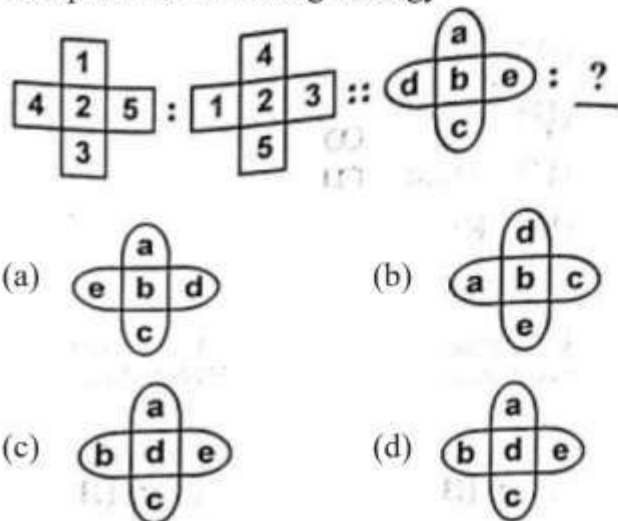
76. Arrange the following in top to bottom order:  
 (A) Hand (B) Face  
 (C) Heel (D) Knee  
 (E) Neck  
 Choose the correct option from the following:  
 (a) (E), (B), (A), (D), (C)  
 (b) (B), (E), (A), (D), (C)  
 (c) (B), (E), (A), (C), (D)  
 (d) (B), (E), (C), (A), (D)
77. Choose the correct mirror image of the figure (X):



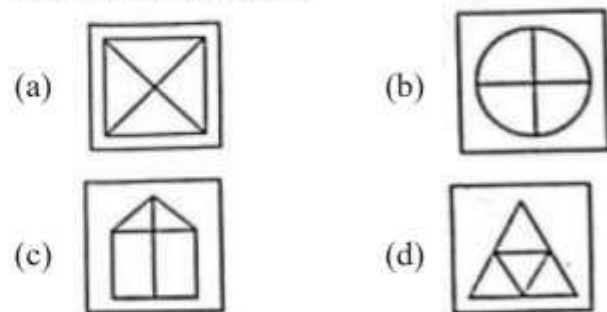
- (a) a (b) b  
(c) c (d) d
78. Find the missing term in the following series:  
HFD, NLJ, TRP, ?  
(a) YWV (b) ZXV  
(c) ZYW (d) ZYV
79. Find the missing number of the series: 0, 3, ?, 15, 24  
(a) 2 (b) 8  
(c) 4 (d) 13
80. There is a certain relationship between two given words on left side of (:). Choose the correct alternative for the missing term using the same relationship.  
Clock: Time :: Thermometer: ?  
(a) Heat (b) Radiation  
(c) Temperature (d) Energy
81. Complete the following analogy:  
C:3::L:?  
(a) 5 (b) 8  
(c) 2 (d) 12
82. Complete the analogy:  
Lion: Den :: Horse :  
(a) Byre (b) Stable  
(c) Barn (d) Burrow
83. complete the pattern:



84. Complete the following analogy



85. Choose the odd one out:  
(a) School (b) College  
(c) Hotel (d) University
86. Complete the following analogy:  
STAR : ATRS :: PLAN : ?  
(a) ALNP (b) ANLP  
(c) ANPL (d) LANP
87. Find the missing number of the given series? 2, 5, 10, ?, 26  
(a) 24 (b) 19  
(c) 17 (d) 23
88. Complete the following analogy  
BDA : 7 : CAB : ?  
(a) 3 (b) 6  
(c) 5 (d) 9
89. Find the odd one out:  
(a) Summer (b) Winter  
(c) Season (d) Spring
90. Find the odd one out:  
(a) 121 (b) 135  
(c) 99 (d) 143
91. Choose the odd one out:  
(a) BEIK (b) CEGI  
(c) ACEG (d) BDFH
92. Find the odd one out:

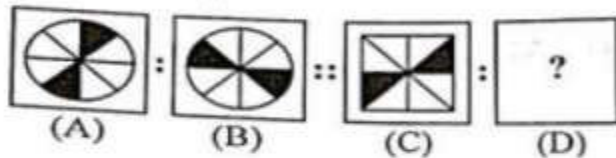


93. Arrange the following in the ascending order.  
(A) Year (B) Month  
(C) Century (D) Week  
(E) Day  
Choose the correct option from those given below:  
(a) (D), (E), (B), (A), (C)  
(b) (E), (B), (D), (A), (C)  
(c) (E), (D), (B), (A), (C)  
(d) (E), (D), (A), (C), (B)
94. Arrange the following words as they occur in the dictionary:  
(A) LETTER (B) LITTER  
(C) LEMON (D) LITTLE  
(E) LIZARD

