STAFF SELECTION COMMISSION
COMBINED HIGHER SECONDARY LEVEL (TIER-I)
SOLVED PAPER
(13ᵗʰ March 2023: Shift-1)

Time Allotted- 1 hour   **Max marks-** 200

Important Instructions:-
⇨ This paper contains 100 questions which are divided into 4 sections and each section contains 25 questions.
   ✓ English Language (Basic Knowledge)
   ✓ General Intelligence
   ✓ Quantitative Aptitude (Basic Arithmetic Skill)
   ✓ General Awareness
⇨ There will be 2 marks for each correct answer and also there will be negative marking of 0.50 marks for each wrong answer.
⇨ Each question is compulsory to attempt and there will be no negative marking for unattempted questions.

English Language

1. Choose the word that can substitute the given group of words.
   The animals of a particular region
   1. Phylum   **2.** Blossom   **3.** Fauna   **4.** Flora

2. Select the correct indirect form of the given sentence.
   The student said to her, "I don't remember your name."
   1. The student said to her that I did not remember her name.
   2. The student said to her that he/she cannot remember her name.
   3. The student told her that he/she did not remember her name.
   4. The student told her that he/she do not remember her name.

3. Improve the underlined part of the sentence. Choose 'No improvement' as an answer if the sentence is grammatically correct.
   People who came into contact with the carrier are in danger of catching the disease.
   1. at dangerous of   **2.** No improvement
   3. in danger off   **4.** in dangers for

4. Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
   I will never judge you for yours impromptu performance.
   1. I will never
   2. yours impromptu performance.
   3. judge you for
   4. No error

5. Fill in the blank with an appropriate option.
   I envy the way she _____ all tasks with such ease and speed.
   1. carries out   **2.** dwindles out
   3. bring about   **4.** account for

6. Fill in the blank with an appropriate option.
   He could feel every _____ and artery in his body.
   1. liver   **2.** vein   **3.** beat   **4.** place

7. Choose the incorrectly spelt word.
   1. Roast   **2.** Ghost   **3.** Malt   **4.** Holitisc

8. Given below are four jumbled sentences. Pick the option that gives their correct order.
   P. Rama, prince of Ayodhya, won the hand of the beautiful princess Sita **(seen here)**, but was exiled with her and his brother Laksmana for 14 years through the plotting of his stepmother.
   Q. The allies attacked Lanka, killed Ravana, and rescued Sita. In order to prove her chastity, Sita entered fire, but was vindicated by the gods and restored to her husband.
   R. After the couple's triumphant return to Ayodhya, Rama's righteous rule **(Ram-Raj)** inaugurated a golden age for all mankind.
   S. In the forest Sita was abducted by Ravana, and Rama gathered an army of monkeys and bears to search for her.
   1. PQRS   **2.** SQPR   **3.** QRSP   **4.** PSQR

9. Select the word that is opposite in meaning (ANTONYM) to the word given below.
   Incredible
   1. Strained   **2.** Far-fetched
   3. Implausible   **4.** Believable

10. Choose the word that is opposite in meaning to the given word.
    Vain
    1. Productive   **2.** Harmony
    3. Unpredictable   **4.** Calculable

11. Choose the option that is the correct passive form of the sentence.
    She ate the last slice of pizza.
    1. She had eaten the last slice of pizza.
    2. The last slice of pizza had been eaten by her.
    3. The last slice of pizza was eaten by her.
    4. The last slice was being eaten by her.

12. Rearrange the parts of the sentence in correct order.
    P. my belief that UHC should be seen as the linchpin of the health development agenda
    Q. rather than being seen as one target among many, it is
    R. not only underpinning a more sustainable approach to the achievement of
    S. the other health targets, but allowing for a balance between them
    1. QPRS   **2.** PQRS   **3.** PRSQ   **4.** SPQR

13. Choose the word that is opposite in meaning to the given word.
    Forthright
    1. Artless   **2.** Uninhibited
    3. Uncandid   **4.** Blunt

14. Choose the word that means the same as the given word.
    Domicile
    1. Wild   **2.** Dictator   **3.** Home   **4.** Evict

15. Improve the underlined part of the sentence. Choose 'No improvement' as an answer if the sentence is grammatically correct.
    The students studied a diagrams of a plant cell.
    1. studied a diagram   **2.** study a diagrams
    3. studying a diagram   **4.** No improvement

16. Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully. Select the option 'no correction required' if the sentence is correct as given.
    We (opened) on a new travel venture.
    1. No correction required   2. Begun
    3. Initiated   4. Embarked

17. Select the most appropriate meaning of the given idiom.
    Water under the bridge
    1. To be very sick.
    2. Anything from the past that isn't significant or important anymore.
    3. A paranormal sense that allows you to communicate with the dead.
    4. Someone else who takes the blame.

18. In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.
    To keep an eye on
    1. To be able to understand everything
    2. To see someone in a bad light
    3. To watch over closely
    4. To keep distance from

19. Identify the segment in the sentence which contains a grammatical error. If there is no error, then select the option "No error".
    If conventional arrangements and/patterns are made more scarcer, other/arrangements and patterns will spring up.
    1. arrangements and patterns will spring up.
    2. No error
    3. If conventional arrangements and
    4. patterns are made more scarcer, other

20. Choose the sentence with no spelling error.
    1. Many input devises perfrom specific functions.
    2. Many input devices perform specific functins.
    3. Many input devices perfrpm specfic functions.
    4. Many input devices perform specific functions.

Comprehension:
In the following passage some of the words have been deleted. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Fresh pineapple, chilled watermelon, and an icy cold soft drink on a hot summer's day. What do these things have in (1)_____ ? They all taste so good because of the sweetness the sugar in them provides. When you think of sugar, you probably picture the white (2)_____ you put in cookies, that your parents put in their coffee, or that you (3)_____ on your cereal.
Actually, this is just one kind of sugar, called sucrose, which is (4)_____ from sugar cane or sugar beets. Technically, sugar is a carbohydrate that occurs (5)_____ in every fruit and vegetable.

21. Select the most appropriate option to fill in blank number 1.
    1. tandem   2. common   3. collision   4. balance

22. Select the most appropriate option to fill in blank number 2.
    1. rubbles   2. capsules 3. stones   4. granules

23. Select the most appropriate option to fill in blank number 3.
    1. raise   2. sprinkle 3. send   4. place

24. Select the most appropriate option to fill in blank number 4.
    1. extracted   2. rugged   3. shelved   4. excavated

25. Select the most appropriate option to fill in blank number 5.
    1. fortunately 2. mentally 3. happily   4. naturally

General Intelligence

26. In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
    Statements:
    I. Some red are black.
    II. No white is black.
    Conclusion:
    I. No black is white.
    II. No white is red.
    III. No black is red.
    1. Neither conclusion follows
    2. All conclusion follows
    3. Only conclusion I follows
    4. Both conclusions II and III follows

27. By interchanging which two numbers (not digits) the given equation will be correct?
    $13 + 9 \div 78 \times 27 - 16 = 3$
    1. 3 and 78   2. 78 and 27   3. 13 and 78   4. 27 and 16

28. How many triangles are there in the given figure?
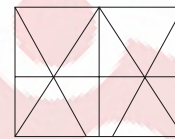
    1. 18   2. 20   3. 10   4. 12

29. Select the option in which the numbers shares the same relationship in set as that shared by the numbers in the given set. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/ subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)
    (8, 9, 431)
    (11, 8, 1267)
    1. (9, 12, 595)   2. (13, 14, 2011)
    3. (7, 5, 318)   4. (12, 10, 1528)

30. A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?
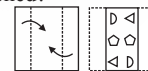
31. Words given on the left side of (::) are related with each other by some Logic/Rule/Relation. Select the missing word/word pair on the right side of (::) from the given alternatives based on the same Logic/Rule/Relation.
    Chair : Table :: Eraser : ?
    1. Rub   2. Stationery 3. Pencil   4. Student

32. Select the option figure in which the given figure is embedded. (rotation is NOT allowed)
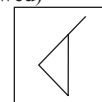
33. In the following question, select the odd letter/letters from the given alternatives.
    1. AXU   2. SPL   3. URO   4. NKH

34. Select the option that is related to the fifth number in the same way as the first number is related to the second number and third number is related to fourth number.
19 : 359 :: 17 : 287 :: 21 : ?
1. 449 **2.** 439 **3.** 441 **4.** 433

35. Q is the sister of R. P is the father of Q. S is the son of T. R is the brother of S. How is T related to P?
**1.** Daughter in law **2.** Daughter
3. Niece **4.** Wife

36. In a certain code language, 'WEIGHS' is coded as 'QHEICW'. What is the code for 'ABUSES' in that code language?
1. QEQUZA **2.** QEQUAZ
3. QEQZUA **4.** QEQUAA

37. Three of the following words are alike in a certain way and one is different. Pick the word that is different from the rest.
1. Sarangi **2.** Telephone
3. Saxophone **4.** Xylophone

38. A piece of paper is folded and punched as shown below in the question figure. From the given answer figures, indicate how it will happen when opened?

