

**STAFF SELECTION COMMISSION**  
**COMBINED HIGHER SECONDARY LEVEL (TIER-I)**  
**SOLVED PAPER**

(14<sup>th</sup> March 2018: 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. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

Needlessly to say, (1)/ we need more (2)/ environmentalists on this planet. (3)/ No error (4).

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

2. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

A debit card is similar to a credit card, but unlike a (1)/ credit card, the money came directly from the (2)/ user's bank account when performing a transaction. (3)/ No error (4)

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

3. In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

One must read the Terms and Conditions \_\_\_\_\_.

1. committedly    2. scrutiny    3. merely    4. carefully

4. In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option. The bees were buzzing around constantly, busy building their \_\_\_\_\_ pretty fast.

1. hive                      2. live                      3. survive                      4. time

5. In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.  
Attenuate

1. Weaken                      2. Expand                      3. Strengthen                      4. Intensify

6. In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.  
Omniscient

1. Illiterate                      2. Arrogant  
3. All-knowing                      4. Local

7. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.  
Brindled

1. Tabby                      2. Spotted  
3. Stippled                      4. Unflecked

8. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.  
Turbulence

1. Disorder                      2. Agitation                      3. Peace                      4. Fight

9. Rearrange the parts of the sentence in correct order.

Libraries' collections are

P : such as economic development, educational

Q : research and recreational pursuits

R : crucial for diverse purposes

1. RPQ                      2. QPR                      3. PQR                      4. PRQ

10. A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice.

She found him lying on the road.

1. She find him lying on the road.  
2. She find him on the road lying.  
3. He was found lying on the road.  
4. He is found lie on the road.

11. A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.

He said to her, "Is your name Anjali?"

1. He asked her whether her name was Anjali.  
2. He inquire about her name being Anjali.  
3. He inquired to her, was not her name Anjali.  
4. He asked whether her name is not Anjali.

12. In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word.

1. Presume                      2. Perrume                      3. Preesume                      4. Preseme

**Comprehension:**

**For Questions 13 to 17:** In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Consciousness resembles a stream also in other particulars. A stream is \_\_\_\_\_ unbroken whole from its source to its mouth, and an observer stationed at one point cannot see all \_\_\_\_\_ it at once. He sees but the one little section which \_\_\_\_\_ to be passing his station point at the time. The current may look much the same from moment to moment, but the component particles which constitute the stream are \_\_\_\_\_ changing. So it is with our thought. Its stream is continuous from birth till death, \_\_\_\_\_ we cannot see any considerable portion of it at one time.