Choose the correct option from the following:

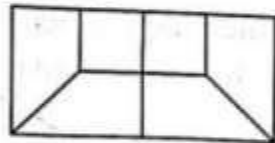
- (a) (C), (A), (D), (E), (B)
- (b) (C), (D), (A), (B), (E)
- (c) (C), (A), (B), (D), (E)
- (d) (A), (C), (B), (D), (E)

95. Figures A and B are related in a particular manner. Establish the same relationship between figure (C) and (D) by choosing a figure from the alternatives, which replaces the question mark (?).



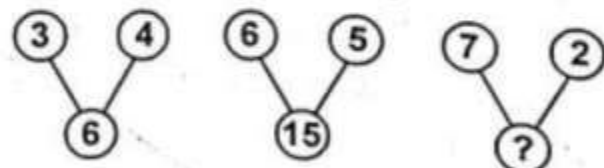
- (a)
- (b)
- (c)
- (d)

96. Which of the following shapes is a part of the given figure?



- (a)
- (b)
- (c)
- (d)

97. Which number replaces the question mark?



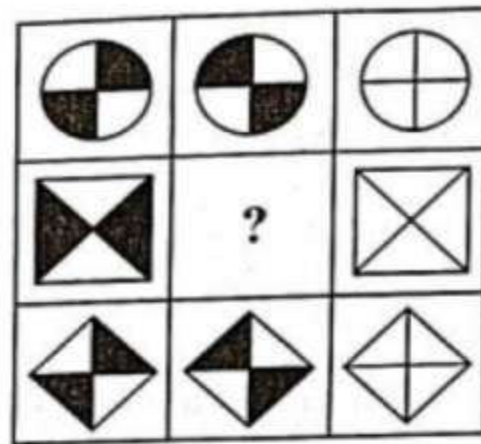
- (a) 8
- (b) 7
- (c) 9
- (d) 14

98. Find the missing term in the following series:

abc, abcc, abbcc, ?, aabbccc, aabbbccc.

- (a) abbcca
- (b) aabbccc
- (c) aabcc
- (d) aabbcc

99. Select the correct figure which will complete the given grid



- (a)
- (b)
- (c)
- (d)

100. Complete the analogy:

Cricket: Bat :: Hockey : ?

- (a) Field
- (b) Stick
- (c) Player
- (d) Ball

### GENERAL KNOWLEDGE

101. Who is the author of the famous work, 'The Man-eater of Malgudi'?

- (a) Rabindranath Tagore
- (b) Ruskin Bond
- (c) RK. Nagyan
- (d) GV.Desani

102. A Khunti is \_\_

- (a) An implement used to dig the soil
- (b) An iron pole to tie cattle
- (c) An earthen pot to cook food
- (d) A musical instrument

103. You put a glass of water in the sun. After 2 days, the glass is empty. Where did the water go?

- (a) It evaporated
- (b) It condensed
- (c) It froze
- (d) It tuned into nitrogen