1. **2.** **3.** **4.**
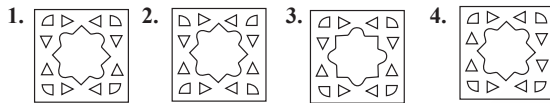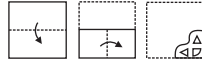
39. Select the option in which the numbers shares the same relationship in set as that shared by the numbers in the given set. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)
(14, 112, 6)
(17, 204, 5)
1. (21, 189, 12) **2.** (24, 145, 18)
3. (9, 89, 3) **4.** (15, 135, 7)

40. In the following question, select the missing number from the given series.
59, 118, 354, 708, 2124, ?
1. 4350 **2.** 4248 **3.** 4148 **4.** 4250

41. Select the option that is related to the third word in the same way as the second word is related to the first word.
Computer : Mouse :: Television : ?
1. Remote **2.** Flashlight **3.** Marker **4.** Pen

42. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
1. Machine **2.** Macabre
3. Machinery **4.** Macaroni
5. Machete
1. 2, 4, 5, 1, 3 **2.** 2, 5, 1, 3, 4
3. 1, 2, 3, 4, 5 **4.** 4, 1, 5, 2, 3

43. In the following question, select the related letters from the given alternatives.
AJN : DMQ :: PTW :?
1. ITE **2.** MZW **3.** SOH **4.** SWZ

44. Select the option in which the numbers shares the same relationship in set as that shared by the numbers in the given set. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)
(32, 64, 256)
(18, 36, 144)
1. (37, 74, 296) **2.** (26, 52, 313)
3. (41, 82, 164) **4.** (24, 72, 287)

45. Which of the following figures can be formed on folding the given open cube in the question?

1. **2.** **3.** **4.**
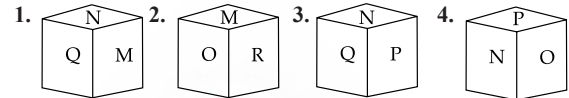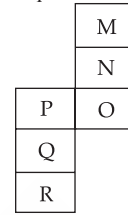
46. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
ANM, GWZ, MFM, SOZ, ?
1. YYM **2.** YXM **3.** NQR **4.** YXR

47. If 'A' means '×', 'B' means '÷', 'C' means '+' and 'D' means '–', then what will come in the place of '?' in the given expression?
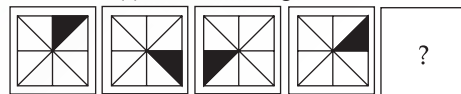94 B 47 C 63 D 14 A 5 C ? = –2
1. 7 **2.** 3 **3.** 4 **4.** 6

48. How many balls are neither bat nor tyre?
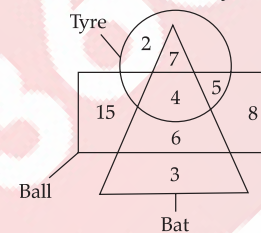
1. 15 **2.** 21 **3.** 23 **4.** 8

49. Select the figure from the given options that can replace the question mark (?) in the following series.

1. **3.** **2.** **4.**
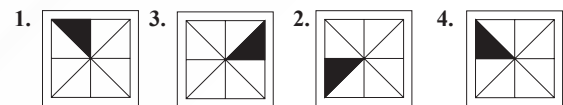
50. In a certain code language, 'GRATEFUL' is coded as '209267562112', 'INSTANCE' is coded as '18138711435'. What is the code for 'LIKEWISE' in that code language?
1. 15181622239195 **2.** 15181623339195
3. 15161822238195 **4.** 15811622239195

Quantitative Aptitude

51. P, Q and R are partners and invest in a business. P invests 1/5th of total investments and Q invests 1/4th of the total investments. What is the ratio of investments of P, Q and R respectively?
1. 4 : 8 : 11 **2.** 4 : 5 : 11 **3.** 4 : 7 : 11 **4.** 4 : 5 : 9

52. What is the value of $(a + b + c)\{(a - b)^2 + (b - c)^2 + (c - a)^2\}$?
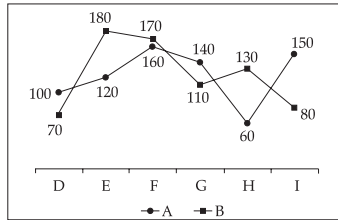**1.** $2a^3 + 2b^3 + 2c^3$ **2.** $2a^3 + 2b^3 + 2c^3 - 6abc$
**3.** 3abc **4.** 6abc

53. The line chart given below shows the marks obtained by two students A and B in 6 subjects.

The marks obtained by A in all the subjects is what percent of the marks obtained by B in all the subjects?

1. 82.16 percent
2. 92.44 percent
3. 98.64 percent
4. 86.32 percent

54. What is the difference of the largest and smallest of the given fractions?

$$\frac{5}{11}, \frac{5}{7}, \frac{3}{8}, \frac{6}{13}$$

1. $\frac{17}{56}$
2. $\frac{19}{56}$
3. $\frac{1}{7}$
4. $\frac{23}{56}$

55. Speed of stream is 4 km/hr and the speed of boat is 11 km/hr. In how much time will the boat cover a distance of 21 km upstream and 45 km downstream?

1. 6 hours
2. 3 hours
3. 4 hours
4. 7 hours

56. What is the value of $\sqrt{\dfrac{\operatorname{cosec} A + 1}{\operatorname{cosec} A - 1}} + \sqrt{\dfrac{\operatorname{cosec} A - 1}{\operatorname{cosec} A + 1}}$?

1. 2 cos A
2. sec A
3. cos A
4. 2 sec A

57. The average of 10 consecutive integers is 33/2. What is the average of first three integers?

1. 12
2. 13
3. 15
4. 11

58. In Δ STU, SX is the median on TU. If SX = TX, then what is the value of ∠TSU?

1. 75 degree
2. 45 degree
3. 60 degree
4. 90 degree

59. Median of an equilateral triangle is 15√3 cm. What is the side of this triangle?

1. 24 cm
2. 18 cm
3. 30 cm
4. 36 cm

60. The simple interest accrued on a certain principal is Rs. 1200 in 3 years at the rate of 8% per annum. What would be the compound interest (compounding annually) accrued on twice of that principal at the rate of 10% per annum in 2 years?

1. Rs. 1,050
2. Rs. 2,150
3. Rs. 2,100
4. Rs. 1,100

61. AD is the median of Δ ABC. G is the centroid of Δ ABC. If AG = 14 cm, then what is the length of AD?

1. 42 cm
2. 28 cm
3. 35 cm
4. 21 cm

62. If tan A= 3, then what is the value of 3 sin A cos A?

1. $\frac{8}{9}$
2. $\frac{9}{10}$
3. $\frac{7}{9}$
4. $\frac{9}{11}$

63. The price of a commodity is decreased by 25 percent and therefore a household increased the consumption of that commodity by 20 kg to keep the expenditure same. What was the earlier consumption?