13. A stream is \_\_\_\_\_ unbroken whole from  
1. a                      2. only                      3. an                      4. that
14. cannot see all \_\_\_\_\_ it at once.  
1. of                      2. form                      3. for                      4. off
15. section which \_\_\_\_\_ to be passing  
1. happens                      2. happen  
3. happened                      4. happening
16. the stream are \_\_\_\_\_ changing.  
1. constantly                      2. constant                      3. constancy                      4. constants
17. birth till death, \_\_\_\_\_ we cannot  
1. because                      2. if                      3. then                      4. but
18. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.  
A penny for your thoughts  
1. A way of asking what someone is thinking.  
2. Another way of saying penny wise pound foolish.  
3. An idea is less worth a penny unless it is executed successfully.  
4. Willing to share a secret only at a price.
19. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.  
All in a day's work  
1. Even in routine work one can find instances of fun.  
2. Something unusual or difficult accepted as part of someone's normal routine.  
3. A lot of work which is done in just one day.  
4. Work all day on a job that you love.
20. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.  
A state of disorder due to absence or non-recognition of authority or other controlling systems  
1. Anarchy                      2. Bridle  
3. Ascendancy                      4. Dominion
21. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.  
A liquid with healing, magical, or poisonous properties  
1. Viscous                      2. Potion                      3. Dulcet                      4. Luscious
22. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence.  
In case no improvement is needed, select "no improvement".  
It must (has started) when I was eight or nine years old when the curse of cursive writing struck me.  
1. have started                      2. have start  
3. have starting                      4. no improvement
23. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence.  
In case no improvement is needed, select "no improvement".  
The stove (to lit) using a match stick, each wick lit individually.  
1. were lit                      2. are lit  
3. was lit                      4. no improvement
24. The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.  
Yet, corporate redundancy  
A-victims and the top, B-bosses continue to stay  
C-policies have the employees as the first  
1. CAB                      2. BCA                      3. BAC                      4. ACB
25. In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.  
1. exuberantly                      2. exuberrantly  
3. exubarantly                      4. exubarrantly
1. Tyre : Round                      2. Car : Green  
3. Fuel : Petrol                      4. Drought : Flood
27. In the following question, select the related number pair from the given alternatives.  
15 : 26 :: ? : ?  
1. 39 : 49                      2. 34 : 45                      3. 46 : 55                      4. 56 : 69
28. In the following question, select the related letter/letters from the given alternatives. HIK : KLN :: PQS : ?  
1. TUW                      2. STV                      3. STU                      4. TUX
29. In the following question, select the odd word pair from the given alternatives.  
1. Sorrow – Black                      2. Red – Danger  
3. Star – Rank                      4. Wheel – Progress
30. In the following question, four number pairs are given. The number on left side of (–) is related to the number on the right side of (–) with some Logic/Rule/Relation.  
Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.  
1. 11 – 12                      2. 23 – 24                      3. 17 – 18                      4. 19 – 21
31. In the following question, select the odd letter/letters from the given alternatives.  
1. GMS                      2. LRX                      3. CIP                      4. EKQ
32. From the given alternatives, according to dictionary, which word will come at FOURTH position?  
1. Friend                      2. Fringe                      3. Florist                      4. Frighten  
5. Future  
1. Friend                      2. Fringe                      3. Frighten                      4. Future
33. In the following question, select the missing number from the given series. 9, 28, 86, 261, 787, ?  
1. 2366                      2. 1795                      3. 2175                      4. 2285
34. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.  
CG, KO, SW, AE, ?  
1. JN                      2. MJ                      3. IM                      4. JL
35. Manoj walks 12 metres towards north. Then turns right and walk another 12 metres. Then turn right and walks for 7 metres to reach college R. He again turns to his right and walks for 12 metres. What is the straight line distance (in metres) between the starting point and college R?  
1.  $12\sqrt{2}$                       2. 13                      3. 14                      4.  $14\sqrt{3}$
36. From the given alternatives, select the word which CANNOT be formed using the letters of the given word.  
Xenophobia  
1. Phone                      2. Hope                      3. Xerox                      4. Open
37. In a certain code language, "REGAL" is written as "TCIYN". How is "FARMS" written in that code language?  
1. RTHKU                      2. HYTKU                      3. GTHSR                      4. NVKTH
38. In a certain code language, '+' represents '+', '-' represents 'x', 'x' represents '÷' and '÷' represents '-'. Find out the answer to the following question.  $24 \div 14 - 5 + 10 \times 14 = ?$   
1. 39                      2. 45                      3. 27                      4. 17
39. The following equation is incorrect. Which two signs should be interchanged to correct the equation?  $12 \times 4 - 6 \div 7 + 18 = 19$   
1. + and x                      2. + and ÷                      3. ÷ and –                      4. - and +
40. If  $2\Delta 5 = 5$ ,  $2\Delta 3 = 3$  and  $8\Delta 4 = 16$ , then find the value of  $16\Delta 8 = ?$   
1. 18                      2. 14                      3. 16                      4. 64
41. Which of the following terms follows the trend of the given list? XXXXXXY, XXXXXYX, XXXXYXX, XXXYXXX, XXYXXXX, \_\_\_\_\_  
1. XYXXXXX                      2. YXXXXXX  
3. XXXXXXXY                      4. XXXXXYX
42. Two vans X and Y start from the same point. X travels 5 km West, then turns to its left and travels 3 km. Y travels 13 km South, then turns West and travels 5 km, then turns to its left and travels 7 km. Where is Y with respect to X now?  
1. 11 km South                      2. 17 km South  
3. 17 km North                      4. 11 km North

### General Intelligence

26. In the following question, select the related word pair from the given alternatives. Fatigue : Energy :: ? : ?

43. In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

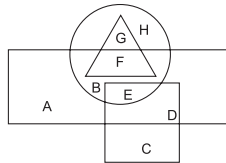
**Statements:**

- I. No fruits are berries
- II. Some cherries are fruits

**Conclusions:**

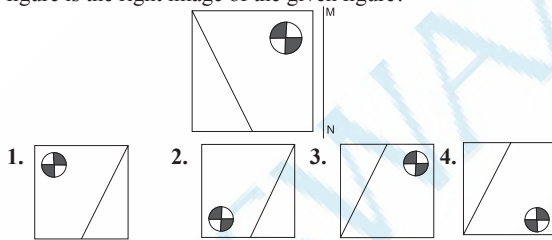
- I. All berries are cherries
  - II. Some cherries are berries
1. Only conclusion I follows
  2. Only conclusion II follows
  3. Both conclusions I and II follow
  4. Neither conclusion I nor conclusion II follows

44. In the following figure, rectangle represents Dieticians, circle represents Racers, Triangle (triangle) case small represents Singers and square represents Cricketers. Which set of letters represents Dieticians who are either Racers or Singers?