104. Best friend of soil is:

- (a) Birds
- (b) Earthworms
- (c) Insects
- (d) Snakes

105. Which solution is given when a person has vomiting and loose motions?

- (a) Milk shake
- (b) Lemon water
- (c) Fruit juice
- (d) Salt and Sugar



106. Which one among the following is NOT a natural way of food preservation?
- Drying
  - By adding preservatives
  - Salting and sweetening
  - Pickling
107. Which leaves can be kept in box to protect the seed from the insects?
- Neem
  - Banyan
  - Banana
  - Mango
108. Which of the following works can NOT be done with water that has been used once?
- Mopping the floor
  - Washing hands and face
  - Watering plants
  - Using in the toilet
109. Which of the following devices is used to measure body temperature?
- Lactometer
  - Barometer
  - Thermometer
  - Speedometer
110. How many spokes are there in the wheel placed in the centre of the Indian flag?
- Twenty-six
  - Twenty-four
  - Twenty-one
  - Twenty-eight
111. Who wrote Ramayana?
- Valmiki
  - Vedvyas
  - Kalidas
  - Gyaneshwar
112. Which one of the following is a non-renewable resource?
- Petrol
  - Wind
  - Bio-gas
  - Solar
113. In Jammu & Kashmir, what does "Yakhni" refer to?
- A piece of cloth worn on head by men
  - A non-vegetarian dish
  - A cultural festival
  - A form of local dance
114. "Tadpole" is in the larval age of which animal?
- Dog
  - Tiger
  - Frog
  - Goat
115. Birds like kites, eagles and vultures can see things from a distance of:
- two meters
  - four peters
  - eight meters
  - twenty meters
116. What is the name of the eldest brother among Pandavas?
- Bheem
  - Arjun
  - Yudishther
  - Karna
117. Bihu dance belongs to which State?
- Assam
  - Gujarat
  - Bihar
  - Punjab
118. Wahida Prism, Lieutenant Commander in the Indian Navy is what type of a professional?
- Doctor
  - Software Engineer
  - Chef
  - Teacher
119. How many gold medals did India win in Asian Games held in 2023?
- 28
  - 52
  - 42
  - 14
120. Which super sense is activated by langur While Warning others of danger ?
- Sight
  - Sound
  - skin
  - smell
121. Which one out of the following animals has a very strong sense of smell?
- Rabbit
  - Ant
  - cat
  - Monkey
122. We mainly get energy to do work from:
- Proteins
  - Vitamins
  - Fats and carbohydrates
  - Minerals
123. Children who live in the plains would find it difficult to walk on the mountains because
- They are lazy.
  - The paths are rocky and uneven.
  - The paths are very smooth.
  - There are no transports available on mountains.
124. Where is Char Minar situated?
- Jaisalmer
  - puri
  - Aurangabad
  - Hyderabad
125. Earth takes how many days to revolve around the Sun?
- 365 days
  - 365 1/4 days
  - 365 1/2 days
  - 365 1/3 days



## Solutions

1. (a) Sanction, Sancison, and Sanccion are all incorrect spellings of "sanction". The correct spelling is "sanction," which means "to authorize or permit" or "to impose a penalty or restriction."
2. (d) While all the options could be seen as opposing forgiveness in some way, revenge is the most direct opposite. It signifies the act of punishing someone for a wrong they have done, whereas forgiveness involves letting go of resentment and anger.
3. (b) He is (an) honest man. It is because in the word honest (h) is silent, so we see (o) and o is vowel so we apply an with this.
4. (a) The sentence describes a general habit or truth, using the base form of the verb 'set' and the simple present tense marker "s".
5. (a) "Quality" is a singular noun, hence it takes the singular verb "is".
6. (b)
7. (a)
8. (d)
9. (b) "Hair" functions as the object of the preposition "of" in the sentence, making it a noun.
10. (c) "Thin" is the direct opposite of "thick" in terms of density of measurement.
11. (a) "High" modifies the noun "altitudes" in the passage, making it an adjective.
12. (b) "More" is the appropriate comparative degree to indicate having a greater amount of money than usual.
13. (b) "Imaginary" is the opposite of "real", describing something that exists only in the mind or is not factual.
14. (a) "Receive" is the correct spelling of the verb meaning to get or accept something.
15. (a) "There" is an adverb meaning that place, but it is also used as a pronoun introducing a clause or sentence. 'Their' is a possessive pronoun and it is often used as a possessive determiner in front of the nouns. In the given statement, "Their" is more apt to use as a determiner before the noun 'bus'.
16. (c) Since Ram's action happened before Shyam's, the past perfect tense "had left" is more appropriate than the present perfect "has left" to indicate earlier completion.
17. (d) The positive statement requires a negative tag since Ram is confident about not needing to ask, making "need I" the logical question tag.
18. (b) Since the event happened in the past, the simple past, the simple past tense, "stopped" is appropriate to describe the sudden halt of the train.
19. (b) In this sentence, "fly" describes the action of birds without taking a direct object, making it an intransitive verb.
20. (a) "Whether" introduces an indirect question to clarify the uncertainty about the speaker's knowledge of his departure.
21. (a)
22. (b) "The speaker is going off the subject" suggests a deviation or departure from the main topic.
23. (c) "Seized" is the correct past tense form in this context.
24. (a) Beat the air" metaphorically represents making futile attempts with no meaningful outcome.
25. (c) Safety directly opposes the danger and fear implied by a threat.
26. (a)  $3 \text{ kg } 700 \text{ gm} = 3 \text{ kg} + 700 \text{ gm}$   
ATQ  
 $\Rightarrow 2.6 \text{ kg} + 3 \text{ kg} + 700 \text{ g}$   
 $\Rightarrow 2600 \text{ g} + 3000 \text{ g} + 700 \text{ g} \quad [1 \text{ kg} = 1000 \text{ gm}]$   
 $\Rightarrow 6300 \text{ g}$   
 $\Rightarrow 6 \text{ kg } 300 \text{ g}.$
27. (a) The volume of would remains same  
 $\therefore \text{Volume of cube} = \text{Volume of cuboid}$   
 $= 3 \text{ cm} \times 8 \text{ cm} \times 9 \text{ cm}$   
 $\text{Volume of cube} = 216 \text{ cm}^3$