1. 60 kg
2. 55 kg
3. 75 kg
4. 45 kg

64. What is the value of $(a^2 + b^2 + 4c^2 - ab - 2bc - 2ca)$ $(a + b + 2c)$?

1. $a^3 + b^3 + 8c^3 - 8abc$
2. $a^3 + b^3 + 6c^3 - 4abc$
3. $4a^3 + b^3 + 8c^3 - 9abc$
4. $a^3 + b^3 + 8c^3 - 6abc$

65. Radii of two circles are 11 cm and 3 cm. Distance between their centres is 17 cm. What is the length of the direct common tangent?

1. 12 cm
2. 14 cm
3. 16 cm
4. 15 cm

66. The bar graph given below shows the sales of two companies C1 and C2 in 5 years.
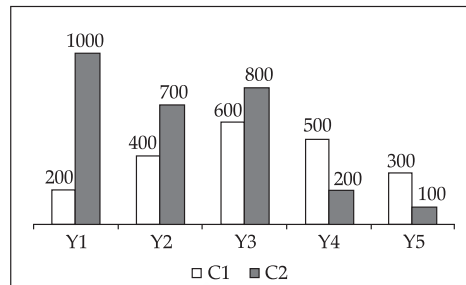
J1 = The average sale of company C1 in year Y1, Y2 and Y3.
J2 = The difference between total sale of company C1 and C2 in all the 5 years.
What is the value of (J$_2$/J$_1$)?

1. 4
2. 2
3. 3
4. 1

67. What is the value of $\dfrac{1 + \sin A}{\cos^2 A}$?

1. $\dfrac{1}{1 - \sin A}$
2. $\dfrac{1}{1 + \sin A}$
3. $\dfrac{1}{1 + \cos A}$
4. $\dfrac{1}{1 - \cos A}$

68. The table given below shows the salary of 6 employees of a company.

Employees	Salary
P	200
Q	650
R	350
S	250
T	450
U	300

What is the total salary of all the employees?

1. 1800
2. 2400
3. 1600
4. 2200

69. What is the value of 525 + 1235 ÷ 247 – 29 × 10?

1. 210
2. 240
3. 220
4. 250

70. If $x + \dfrac{1}{x} = -2$, then what is the value of $x^7 + x^{-7} + x^2 + x$?

$(x < 0)$

1. 4
2. 2
3. 1
4. 0

71. The ratio of time taken in completing a work by a man and woman is 2 : 3. The man and the woman can complete the work together in 24 days. In how many days can the woman complete the work alone?

1. 20 days
2. 40 days
3. 60 days
4. 30 days

72. A dealer sells two machines at the rate of Rs. 15000 per machine. On one he earns a profit of 20 percent and on the other he loses 40 percent. What is his profit/loss percentage in the whole transaction?

1. 20 percent loss
2. 10 percent loss
3. 10 percent profit
4. 20 percent profit

73. The pie chart given below shows the expenditure of a family in percentage during a certain year.
If the total amount spent during the year is Rs. 3,00,000. On which of the following items, amount spent together is equal to Rs. 1,50,000.

The expenditure of a family
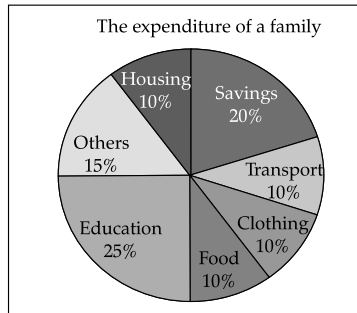
1. Education, Others, Savings
2. Transport, Others, Education
3. Savings, Housing, Education
4. Savings, Clothing, Education

74. How many solid spherical balls of radius 6 cm can be made by melting a solid hemisphere of radius 12 cm?
    1. 4   **2.** 2   **3.** 10   **4.** 8

75. A shopkeeper allows 20 percent discount on the marked price of an article and he suffers a loss of 5 percent. If the article is sold at marked price, then what will be the profit percentage?
    1. 8.33 percent   **2.** 16.25 percent
    3. 18.75 percent   **4.** 17.25 percent

General Awareness

76. Which article of the constitution of India is related to Comptroller and Auditor General of India Audit reports?
    1. 148   **2.** 150   **3.** 151   **4.** 149

77. As on September 2021, which of the following is NOT a national political party in India?
    1. Indian National Congress   **2.** Indian National Lok Dal
    3. Communist Party of India   **4.** Bahujan Samaj Party

78. _____, also known as search unemployment, occurs when workers lose their current job and are in the process of finding another one.
    1. Voluntary unemployment   **2.** Disguised unemployment
    3. Frictional unemployment   **4.** Classical unemployment

79. Which of the following is NOT an application software?
    1. Entertainment software
    2. Education software
    3. Programming language translator software
    4. Personal assistance software

80. Which among the following lakes is known as the only "Floating Islands Lake" in India?
    1. Loktak   **2.** Pulicat   **3.** Chilka   **4.** Kolleru

81. In India, what is the mean annual average temperature in subtropical vegetation zone?
    1. Above 24°C   **2.** 7°C to 17° C
    3. Below 7°C   **4.** 17°C to 24°C

82. Which famous sportsperson has received the Bharat Ratna award in 2014?
    1. Ravi Shastri   **2.** Yogeshwar Dutt
    3. MS Dhoni   **4.** Sachin Tendulkar

83. What is India's rank in reducing overall inequality according to the Commitment to Reducing Inequality Index (CRII) 2022?
    1. 118   **2.** 123   **3.** 129   **4.** 132

84. What is the atomic mass of sodium?
    1. 32   **2.** 40   **3.** 23   **4.** 12

85. Which Union Territory of India lies in the Bay of Bengal?
    1. Dadra & Nagar Haveli and Daman & Diu
    2. Chandigarh
    3. Lakshadweep Islands
    4. Andaman and Nicobar Islands

86. Which of the following shortcut key is used to display the font dialog box in MS-Word 365?
    1. Ctrl + F   **2.** Ctrl + D   **3.** Alt + D   **4.** Alt + F

87. VSHORADS missile was successfully tested in September 2022 by _____.
    1. Defence Research and Development Organization (DRDO)
    2. Earth System Science Organization (ESSO)
    3. Hindustan Aeronautics Limited (HAL)
    4. Forest Survey of India (FSI)

88. Humayun's Tomb situated in Delhi is built by _____.
    1. Gulbadan Begum   **2.** Bega Begum
    3. Hamida Begum   **4.** Maham Begum

89. Which of the following statements is correct?
    1. Living organisms can survive a wide range of pH change.
    2. When pH of rain water is less than 8.2, it is called acid rain.
    3. Our body works within the pH range of 7.0 to 7.8.
    4. Tooth decay starts when the pH of the mouth is lower than 1.5.

90. Where was the Commonwealth games held in the year 2022?
    1. Gold Coast   **2.** New Delhi
    3. Birmingham   **4.** Glasgow

91. Who among the following has been chosen as the male goalkeeper of the year by the International Hockey Federation (FIH) 2021-22?
    1. PR Sreejesh   **2.** Mumtaz Khan
    3. Pirmin Blaak   **4.** Arthur Thieffry

92. The shehnai is a reed instrument with how many holes along the tube?
    1. Five   **2.** Seven
    3. Eleven   **4.** Six

93. The Indian National Congress was established when _____ delegates from all over the country met at Bombay in December 1885.
    1. 34   **2.** 72   **3.** 108   **4.** 156

94. _____ is the change in total utility due to consumption of one additional unit of a commodity.
    1. Product Utility (PU)   **2.** Revenue utility (RU)
    3. Demand utility (DU)   **4.** Marginal utility (MU)

95. Which among the following pairs of 'animal – phylum of animal kingdom they belong' is incorrect?
    1. Liver fluke - Nematoda   **2.** Sycon - Porifera
    3. Prawns - Arthropoda   **4.** Starfish - Echinodermata

96. Kalinga is the ancient name of coastal _____.
    1. Tamil Nadu   **2.** Orissa
    3. Kerala   **4.** Andhra Pradesh

97. The Arctic Ocean is located within the Arctic Circle and surrounds the North Pole. It is connected with the Pacific Ocean by a narrow stretch of shallow water known as _____ strait.
    1. Berring   **2.** Palk
    3. Hudson   **4.** Bosphorus