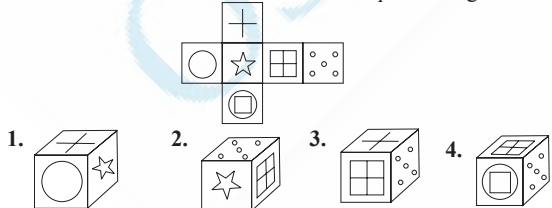


1. BED
  2. GH
  3. FBE
  4. ABC
45. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series. ARC, XOZ, ULW, ?, OFQ
1. RIT
  2. KFT
  3. RAK
  4. SJQ
46. In the following question, select the missing number from the given series.  
152, 164, 176, 188, ?, 212
1. 196
  2. 202
  3. 200
  4. 210
47. In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

1. (63, 74, 85)
  2. (97, 108, 119)
  3. (92, 103, 116)
  4. (74, 85, 96)
48. If a mirror is placed on the line MN, then which of the answer figure is the right image of the given figure?



49. Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?



50. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of alternatives in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The column and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II

are numbered from 5 to 9. A letter from these matrices can be represented first by its rows and next by its column, for example 'G' can be represented by 31, 43 etc and 'Z' can be represented by 97, 69 etc. Similarly, you have to identify the set for word 'LATE'

Matrix-I					
	0	1	2	3	4
0	C	L	H	M	J
1	E	M	I	G	K
2	E	H	I	A	M
3	F	G	B	F	F
4	F	B	J	G	L

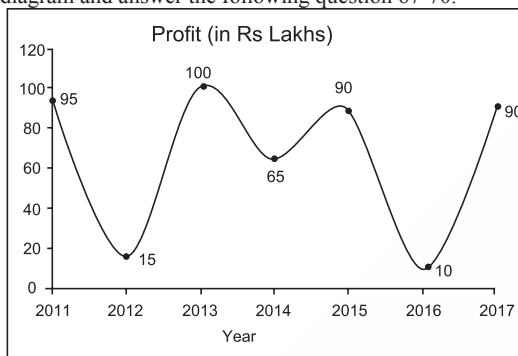
Matrix-II					
	5	6	7	8	9
5	X	O	Q	X	P
6	X	Q	O	P	Z
7	W	O	S	S	X
8	R	X	U	U	S
9	Y	T	Z	U	N

1. 44,23,96,20
2. 13,96,14,57
3. 22,96,43,95
4. 41,77,30,59

**Quantitative Aptitude**

51. What least number can be multiplied by 165375 to make it a perfect cube?
1. 2
  2. 5
  3. 7
  4. 49
52. Find the sum of  $0.99995 + 0.88885 + 0.77775 + 0.66665 + 0.55555$ .
1. 3.88875
  2. 2.88875
  3. 3.6875
  4. 2.9875
53. If any  $x + \frac{4}{x} = 4$  then the value of  $x^6 + 1$ .
1. 51
  2. 65
  3. 78
  4. 82
54. If  $y : x : z = 4 : 5 : 6$ , then find the value of  $\frac{x - y + z}{x + y - z}$
1. 3/3
  2. 3/7
  3. 5/7
  4. 7/3
55. If the length of the three sides of a triangle is 5 cm, 12 cm and 13 cm respectively, then calculate the length (in cm) of the median of side AC of the given triangle.
1. 5
  2. 6
  3. 6.5
  4. 7
56. What will be the value of the angle (in degrees) subtended by the chord in the minor segment of the circle, if the length of a chord is equal to the radius of the circle?
1. 120°
  2. 150°
  3. 160°
  4. 180°
57. What is the value of 30% of 125 + 45% of 300?
1. 165
  2. 172.5
  3. 155
  4. 163.5
58. If  $A : B = 5 : 3$ , then what is the value of  $(A + B) : (A - B)$ ?
1. 4 : 1
  2. 2 : 1
  3. 4 : 3
  4. 8 : 3
59. How many kg of rice at Rs 54 per kg must be mixed with 30 kg of rice at Rs 40 per kg, so that on selling the mixture at Rs 48.4 per kg, there will be a profit of 10%?
1. 22
  2. 18
  3. 15
  4. 12
60. The average weight of X, Y and Z is 35 kg. If the average weight of X and Y is 33 kg and that of Y and Z is 29 kg, then what is the weight (in kg) of Y?
1. 19
  2. 23.5
  3. 27
  4. 37
61. Some part of Rs 9500 was lent at the rate of 15% per annum simple interest and the remaining part at the rate of 20% per annum simple interest. The total interest received after 3/2 years is Rs 2565. What is the ratio of money lent at the rate of 15% and 20%?
1. 11 : 8
  2. 12 : 7
  3. 2 : 3
  4. 5 : 4
62. If 80% of total articles are sold at a loss of 15% and remaining articles are sold at a profit of 15%, then what will be the overall loss percentage?
1. 15
  2. 6
  3. 9
  4. 12