$$\therefore \frac{2}{5} > \frac{2}{7} > \frac{2}{9} > \frac{2}{11}$$

Hence, descending orders =  $\frac{2}{5}, \frac{2}{7}, \frac{2}{9}, \frac{2}{11}$

36. (c)  $\therefore$  The denominator is not equal  
 $\therefore$  First of all, make denominators equal  
Hence, calculate LCM of 9, 11, 12, 13  
LCM of 9, 11, 12 and 13 is 5148

$$\text{Thus, } \frac{5}{9} = \frac{5 \times 572}{9 \times 572} = \frac{2860}{5148}$$

$$\frac{4}{11} = \frac{4 \times 468}{11 \times 468} = \frac{1872}{5148}$$

$$\frac{7}{12} = \frac{7 \times 429}{12 \times 429} = \frac{3003}{5148}$$

$$\frac{6}{13} = \frac{2376}{5148}$$

Hence, the largest among fraction is  $\frac{7}{12}$ .

37. (c) Let the number to be added be x

$$x + \frac{5}{13} = \frac{13}{5}$$

$$\Rightarrow x = \frac{13}{5} - \frac{5}{13}$$

$$\Rightarrow x = \frac{169 - 25}{65}$$

$$\Rightarrow x = \frac{144}{65} \text{ is the number to be added.}$$

38. (d) The length of each piece would be the HCF of 7 m, 7.5 m, 9.5 m.  
= HCF (700 cm, 750 cm, 950 cm)  
= HCF (10 × 5 × 12), (10 × 15 × 5), (10 × 5 × 19)  
= 10 × 5 = 50

39. (d) Formula: LCM × HCF = Product of two number

Let the other number be x

$$\Rightarrow 150 \times 25 = 75 \times x$$

$$\Rightarrow x = \frac{150 \times 25}{75}$$

$$\Rightarrow x = 50$$

$\therefore$  The other number is 50

40. (d) Total cost price of table and chair  
= 1900 + 600 = 2500  
Profit = 15%

$$S.P = \left(1 + \frac{15}{100}\right) C.P \Rightarrow S.P = \frac{115}{100} (2500)$$

$$\Rightarrow S.P = 2875$$

Ankit paid ₹ 2875 for the table and the chair.

41. (d) Let the percentage of marks be x

Then, x% of 400 = 340

$$\Rightarrow \frac{x}{100} (400) = 340$$

$$\Rightarrow x = \frac{340}{4} \Rightarrow x = 85\%$$

42. (c) Let the number be x

Then, 20% of x = 10

$$\Rightarrow \frac{20}{100} (x) = 10$$

$$\Rightarrow x = 50$$

43. (d) Let the number be x

ATQ

46% of x = 115

$$\frac{46}{100} (x) = 115$$

$$\Rightarrow x = 250$$

$$\therefore 150\% \text{ of } x = \frac{150}{100} (250)$$

$$= 375$$

44. (c) The present temperature of rod

$$= 120^\circ\text{C} - 34^\circ\text{C} + 45^\circ\text{C}$$

$$= 131^\circ\text{C}$$

45. (a) The temperature in Fahrenheit is related to Celsius scale as

$$F = \frac{9C}{5} + 32$$

$$F = \frac{9}{5} (62) + 32$$

$$\Rightarrow F = \frac{558}{5} + 32$$

$$\Rightarrow F = 111.6 + 32$$

$$\Rightarrow F = 143.6$$

46. (b)

47. (b) AB = 8 cm (diameter)

$$OP = \frac{AB}{2} \left( \text{Radius} = \frac{\text{Diameter}}{2} \right)$$

$$\Rightarrow OP = 4 \text{ cm}$$

48. (c) Total C.P = 1,18,000 + 7000 = 1,25,000

$$S.P = 1,40,000$$



$$\text{Profit \%} = \frac{\text{Profit}}{\text{C.P}} \times 100$$

$$= \frac{15000}{125000} \times 100$$

$$= \frac{15}{5} \times 4$$

$$= 12\%$$

49. (a) When the sum of two angles is  $90^\circ$ , then the angles are known as complementary angle. When the sum of two angles is 180, then angles are known as supplementary angle.