98. Which among the following Ministries launched the app JALDOOT?
    1. Ministry of Finance
    2. Ministry of Culture
    3. Ministry of External Affairs
    4. Ministry of Rural Development

99. Which team won the Ranji trophy 2021 – 2022?
    1. Mumbai   **2.** Madhya Pradesh
    3. Vidarbha   **4.** Himachal Pradesh

100. Who among the following received the best actor in leading role (male) popular choice in the Filmfare Awards 2022?
    1. Vicky Kaushal   **2.** Sidharth Malhotra
    3. Dhanush   **4.** Ranveer Singh

Answer Key

1.	(3)	2.	(3)	3.	(2)	4.	(2)	5.	(1)	6.	(2)	7.	(4)	8.	(4)	9.	(4)	10.	(1)
11.	(3)	12.	(1)	13.	(3)	14.	(3)	15.	(1)	16.	(4)	17.	(2)	18.	(3)	19.	(4)	20.	(4)
21.	(2)	22.	(4)	23.	(2)	24.	(1)	25.	(4)	26.	(3)	27.	(1)	28.	(2)	29.	(3)	30.	(2)
31.	(3)	32.	(4)	33.	(2)	34.	(2)	35.	(4)	36.	(1)	37.	(2)	38.	(1)	39.	(1)	40.	(2)
41.	(1)	42.	(1)	43.	(4)	44.	(1)	45.	(4)	46.	(2)	47.	(2)	48.	(3)	49.	(4)	50.	(1)
51.	(2)	52.	(2)	53.	(3)	54.	(2)	55.	(1)	56.	(4)	57.	(2)	58.	(4)	59.	(3)	60.	(3)
61.	(4)	62.	(2)	63.	(1)	64.	(4)	65.	(4)	66.	(2)	67.	(1)	68.	(4)	69.	(2)	70.	(4)
71.	(3)	72.	(1)	73.	(2)	74.	(1)	75.	(3)	76.	(3)	77.	(2)	78.	(3)	79.	(3)	80.	(1)
81.	(4)	82.	(4)	83.	(2)	84.	(3)	85.	(4)	86.	(2)	87.	(1)	88.	(2)	89.	(3)	90.	(3)
91.	(1)	92.	(2)	93.	(2)	94.	(4)	95.	(1)	96.	(2)	97.	(1)	98.	(4)	99.	(2)	100.	(4)

Answers with Explanations

1. Option (3) is correct.

Fauna refers to the animals of a particular region, habitat, or geological period. Phylum connotes a level of classification or taxonomic rank below kingdom and above class. Blossom is a flower or a mass of flowers, especially on a tree or bush. Flora is all the plant life present in a particular region or time, generally the naturally occurring (indigenous) native plants.

2. Option (3) is correct.

It is to be noted that 'said to' as a reporting verb changes to 'told' in assertive sentences. Moreover, the verb 'don't' will change to the past tense in indirect form, so 'did' is appropriate. Only option (3) fulfils all the criteria. Thus the correct sentence is: The student said to her that he/she cannot remember her name.

3. Option (2) is correct.

The sentence 'People who came into contact with the carrier are in danger of catching the disease' does not need any improvement, because the verb 'danger' which is followed by 'of' , is used to show the hazards one is exposed to.

4. Option (2) is correct.

The sentence 'I will never judge you for yours impromptu performance' has the error in 'yours impromptu performance'. There is an error in pronoun usage. The personal pronoun 'your' will be used , not possessive pronoun 'yours'. There is no sense of belonging. Thus, the correct sentence is: I will never judge you for your impromptu performance.

5. Option (1) is correct.

Since the sentence is in simple present tense, the subject 'she' will take a singular verb and be in simple present tense. So 'carries out' makes sense. Options (3) and (4) can be eliminated as they have plural verbs, and they do not make sense. 'Dwindles out' means to fade out' , which is ridiculous in the given context. Thus, the correct sentence is: I envy the way she carries out all tasks with such ease and speed.

6. Option (2) is correct.

The correct answer is 'vein', because both 'arteries and veins' are blood vessels, arteries carry blood away from your heart and veins carry blood back toward your heart. One can feel the arteries and veins throbbing inside our body, but 'liver' cannot be touched or felt.

7. Option (4) is correct.

'Holistic' is the correct spelling, which means 'to provide support that looks at the whole person, not just their mental health needs.'

8. Option (4) is correct.

The correct sequence is PSQR. P starts the paragraph, as it is about the protagonist, Rama, prince of Ayodhya. Since it is a narrative piece, we need to look for a chronological sequence.

So first Rama is introduced, and we are told that he was exiled with her and his brother Laksmana for 14 years through the plotting of his stepmother (P). Next comes the climax, when Sita is abducted by Ravana, and Rama gathered an army of monkeys and bears to search for her (S). The 'allies' mentioned in Q are detailed in S, so QS is a substantial pair. So these 'allies' attacked Lanka, killed Ravana, and rescued Sita. After their victory, they return to Ayodhya.

9. Option (4) is correct.

Incredible means impossible to believe. Strained implies showing signs of nervous tension or tiredness. Far-fetched connotes unlikely and unconvincing;Implausible means not seeming reasonable or probable, believable means able to be believed. Therefore, it is clear that believable is the antonym of incredible.

10. Option (1) is correct.

Vain means 'unproductive/hopeless'. So, the antonym will be 'productive'.

11. Option (3) is correct.

The sentence 'She ate the last slice of pizza' has the verb in its simple past form. In passive voice, the object (the last slice of pizza) will turn to be the subject. Moreover, in active verb form: second form of the verb. Passive verb form: was/were + past participle form of the verb. So 'The last slice of pizza was eaten by her' is appropriate.

12. Option (1) is correct.

The correct sequence is QPRS. In this category of rearranging the parts of the sentence in correct order, one needs to join the clues evident in either the first or the last part of the options- Q says- 'it is', but when clubbed with P , it makes complete sense- 'it is my belief that UHC should be seen as the linchpin of the health development agenda'. This is in respect to 'not only underpinning…' (R) , (S)–'but allowing for a balance…'. Therefore, RS is an indispensable pair.

13. Option (3) is correct.

Forthright means direct and outspoken.Artless means natural and simple. While unhabitated means 'not having been restrained or suppressed.' Uncandid refers to being not candid or frank. Blunt implies uncompromisingly forthright.

14. Option (3) is correct.

Domicile means the country that a person treats as his/her permanent home, or lives in and has a substantial connection with. Therefore, 'home' is the evident answer.

15. Option (1) is correct.

The part 'studied a diagram' is grammatically correct. This is so because of the use of indefinite article 'a' which suggests 'any one'. So, the noun 'diagram' will be singular instead of plural. The correct sentence is :The students studied a diagram of a plant cell.

16. Option (4) is correct.

Embarked means to begin (a course of action). The sentence: 'We (opened) on a new travel venture' can be substituted as 'We embarked on a new travel venture. 'Initiated' also means to begin, but the usage ' initiated on' is incorrect; whereas the idea of embarking on something new is exact.

17. Option (2) is correct.

The idiom 'water under the bridge' isused to refer to events that are in the past and consequently no longer to be regarded as important. Example: It is true that we have had our share of conflicts, but that is water under the bridge as we are collaborating on a new venture. So 'water under the bridge' means 'anything from the past that isn't significant or important anymore.'

18. Option (3) is correct.

The phrase 'to keep an eye on' implies 'to watch closely or carefully.' Example : I need a keep on my son's diet, given his tendency to put on weight.

19. Option (4) is correct.

The part 'patterns are made more scarcer' has an error in comparison of degree of adjectives. This part commits the error of using double comparatives - more scarcer. It will only be 'scarcer'. Therefore, the correct sentence is: If conventional arrangements and patterns are made scarcer, other arrangements and patterns will spring up.

20. Option (4) is correct.

The correct sentence is: Many input devices perform specific functions. Option (1) has the incorrect spelling 'perfrom'; option (2) has the erroneous spelling 'functins'; option (3) has the inappropriate spellings 'perfrpmspecfic'.