$$180 - \left[ 90 - \frac{1}{10}(90) \right] = 180 - (90 - 9)$$

$$= 180 - 81$$

$$= 99^\circ$$

50. (c)  $180 - \left[ 3 \times \left( \frac{90}{2} \right) \right]$

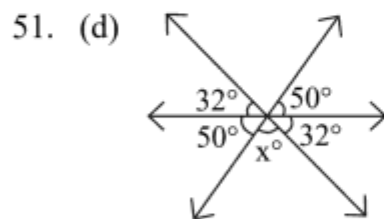
$$= 180 - (3 \times 45)$$

$$= 180 - 135$$

$$= 45^\circ$$

$\therefore$  The angle is less than  $90^\circ$ , therefore it is a acute angle.

Also,  $\frac{90^\circ}{2} = 45^\circ$ , hence the angle is half of right angle.



Vertically opposite angles are equal

Straight angle =  $180^\circ$

$$\Rightarrow 50^\circ + x^\circ + 32^\circ = 180^\circ$$

$$\Rightarrow x^\circ + 82^\circ = 180^\circ$$

$$\Rightarrow x^\circ = 98^\circ$$

52. (c) Greatest 4-digit = 9999

Smallest 3-digit = 100

Sum = 10099

53. (d) Greatest 5-digit number = 53210

Smallest 5-digit number = 10235

Difference =  $53210 - 10235$

$$= 42975$$

54. (b) If the sum of the digits of the number is divisible by 3, then the number is divisible by 3.

$117342 = 1 + 1 + 7 + 3 + 4 + 2 = 18$  is divisible by 3

$\Rightarrow 117342$  is divisible by 3.

55. (c)  $(144 \div 9) \times 2 + 6 - 4$

$$= (16 \times 2) + 6 - 4$$

$$= 32 + 2 = 34$$

56. (c) Ratio of initial investment of Jayesh & Mohan

Jayesh : Mohan = 28000 : 35000

Jayesh : Mohan = 4 : 5 =  $4x : 5x$

Profit received by Mohan = ₹6250

$$\Rightarrow 5x = 6250 \Rightarrow x = 1250$$

Profit received by Jayesh =  $4x = 4(1250)$   
 $= 4x = 5000$

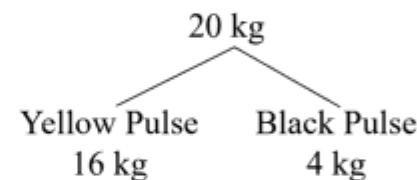
$$\text{Total profit} = 4x + 5x$$

$$= 9x$$

$$= 9(1250)$$

$$= ₹11,250$$

57. (b)



Ratio, Black Pulse : Yellow Pulse

$$= 4 : 16$$

$$= 1 : 4$$

58. (b)  $S.I = \frac{P \times R \times t}{100}$   
 $= \frac{(25000)(4)(6)}{100}$

$$S.I = 6000$$

$$\text{Amount} = P + S.I$$

$$= 25000 + 6000$$

$$\text{Amount} = ₹31,000$$

59. (b)  $P = ₹1800$

$$A = ₹2610$$

$$r = 9\%$$

$$T = ?$$

$$S.I = A - P = 2610 - 1800 = ₹810$$

$$S.I = \frac{P \times R \times T}{100}$$

$$T = \frac{S.I \times 100}{R \times P}$$

$$= \frac{810 \times 100}{9 \times 1800} = \frac{90}{18}$$

$$T = 5 \text{ years.}$$

60. (c) Perimeter = Sum of all sides  
 $= (8 \times 2) + (8 \times 4)$   
 $= 16 + 32 = 48 \text{ cm}$

61. (b) Distance covered by Pinky  
 $= (4 \times 50) \text{ m} \times 6 \text{ rounds}$   
 $= 200 \text{ m} \times 6 \text{ rounds} = 1200 \text{ m}$

Distance covered by Shruti  
 $= 2(160 + 120) \text{ m} \times 2 \text{ rounds}$   
 $= 2(280) \text{ m} \times 2 \text{ rounds}$   
 $= 1120 \text{ m}$

Extra distance covered by Pinky  
 $1200 - 1120 = 80 \text{ m}$

62. (c) Average =  $\frac{\text{Sum of observations}}{\text{Total number of observations}}$   
 $\frac{12 + 15 + 19 + k + (k + 5)}{5} = 13$

$\Rightarrow 51 + 2k = 65$

$\Rightarrow 2k = 14$

$\Rightarrow \boxed{k = 7}$

63. (b) Average weight  
 $= \frac{\text{Total weight of all friends}}{\text{Number of friends}}$   
 $\frac{48 + 50 + 53 + 55 + 49}{5}$   
 $= \frac{255}{5}$   
 $= 51 \text{ kg}$

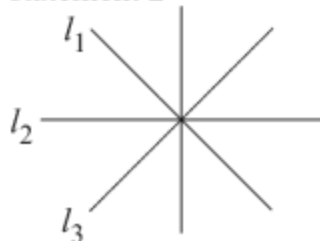
64. (b) Consider statement 1

$l_1$  \_\_\_\_\_

$l_2$  \_\_\_\_\_

Two distinct lines  $l_1$  &  $l_2$  don't intersect at any point

Consider statement 2



Hence,  
Statement-I is false  
Statement-II is true

65. (a)  $16\left(\frac{x}{y} + 5\right) + 1$   
 $= 16\left(\frac{30}{120} + 5\right) + 1$   
 $= 16\left(\frac{1}{4} + 5\right) + 1 = 16\left(\frac{21}{4}\right) + 1$   
 $= 84 + 1$   
 $= 85$

66. (c)  $\frac{5}{8} = 0.625$

67. (a) Sum of all prime number less than 21  
 $\Rightarrow 2 + 3 + 5 + 7 + 11 + 13 + 17 + 19$   
 $\Rightarrow 77$

68. (c) Statements A, B, C are not correct  
Statement D is correct.

69. (c) Total cost of all items =  $450 + 300 + 270$   
 $= 1020$   
Cost of item given to each child  
 $= \frac{1020}{30} = ₹ 34$

70. (d) Let the number be x  
 $(3509 + 2165) - x = 4009$   
 $\Rightarrow 5674 - x = 4009$   
 $\Rightarrow x = 1665$

71. (c)  $199 = 100 + 90 + 9$   
 $= C + XC + IX$   
 $= CXCIX$

72. (a)  $(XXI - XV) - VI + MCLXXIII$   
 $= 21 - 15 - 6 + MCLXXIII$   
 $= 6 - 6 + MCLXXIII$   
 $= MCLXXIII$

73. (c) 45 km/hour means that Harish drive 45 km in 1 hour

So he would drive 1 km in  $\frac{1}{45}$  hours

For 12 km, he would take time =  $\frac{12}{45}$  hours

$\frac{12}{45} \text{ hours} = \frac{12}{45} \times 60 \text{ min} = 16 \text{ minutes}$

74. (c)  $\text{Speed} = \frac{\text{Distance}}{\text{Time}}$

Let  $S_1$  be the normal speed of Raman

$$S_1 = \frac{24}{(40/60)} = 36 \text{ km/hr}$$

Let  $S_2$  be the increased speed

$$S_2 = (36 + 4) \text{ km/hr} = 40 \text{ km/hr}$$

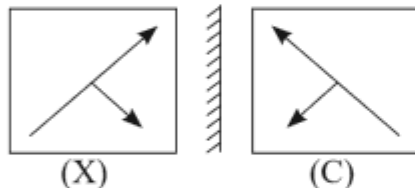
$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

$$= \frac{24}{40} \text{ hrs} = \frac{24}{40} \times 60 \text{ minutes} = 36 \text{ minutes}$$

75. (c)  $500 - 135.50 - 30.50 - 3.75 - 48 - 142$   
 $= ₹ 140.25$

76. (b) B. Face  
 E. Neck  
 A. Hand  
 D. Knee  
 C. Heel

77. (c)



78. (b) HFO, NLJ, TRP, ?

$$\Rightarrow H + 6 = N \quad N + 6 = T \quad T + 6 = Z$$

$$\Rightarrow F + 6 = L \quad L + 6 = R \quad R + 6 = X$$

$$\Rightarrow D + 6 = J \quad J + 6 = P \quad P + 6 = V$$

Next term will be  $\Rightarrow ZXV$

79. (b) The logic here is that odd numbers are added in the terms.

$$0 + 3 = 3$$

$$\boxed{3 + 5 = 8}$$

$$8 + 7 = 15$$

$$15 + 9 = 24$$

80. (c) A clock is used to show time similarly "Thermometer" used to measure a "Temperature".

81. (d) "C" is the third letter of alphabet  
 Therefore, "L" is the "12<sup>th</sup>" of the alphabet.