21. Option (2) is correct.

The question asked in the first blank has its answer in the next sentence. In other words, fresh pineapple, chilled watermelon, and an icy cold soft drink all taste so good because of the sweetness the sugar in them provides. This is a characteristic common to all these drinks. So blank (1) will be 'common'.

22. Option (4) is correct.

Blank (2) gives us the picture of how sugar looks like – something white you put in cookies, that your parents put in their coffee. Thus, they are 'granules'(a small compact particle of a substance). 'Capsules/stones/rubbles' are inappropriate to qualify the texture of sugar.

23. Option (2) is correct.

Granules of sugar are really small that they can be 'sprinkled', not placed or raised.

24. Option (1) is correct.

Sucrose, being one kind of sugar, is remove or taken out, (extracted) from sugar cane or sugar beets. Other options like 'rugged/uneven,' 'shelved/cancelled', 'excavated/mined' are inappropriate to the context.

25. Option (4) is correct.

Sugar is a carbohydrate, present naturally in every fruit andvegetable. Rest of the options are misfits for the blank.

26. Option (3) is correct.
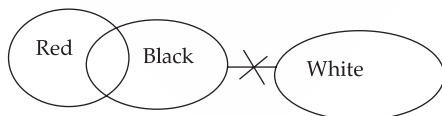
Explanation:

From the venn diagram, only conclusion I follows.

27. Option (1) is correct.

Explanation: Given that: $13 + 9 \div 78 \times 27 - 16 = 3$
After interchanged, 3 and 78
$13 + 9 \div 3 \times 27 - 16 = 78$
Using BODMAS

$$\begin{aligned} \text{LHS} &= 13 + 9 \div 3 \times 27 - 16 \\ &= 13 + 3 \times 27 - 16 \\ &= 13 + 81 - 16 = 78 = \text{RHS} \end{aligned}$$

28. Option (2) is correct.
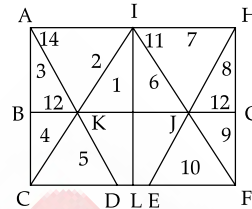
Explanation:

Total triangles = $14 + \Delta\ \text{ILC} + \Delta\ \text{EFH} + \Delta\ \text{FHI} + \Delta\ \text{ACD}$
$+ \Delta\ \text{CIF} + \Delta\ \text{ILF} = 20$

29. Option (3) is correct.

Explanation:

Given that: (8, 9, 431)
(11, 8, 1267)
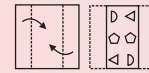
Logic:
$(8, 9, 431) = 8^3 - 9^2 = 431$
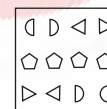$(11, 8, 1267) = 11^3 - 8^2 = 1267$
Hence,
$(7, 5, 318) = 7^3 - 5^2 = 318$

30. Option (2) is correct.

Explanation:

Logic of symmetry will be followed here. Hence,

31. Option (3) is correct.

Explanation: Given that: Chair : Table :: Eraser : ?
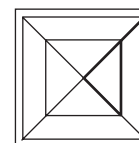
Logic: As, Chair is related to Table; similarly, Eraser is related to Pencil.
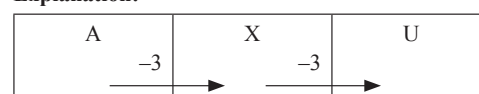
32. Option (4) is correct.

Explanation:

The above figure is embedded in the option 4 as highlighted below.

33. Option (2) is correct.

Explanation:

A	X	U
−3	−3	

S	P	L
−3 →	−4 →	

U	R	O
−3 →	−3 →	

N	K	H
−3 →	−3 →	

Hence, SPL is the odd one out.

34. Option (2) is correct.

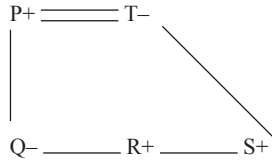**Explanation:** Given that: 19 : 359 :: 17 : 287 :: 21 : ?

Logic:

$19 : 359 \Rightarrow (19)^2 - 2 = 359$
$17 : 287 \Rightarrow (17)^2 - 2 = 287$
$21 : ? \Rightarrow (21)^2 - 2 = 439$

35. Option (4) is correct.

Explanation: Male +, Female −

P+ ——— T−

Q− ——— R+ ——— S+

From the above diagram, T is the wife of P.

36. Option (1) is correct.

Explanation:

23	5	9	7	8	19
W	E	I	G	H	S

↓ ↓+3 ↓−4 ↓+2 ↓−5 ↓

Q	H	E	I	C	W
17	8	5	9	3	23

−2

A	B	U	S	E	S
1	2	21	19	5	19

↓− ↓+3 ↓−4 ↓+2 ↓−5 ↓

Q	E	Q	U	Z	A
17	5	17	21	26	1

−2

37. Option (2) is correct.

Explanation:

Logic: Sarangi, saxophone, and xylophone are musical instruments, whereas the telephone is a calling device.

38. Option (1) is correct.
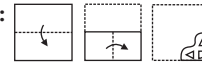
Explanation:

Logic of pattern and symmetry will be followed here. Hence,
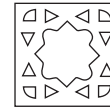
39. Option (1) is correct.

Explanation: Given that: (14, 112, 6), (17, 204, 5)

Logic: $(14, 112, 6) = 14 \times (14 - 6) = 14 \times 8 = 112$

Similarly, $(17, 204, 5) = 17 \times (17 - 5) = 17 \times 12 = 204$

Hence, $(21, 189, 12) = 21 \times (21 - 12) = 21 \times 9 = 189$

40. Option (2) is correct.

Explanation:

Given series: 59, 118, 354, 708, 2124, ?

59	118	354	708	2124	4248
×2	×3	×2	×3	×2	

41. Option (1) is correct.

Explanation: Given that: Computer: Mouse :: Television : ?

Logic: Since, computer is operated by mouse, similarly, television is operated by remote.

42. Option (1) is correct.

Explanation:

2. Macabre	4. Macaroni	5. Machete	1. Machine	3. Machinery

43. Option (4) is correct.

Explanation: Given that: AJN : DMQ :: PTW :?

A	J	N
1	10	14

↓+3 ↓+3 ↓+3

D	M	Q
4	13	17

Similarly,

P	T	W
16	20	23

↓+3 ↓+3 ↓+3

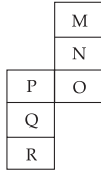| S	W	Z
19	23	26

44. Option (1) is correct.

Explanation:

$(32, 64, 256) = 32 \times 2 = 64, 64 \times 4 = 256$
$(18, 36, 144) = 18 \times 2 = 36, 36 \times 4 = 144$
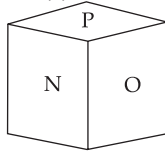$(37, 74, 296) = 37 \times 2 = 74, 74 \times 4 = 296$

45. Option (4) is correct.

Explanation:

M	
N	

P	O

Q

R

Logic: Alternate pairs are opposite to each other.

M-O, P-R, N-Q

All these are opposite pairs but cannot be adjacent to each other. Hence, only option (4) can be formed.

46. Option (2) is correct.

Explanation: Given series: ANM, GWZ, MFM, SOZ, ?

Logic:

A	N	M
1	14	13

↓+6 ↓+9 ↓+13

G	W	Z
7	23	26

↓+6 ↓+9 ↓+13

M	F	M
13	6	13

↓+6 ↓+9 ↓+13

S	O	Z
19	15	26

↓+6 ↓+9 ↓+13

Y	X	M
25	24	13

47. Option (2) is correct.

Explanation:

'A' means '×',

'B' means '÷',

'C' means '+' and

'D' means '–',

94 B 47 C 63 D 14 A 5 C ? = –2

After putting sign, $94 \div 47 + 63 - 14 \times 5 + ? = -2$

Using BODMAS Rule:

$2 + 63 - 70 + ? = -2$

$? = -2 - 2 - 63 + 70$

$? = -67 + 70$

$? = 3$

48. Option (3) is correct.
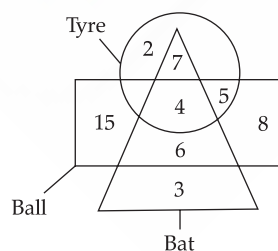
Explanation:

Logic:

Rectangle represents Ball

Triangle represents Bat

Circle represents Tyre

So, the number of balls which are neither bat nor tyre is $15 + 8 = 23$.

49. Option (4) is correct.
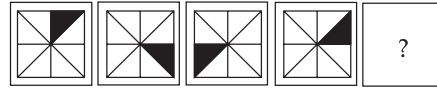
Explanation:

Logic: The black part is moving clockwise, following a pattern of 2 steps, 3 steps, 4 steps, and so on. So, in the last figure it will move 5 steps. Hence,
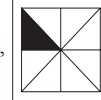
50. Option (1) is correct.

Explanation:

Logic: Place value of the first 4 letters from the end of an alphabetical series and the place value of the last 4 letters from the start of an alphabetical series.

'GRATEFUL' is coded as '209267562112',

G	R	A	T	E	F	U	L
20	9	26	7	5	6	21	12

Similarly,

'INSTANCE' is coded as '18138711435'.

I	N	S	T	A	N	C	E
18	13	8	7	1	14	3	5

Hence,

'LIKEWISE,' can be coded as:

L	I	K	E	W	I	S	E
15	18	16	22	23	9	19	5

Hence, 15181622239195 is the correct answer.

51. Option (2) is correct.

Let the total investment $= x$

Investment of P $= \dfrac{x}{5}$

Investment of Q $= \dfrac{x}{4}$

So, investment of R $= x - \dfrac{x}{5} - \dfrac{x}{4} = \dfrac{11x}{20}$

Ratio of investment of P, Q and R $= \dfrac{x}{5} : \dfrac{x}{4} : \dfrac{11x}{20} = 4 : 5 : 11$

52. Option (2) is correct.

We have, $a^3 + b^3 + c^3 - 3abc = \dfrac{1}{2}(a + b + c)(\{(a - b)^2 + (b - c)^2 + (c + a)^2\}$

So, $2(a^3 + b^3 + c^3 - 3abc) = (a + b + c)\{(a - b)^2 + (b - c)^2 + (c + a)^2\}$

$\Rightarrow (a + b + c)(\{(a - b)^2 + (b - c)^2 + (c + a)^2\} = 2a^3 + 2b^3 + 2c^3 - 6abc$

53. Option (3) is correct.

Marks obtained by A in all the subjects $= 100 + 120 + 160 + 140 + 60 + 150 = 730$

Marks obtained by B in all the subjects $= 70 + 180 + 170 + 110 + 130 + 80 = 740$

Required percentage $= \dfrac{730}{740} \times 100 = 98.64\%$

54. Option (2) is correct.

Given numbers are $\dfrac{5}{11}, \dfrac{5}{7}, \dfrac{3}{8}, \dfrac{6}{13}$.

$\Rightarrow \dfrac{5}{11} = 0.4545$

$\Rightarrow \dfrac{5}{7} = 0.714$

$\Rightarrow \dfrac{3}{8} = 0.375$

$\Rightarrow \dfrac{6}{13} = 0.4615$

So, the difference between largest and smallest number

$= \dfrac{5}{7} - \dfrac{3}{8} = \dfrac{19}{56}$

55. Option (1) is correct.

Given,

The speed of stream = 4 km/h

Speed of boat = 11 km/h

So, upstream speed = 11 – 4 = 7 km/h

And downstream speed = 11 + 4 = 15 km/h

We have, Time = $\dfrac{\text{Distance}}{\text{Speed}}$

According to the question,

$\Rightarrow$ Total time taken = $\dfrac{21}{7} + \dfrac{45}{15}$ = 3 + 3 = 6 h

56. Option (4) is correct.

Value of $\sqrt{\dfrac{\text{cosec A}+1}{\text{cosec A}-1}} + \sqrt{\dfrac{\text{cosec A}-1}{\text{cosec A}+1}}$

$= \dfrac{(\text{cosec A}+1)+(\text{cosec A}-1)}{\sqrt{\text{cosec}^2 A - 1^2}} = \dfrac{2\,\text{cosec A}}{\sqrt{\cot^2 A}} = \dfrac{2\,\text{cosec A}}{\cot}$

$= \dfrac{2}{\sin A \cdot \dfrac{\cos A}{\sin A}} = \dfrac{2}{\cos A}$ = 2 sec A

57. Option (2) is correct.

Let the 10 consecutive numbers are $x, x + 1, x + 2, x + 3, x + 4, x + 5, x + 6, x + 7, x + 8, x + 9$.

Given that,

$\dfrac{\begin{array}{l}x + x + 1 + x + 2 + x + 3 + x + 4 + x + 5\\ + x + 6 + x + 7 + x + 8 + x + 9\end{array}}{10} = \dfrac{33}{2}$

$\Rightarrow 10x + 45 = 165$

$\Rightarrow x = 12$

So, first three numbers are 12, 13 and 14.

So, average of first three numbers

$= \dfrac{12 + 13 + 14}{3} = 13$

58. Option (4) is correct.
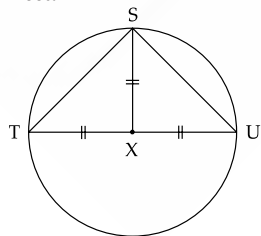
According to the question,

$\qquad$ TX = XU = XS

So, X is the circumcentre of the triangle.

So, $\qquad \angle$TSU = 90° $\qquad$ [Circular Property]

59. Option (3) is correct.

Given that the median of triangle = $15\sqrt{3}$ cm

Using, median = $\dfrac{\sqrt{3}}{2} \times$ side

$\Rightarrow 15\sqrt{3} = \dfrac{\sqrt{3}}{2} \times$ side

$\Rightarrow$ side = 30 cm

60. Option (3) is correct.

Given,

Simple interest in 3 years = ₹ 1200

Let the principal amount = ₹ P

Rate of interest = 8%

Using, $\qquad$ SI = $\dfrac{\text{PRT}}{100}$

$\Rightarrow \qquad 1200 = \dfrac{P \times 8 \times 3}{100}$

$\Rightarrow \qquad P = 5000$
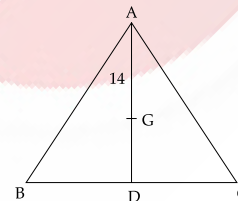
Now, rate of interest = 10% annum

$\qquad$ Time = 2 years

Using, $A = P\left(1 + \dfrac{r}{100}\right)^2$

$\Rightarrow A = 10000\left(1 + \dfrac{10}{100}\right)^2 \Rightarrow A = 10000 \times \dfrac{11}{10} \times \dfrac{11}{10} = 12100$

So, compound interest = 12100 – 10000 = ₹ 2100

61. Option (4) is correct.

We know that centroid divides each median into segment with ratio of 2 : 1.

So, AG : GD = 2 : 1

Given that AG = 14 cm

$\therefore \quad$ GD = $\dfrac{14}{2}$ = 7 cm.

So, AD = AG + GD = 14 + 7 = 21 cm.

62. Option (2) is correct.

Given that, tan A = 3

We know that tan A = $\dfrac{\text{P}}{\text{B}}$

So, in a right-angled triangle, P = 3, B =1

Then, H = $\sqrt{3^2 + 1^2} = \sqrt{10}$

Now, the value of 3 . sin A . cos A = $3 \times \dfrac{3}{\sqrt{10}} \times \dfrac{1}{\sqrt{10}} = \dfrac{9}{10}$

63. Option (1) is correct.

Given that price of commodity is decreased by 25% i.e. $\dfrac{1}{4}$ of original quantity.

We have, Expenditure = Price × Consumption

For keeping the expenditure constant, if price is decreased by a factor of $\dfrac{1}{x}$, then consumption must be increase by a factor of $\dfrac{1}{x-1}$.

So, Consumption will increase by $\dfrac{1}{3}$.