82. (b) Lion lives in "Den"  
 Similarly horse lives in a "stable"

83. (d) In the given problem, both the images change their positions, the image at inside become the image at outside vice versa.

84. (b) As per the pattern the vertical letters will become horizontal will become vertical, the centre symbol will remains.

85. (c) School, college, University are educational institute.

86. (a)



87. (c) In the pattern odd numbers are added in every term.

88. (b) If we look at the positions of the letters in the alphabet

$$B \rightarrow 2 \quad D \rightarrow 4 \quad A \rightarrow 1$$

$$(2 + 4) + 1 = 7$$

Similarly

$$C \rightarrow 3 \quad A \rightarrow 1 \quad B \rightarrow 2$$

$$(3 + 1) + 2 = 6$$

89. (c) Summer, Winter, spring are seasons.

90. (b) Expect "135" all are multiple of 11.

$$11 \times 11 = 121$$

$$9 \times 11 = 99$$

$$13 \times 11 = 143$$

91. (a) Consider CEGI

$$C + 2 = E$$

$$E + 2 = G$$

$$G + 2 = I$$

Consider ACEG

$$A + 2 = C$$

$$C + 2 = E$$

$$E + 2 = 7$$

$$B + 2 = D$$

$$D + 2 = F$$

$$F + 2 = H$$

Consider BEJK

$$B + 2 \neq E$$

Hence BEIK is odd one out.

'BEIK' doesn't have the proper pattern, rest of them have + 2 alphabet.

92. (c) Every option has 2 image except option "c".

93. (c) Ascending order:

Day

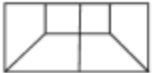
Week

Month

Year

Century



94. (c) As per dictionary order:  
Lemon, Letter, Litter, Lizard
95. (c) As per the pattern the dark part rotates 90°  
So option 'c' is correct answer.
96. (b) 
97. (b) In the given pattern  

$$\frac{3 \times 4}{2} = 6$$
 Similarly,  

$$\frac{7 \times 2}{2} = 7$$
98. (d) In the given pattern.  
 abc : starts with single letter a,b,c  
 abcc: c repeats again.  
 abbcc: 'b' repeats again  
 So, the next term would be aa bb cc, where 'a' repeats
99. (b) From the given figure the shaded part will interchange their position from 1<sup>st</sup> box to 2<sup>nd</sup> box the same pattern applies to the next row
100. (b) Cricket is played by bats.  
 Similarly, Hockey is played by Hockey sticks.
101. (c) In "The Man-Eater of Malgudi," R.K. Narayan incorporates the mythological figure Bhasmasura to explore themes of ego and downfall. Set in the fictional town of Malgudi, the novel follows Nataraj's encounters with a taxidermist whose destructive obsessions mirror the mythological demon's downfall due to arrogance.
102. (a) Khunti, an iron rod used for digging and loosening soil, is known as "khurpi" in North India and as "khunti" in South Indian states. This versatile tool aids in agricultural tasks, reflecting regional variations in terminology while serving the same purpose across the country.
103. (a) Evaporation is the process through which a liquid, like water, transforms into a gas, known as water vapor. This occurs when molecules at the surface of the liquid gain enough energy to break free from the liquid's surface and enter the air as vapor. It's a key part of the water cycle and plays a significant role in various natural processes.
104. (b) earthworms are often referred to as soils 'best friends' due to the invaluable services they offer in enhancing soil health. They aerate the soil by burrowing, which improves its structure and allows better water and nutrient absorption by plants. Additionally, their castings enrich the soil with nutrients, promoting plant growth and overall agricultural productivity.
105. (d) Vomiting and diarrhea can lead to dehydration due to the loss of fluids and electrolytes from the body. ORS (Oral Rehydration Solution) is a simple yet effective remedy for replenishing lost fluids and electrolytes. It typically contains a precise balance of salt and sugar, which helps the body absorb water and electrolytes more effectively, aiding in the recovery from dehydration.
106. (b) Food preservation safeguards against food spoilage, illness, and microbial contamination. Methods include pickling, drying, cooling, sugaring, and salting. These techniques protect food quality, extending its shelf life and ensuring its safety for consumption.
107. (a) Neem plant leaves serve as a natural defense against insects for seeds by containing compounds acting as insecticides. Azadirachtin, a component of neem, disrupts insect larvae metamorphosis, exemplifying its effectiveness in pest control and highlighting the plant's significance in organic agriculture.
108. (b) Water utilized for washing hands and face should not be reused for hygiene reasons. However, it can serve secondary purposes such as watering plants, mopping floors, or flushing toilets, contributing to sustainable water usage and household efficiency.
109. (c) **Lactometer:** Gauges milk density to assess quality or adulteration.  
**Barometer:** Tracks atmospheric pressure, aiding in weather prediction.  
**Thermometer:** Measures temperature for diverse applications such as body temperature.  
**Speedometer:** Indicates vehicle speed for safe driving.
110. (b) The Ashoka Chakra at the center of India's tricolor flag boasts twenty-four spokes. Adopted on July 22, 1947, it symbolizes the nation's eternal wheel of progress, righteousness, and movement towards a brighter future.
111. (a) The Ramayana, a revered Hindu epic, is attributed to Maharshi Valmiki, believed to have been written around 200 BCE. Depicting the life and adventures of Lord Rama, it

- remains a timeless narrative cherished for its moral teachings and spiritual significance.
112. (a) Non-renewable resources, like fossil fuels and petroleum, deplete upon extraction and consumption. In contrast, renewable resources such as wind and solar energy are continuously replenished by natural processes, offering sustainable alternatives for energy production and environmental conservation.
  113. (b) Jammu and Kashmir, whether as a state or a union territory, is renowned for 'Yakhni', a delicacy featuring a yogurt-based gravy. Yakhni, a light curry or broth, incorporates yogurt and saffron along with other flavorful ingredients, representing the region's rich culinary heritage and cultural diversity.
  114. (c) A tadpole is the larval stage of a frog, existing primarily in water. This transitional phase in the life cycle of amphibians precedes their metamorphosis into adult frogs, during which they undergo significant physiological changes to adapt from aquatic to terrestrial environments.
  115. (c) Birds like kites, eagles, and vultures can see things from a distance of eight meters, which is four times as far as humans can see from two meters. This is because these birds have monocular vision, which means their eyes are on the sides of their heads. Monocular vision allows birds to focus on two things at once, and to detect prey without moving their heads.
  116. (c) Yudhishtira stands as the eldest among all five siblings, including his four brothers and their shared wife, Draupadi. This positioning underscores his role as the foremost leader and exemplar of virtue among the Pandavas in the epic tale of the Mahabharata.
  117. (a) The Bihu dance, an indigenous folk dance originating from Assam, accompanies the Bihu Festival celebrated thrice annually in the state. Young men and women perform in groups, showcasing brisk steps and rapid hand movements, defining the vibrant and energetic essence of this traditional cultural expression.
  118. (a) Lieutenant Commander Wahida Prism, a doctor in the Indian Navy, holds distinction as one of the few women to serve aboard a naval ship. Breaking barriers, she achieved another milestone by becoming the first woman to lead a parade, exemplifying her trailblazing journey and commitment to naval service.
  119. (a) India concluded the Asian Games 2023 with a historic achievement, securing a total of 107 medals, including 28 gold, 38 silver, and 41 bronze. This remarkable performance underscored India's rising prowess in sports and its commitment to excellence on the international stage.
  120. (b) Perched atop trees, langurs serve as vigilant guardians for their community's safety. With their keen senses, they emit unique warning calls to alert others of lurking dangers like tigers or leopards. This coordinated communication ensures swift responses and enhances the group's survival strategies amidst perilous environments.
  121. (b) Ants are renowned for their exceptional sense of smell, relying on their sensitive antennae to detect diverse chemicals and pheromones in their surroundings. This acute olfactory ability enables ants to communicate, navigate, and locate food sources effectively, contributing to their success as social insects.
  122. (c) Carbohydrates and fats serve as the primary nutrients supplying energy to our bodies. While carbohydrates offer a quick energy source, fats provide a more sustained and concentrated form of energy, both crucial for fueling bodily functions and activities.
  123. (b) The rugged and uneven paths pose a challenge, particularly for children accustomed to living in the plains. Negotiating such terrain may prove challenging for them, requiring adaptation and care to navigate safely through the rocky landscape.
  124. (d) Located at the heart of Hyderabad in west-central Telangana state, the Charminar is a historic monument. Constructed in 1591 by Sultan Mohammed Quli Qutb Shah, it stands as an iconic symbol of the city's rich heritage and architectural splendor, attracting visitors from around the world.
  125. (b) The Earth takes 365 days, 6 hours, and 9 minutes to revolve around the sun, which is based on a reference to the stars. The Earth's orbit is an ellipse, but to make the math simpler, let's say it's a circle. The Earth's rotation relative to the sun is every 24.0 hours mean solar time.