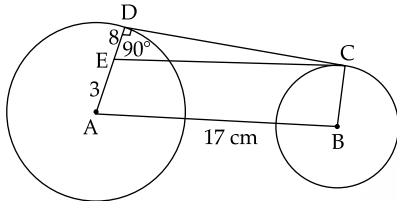According to the question, $\dfrac{1}{3}$ × earlier cosumption = 20

$\Rightarrow$ earlier cosumption = 60 kg

64. Option (4) is correct.

We have, $a^3 + b^3 + c^3 - 3abc = (a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca)$

So, the value of $(a + b + 2c)(a^2 + b^2 + 4c^2 - ab - 2bc - 2ca)$
$$= a^3 + b^3 + 8c^3 - 6abc$$

65. Option (4) is correct.

As shown in diagram, AB ∥ EC

and   ∠EDC = 90°   [circular property]

So, in Δ EDC, using Pythagoras theorem,

$$EC^2 = ED^2 + DC^2$$
$$\Rightarrow \qquad 17^2 = 8^2 + DC^2$$
$$\Rightarrow \qquad DC^2 = 289 - 64$$
$$\Rightarrow \qquad DC = \sqrt{225} = 15$$

∴ Length of direct common tangent = 15 cm.

66. Option (2) is correct.

According to the question,

$$J_1 = \dfrac{200 + 400 + 600}{3} = 400$$

$$J_2 = (1000 + 700 + 800 + 200 + 100) - (200 + 400 + 600 + 500 + 300) = 800$$

Required ratio $= \dfrac{800}{400} = 2$

67. Option (1) is correct.

Value of $\dfrac{1 + \sin A}{\cos^2 A} = \dfrac{1 + \sin A}{1 - \sin^2 A}$

$$= \dfrac{1 + \sin A}{(1 - \sin A)(1 + \sin A)}$$

$$= \dfrac{1}{1 - \sin A}$$

68. Option (4) is correct.

As shown in the table,

Total salary of all the employees = 200 + 650 + 350 + 250 + 450 + 300 = 2200

69. Option (2) is correct.

Value of 525 + 1235 ÷ 247 – 29 × 10
$$= 525 + 5 - 29 \times 10$$
$$= 525 + 5 - 290 = 240$$

70. Option (4) is correct.

Given that, $x + \dfrac{1}{x} = -2$

So, $x = -1$

Now, the value of $x^7 + x^{-7} + x^2 + x^{-2}$
$$= (-1)^7 + (-1)^{-7} + (-1)^2 + (-1)^{-2},$$
$$= -1 - 1 + 1 + 1 = 0$$

71. Option (3) is correct.

Ratio of the time taken by a man and a woman = 2 : 3

So, the ratio of the efficiency of a man and a woman = 3 : 2

Time taken by both to finish the work = 24 days

Let total work = 24 × (2 + 3) = 120 unit

So, time taken by a woman to finish the work alone

$$= \dfrac{120}{2} = 60 \text{ days}$$

72. Option (1) is correct.

The selling price of each machine = ₹ 15000

According to the question,

The cost price of 1st article $= \dfrac{15000}{120} \times 100 = ₹ 12500$

The cost price of 1st article $= \dfrac{15000}{60} \times 100 = ₹ 25000$

So, total cost price of both articles = 12500 + 25000 = ₹ 37500

Overall loss percentage $= \dfrac{37500 - 30000}{37500} \times 100 = 20\%$

73. Option (2) is correct.

Given that total amount spent = ₹ 300000

As shown in the pie chart,

Amount spent on transport, others and education = 10% + 15% + 25% = 50%

And 50% of 300000 = 150000

So, option (2) is correct.

74. Option (1) is correct.

Given that the radius of solid hemisphere = 12 cm

So, volume of hemisphere

$$= \dfrac{1}{2} \times \dfrac{4}{3} \times \pi \times r^3 = \dfrac{1}{2} \times \dfrac{4}{3} \times \pi \times 12^3 = 1152\pi$$

Volume of sphere having radius of 6 cm $= \dfrac{4}{3} \times \pi \times 6^3 = 288\pi$

Number of spherical balls of 6 cm radius $= \dfrac{1152\pi}{288\pi} = 4$

75. Option (3) is correct.

Let the MRP of article = ₹ 100

So, selling price = ₹ 80

According to the question, cost price $= \dfrac{80}{95} \times 100 = \dfrac{1600}{19}$

Required profit percentage

$$= \dfrac{100 - \dfrac{1600}{19}}{\dfrac{1600}{19}} \times 100 = \dfrac{3}{16} \times 100 = 18.75\%$$

76. Option (3) is correct.

Article 151 of the Indian Constitution deals with the appointment of the Comptroller and Auditor General (CAG) of India. According to this article, the CAG is appointed by the President of India and holds office for a term of six years

or until he/she attains the age of 65 years, whichever is earlier. The duties and powers of the CAG are also mentioned in this article, which include auditing the accounts of the Union and State governments and conducting performance audits of government programs and schemes. The CAG submits its reports to the President or the Governor of the concerned state, who then present them to the Parliament or the State Legislature, respectively.

77. Option (2) is correct.

Indian National Lok Dal (INLD) is a regional political party in the Indian state of Haryana in northwest-central India. The party's primary concentration has been on the state, with barely a little representation in the national political arena in New Delhi. Its historic Jat (peasant caste) stronghold in central and west-central Haryana has been its primary power base.

78. Option (3) is correct.

Frictional unemployment is a type of unemployment that happens when workers move from one job to another job. It is also known as seeking unemployment and is determined by the individual's circumstances. Frictional unemployment occurs when a worker is looking for work or migrating from one job to another. Seasonal unemployment happens when people are unemployed during specific period of the year when labour demand is lower than labour supply. When advances in technology and working practices force some workers to lose their jobs, this is referred to as technological unemployment. Technological unemployment is part of a broader notion known as structural unemployment. Cyclical unemployment is the component of overall unemployment caused directly by economic ups and downs. The impact of an economic recession or growth on the overall unemployment rate is referred to as cyclical unemployment.

79. Option (3) is correct.

Programming language translator software is not an application software. It is a system software used to translate programs written in a particular programming language into machine language that can be executed by a computer.

80. Option (1) is correct.

Loktak Lake is a freshwater lake situated in Manipur, a state in northeast India. It is the largest freshwater lake in northeastern India and is also known as the only floating lake in the world due to the floating phumdis (masses of vegetation) on it. The lake is an important part of the socio-economic and cultural life of the people of Manipur. It is also home to the endangered Manipur brow-antlered deer, also known as Sangai, which is the state animal of Manipur.

81. Option (4) is correct.

The subtropical vegetation zone in India is characterized by a mean average temperature range of 17° Celsius to 24° Celsius. The type and distribution of vegetation in this zone are primarily determined by temperature, humidity, precipitation, soil, and air. In the hills of the Peninsula and the slopes of the Himalayas, at elevations of 915 m, the temperature decreases, leading to changes in the type of vegetation from tropical to subtropical, temperate, and alpine.

82. Option (4) is correct.

Sachin Tendulkar was the first and only sportsperson to be awarded the Bharat Ratna in 2014. Sachin Tendulkar made his debut in 1989. In a career spanning two decades, he appeared in 664 international cricket matches. He is the only player to have achieved 100 international centuries, the first batter to make a double century in a One Day International, and the only player to have scored more than 34,000 runs in both ODI and Test cricket. Over the years, there have been calls to grant Major Dhyan Chand the Bharat Ratna, the country's highest civilian honour. But that never happened.

83. Option (2) is correct.

According to the most recent Commitment to Reducing Inequality Index (CRII), India has risen six spots to rank 123 out of 161 nations in terms of reducing inequality, but it remains one of the lowest performers in terms of health spending. Norway is the CRII's leader, followed by Germany and Australia.

84. Option (3) is correct.

An element's atomic mass can be estimated using the element's atomic number and the number of neutrons present. The atomic number of sodium is 11. The formula below was used: The total number of neutrons + a total number of protons. Sodium is a metal that is part of the alkali family. It is the first element of the periodic table's third periodic period. It is the eleventh element in the periodic table. Therefore, The atomic number of sodium is 11, and its nucleus has 12 neutrons. The atomic mass of sodium is 11 + 12 = 23.1 mole of sodium equals 23 grammes as a consequence. Because sodium has an atomic mass of 23, we can write it as 23 g/mol.

85. Option (4) is correct.

Andaman and Nicobar Islands is an Indian union territory. Andaman and Nicobar is made up of 572 islands. Andaman and Nicobar's territorial capital is Port Blair. The Andaman and Nicobar Islands are located in the Bay of Bengal, southeast of the Indian mainland. The Mahanadi, Godavari, Krishna, and Kaveri rivers all flow into the Bay of Bengal. The Ten Degree Channel separates the Andaman Islands from the Nicobar Islands in the south. The islands of Andaman and Nicobar were previously known as the Emerald Islands. The principal indigenous peoples of Andaman and Nicobar are the Onch, Jarawa, Sentinel, and others. Barren Island is Andaman and Nicobar's sole active volcano. In 1872, the British captured Andaman and Nicobar.

86. Option (2) is correct.

To launch the Font dialog box with the focus on the Font combo box, press Ctrl+D. A dialog box is a transient window created by an application to collect user input. Dialogue boxes are commonly used by applications to prompt the user for further information about menu options.

87. Option (1) is correct.

Very Short Range Air Defence System (VSHORADS) missile demonstrates the effectiveness of the indigenously developed Man Portable Air Defence System (MANPAD) by DRDO's Research Centre Imarat (RCI), Hyderabad. The collaboration with other DRDO laboratories and Indian industry partners has contributed to the development of this advanced air defence system, which can be easily deployed on the ground and operated by soldiers in combat situations. This system is expected to enhance the air defence capabilities of the Indian armed forces and provide them with a reliable means of protection against aerial threats on the battlefield.

88. Option (2) is correct.

Haji Begam built Humayun's mausoleum in Delhi. Bega Begum was sometimes referred to as Haji Begam. After performing the Hajj pilgrimage, she became known as Haji Begam. Humayun's tomb construction began in 1565 and was finished in 1572. In 1993, the mausoleum was designated a UNESCO World Heritage Site. The principal architect was Mirak Mirza Ghiyath. Humayun's father was Babur. Humayun's son was Akbar.

89. Option (3) is correct.

The human body has a pH range of 7.0 to 7.8, and the pH scale is used to determine whether a water-based solution is acidic or basic. At room temperature (25°C or 77°F), pure water is neutral and has a pH value of 7. If a solution has a pH below 7, it is considered acidic, while a pH above 7 indicates it is basic. pH measurements are important in various fields, such as chemistry, agronomy, medicine, and water treatment.

90. Option (3) is correct.

Birmingham, England, hosted the Commonwealth Games in 2022. It was formally called the XXII Commonwealth Games, however, it is more frequently referred to as Birmingham 2022. England hosted the Games for the third time, following London in 1934 and Manchester in 2002. The Commonwealth Games 2022 motto was "Games for Everyone." The majority of the venues for the Games were in Birmingham.

91. Option (1) is correct.

PR Sreejesh and Savita Punia athletes have received the prize for the second year in a row. PR Sreejesh and Savita Punia both guided their respective teams to medals at the Commonwealth Games 2022. The international hockey organization (FIH) awarded India's Savita Punia and PR Sreejesh the FIH Goalkeepers of the Year 2021-22.

92. Option (2) is correct.

The shehnai is a type of reed instrument that is commonly used in North Indian classical music. It has a total of seven holes along the tube which can be opened or closed with the fingers to produce different notes and melodies. This instrument is considered to be a Mangal vadya and is often played during auspicious occasions such as weddings and temple festivals in North India. While some scholars believe that the shehnai originated in West Asia and was brought to India, others think it may have actually travelled from India to China.

93. Option (2) is correct.

The Indian National Congress was founded on December 28, 1885, at Gokuldas Tejpal Sanskrit College in Bombay, with 72 delegates in attendance. Allan Octavian Hume established the INC. It was established in Mumbai. It was founded when 72 delegates from all of India's presidencies and provinces gathered in Bombay from December 28 to 30, 1885. Allan Octavian Hume was the Congress's General Secretary and played a key role in its development. It was created to bring together a group of educated people on a shared platform in order to influence policymaking. Dadabhai Naoroji, Kashinath Trimbak Telang, Pherozeshah Mehta, S.Subramania Iyer, P. Ananda Charlu, and Dinshaw Edalji Wacha were among the major figures who attended the inaugural session of the congress, which was held at the Gokuldas Tejpal Sanskrit College. Gopal Ganesh Agarkar, G. Subramania Iyer, M. Veeraraghavarchariar, N.G. Chandavarkar, Rahmatullah M. Sayani, and Womesh Chandra Bonnerjee are among those who have contributed to this work. Surendranath Banerjee was an influential leader who was not present. He had called a national convention in Calcutta around the same time. Womesh Chandra Banerjee was the first president of Congress. Congress passed nine resolutions calling for improvements in British policy and administrative reforms.

94. Option (4) is correct.

The change in overall utility caused by consuming one more unit of a commodity is referred to as marginal utility. Utility in economics refers to the complete satisfaction gained from consuming a service or commodity. The economic utility can decrease as the supply of commodities or services increases.

95. Option (1) is correct.

Option (1) Liver fluke - Nematoda is incorrect. Liver fluke belongs to the phylum Platyhelminthes, which is also known as flatworms. Nematodes are a separate phylum of worms, commonly known as roundworms. Sycon belongs to the phylum Porifera (sponges). Prawns belong to the phylum Arthropoda, which includes insects, spiders, and crustaceans like prawns, crabs, and lobsters. Starfish belongs to the phylum Echinodermata, which also includes sea urchins, sand dollars, and sea cucumbers.

96. Option (2) is correct.

Odisha is a state in India's eastern region. Bhubaneswar is the state capital. Kalinga was the ancient name for coastal Orissa. In 261 BCE, the Mauryan emperor Ashoka invaded Kalinga in the Kalinga War. Odisha was also known as Orissa and Utkalam in the past. Odisha has a coastline that stretches over 485 kilometres. Odisha is home to the coastline known as the Gift of six rivers. Odisha is home to the well-known Konark temple. Chilika Lake, India's largest coastal lagoon, is located in Odisha. Odisha is home to one of India's major seaports, Paradeep. Naveen Patnaik is the current Chief Minister. Ganeshi Lal is the current Governor of India.

97. Option (1) is correct.

The Arctic Ocean is located within the Arctic Circle and surrounds the North Pole. It is connected with the Pacific Ocean by a narrow stretch of shallow water known as the Bering Strait. The Bering Strait is a relatively narrow passage between Russia and Alaska that separates the Arctic Ocean from the Pacific Ocean. The strait is about 82 kilometres (51 miles) wide at its narrowest point and has depths reaching more than 50 meters (160 feet) in some places. The Bering Channel is a Pacific channel that borders the Arctic to the north. It is situated between Russia and the United States of America.

98. Option (4) is correct.

The Ministry of Rural Development created the "JALDOOT App," which will be used throughout the country to record the water level of chosen wells in villages. Shri Giriraj Singh, Union Minister of Rural Development and Panchayati Raj, introduced the "JALDOOT App."Gram Rojgar Sahayak (GRS) will be able to use the Jaldoot app to measure the water level of chosen wells twice a year. (pre-monsoon and post-monsoon). A sufficient number of measurement places (2-3) must be chosen in each community. These will be representative of the village's groundwater level.

99. Option (2) is correct.

Madhya Pradesh won the Ranji Trophy in the 2021-22 season, 69 years after they last won the coveted trophy as Holkar and 23 years after they last had a shot at Indian domestic cricket's highest reward.

100. Option (4) is correct.

Ranveer Singh won the Best Actor in a Lead Role (Male) award for his cricket drama '83' at the 67th Filmfare Awards in Mumbai, while Kriti Sanon bagged the Best Actor in a Lead Role (female) award for 'Mimi'.

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