63. If three successive discounts of 10%, 15% and 30% are given, then what will be the net discount (in percentage)?  
 1. 53.15      2. 55      3. 46.45      4. 43.45
64. Which of the following statement(s) is/are TRUE?  
 I.  $\sqrt{324} + \sqrt{3.24} + \sqrt{0.0324} = 19.98$   
 II.  $\sqrt{129} + \sqrt{121} + \sqrt{361} + \sqrt{100} = 13$   
 1. Only I      2. Only II  
 3. Neither I nor II      4. Both I and II
65. A is 40% more efficient than B. If B alone can complete a work in 42 days, then A alone can complete the same work in how many days?  
 1. 36      2. 40      3. 30      4. 32
66. A train of length 180 metres crosses a tree in 15 seconds and crosses another train of the same length travelling in opposite direction in 20 seconds. What is the speed (in km/hr) of the second train?  
 1. 21.6      2. 6      3. 33.4      4. 36.6
- The line graph shows the profits of a certain company. Study the diagram and answer the following question 67-70.



67. In which year were the profits greater than that of the previous year?  
 1. 2013      2. 2012      3. 2014      4. 2016
68. What was the difference in the profits (in Rs lakhs) between the years 2014 and 2013?  
 1. 30      2. 25      3. 40      4. 35
69. The profits in 2012 were greater than that in 2016 by \_\_\_\_\_.  
 1. 16.70%      2. 5%  
 3. 50%      4. 33.30%
70. What were the total profits (in Rs lakhs) of the company in the last four years?  
 1. 250      2. 245      3. 255      4. 240
71. The length and breadth of a rectangle are 21 cm and 20 cm respectively. What must be the length of its diagonal (in cm) ?  
 1. 58      2. 18      3. 36      4. 29
72. If the measure of the interior angle of a regular polygon is  $108^\circ$  greater than the measure of its exterior angle then how many sides does it have?  
 1. 10      2. 12      3. 15      4. 18
73. Find the volume (in  $\text{cm}^3$ ) of a sphere of diameter 21 cm.  
 1. 4851      2. 3628      3. 3071      4. 3724
74. What is the value of  $(\frac{1}{3} - \sec 45^\circ)$  ?  
 1.  $(4 - \sqrt{3})/2$       2.  $(\sqrt{6} - 1)/\sqrt{3}$   
 3.  $(1 - 3\sqrt{2})/3$       4.  $(\sqrt{2} - 1)/\sqrt{2}$
75.  $\Delta ABC$  is right angled at B. If  $\sec A = 5/3$ , then what is the value of  $\text{cosec} C$  ?  
 1.  $5/3$       2.  $3/4$       3.  $4/5$       4.  $4/3$

#### General Awareness

76. Human Poverty Index was introduced in the HDR of the year \_\_\_\_\_.  
 1. 1997      2. 1990      3. 1995      4. 2001

77. Which Five Year Plan was suspended one year before the time schedule?  
 1. Third Plan      2. First Plan      3. Sixth Plan      4. Fifth Plan
78. What is called the cup or bowl shaped opening of a volcano?  
 1. Cinder vent      2. Origin center  
 3. Epicenter      4. Crater
79. Pipli Ghat Pass is located in which mountain area?  
 1. Western Ghats      2. Eastern Ghats  
 3. Vindhya Ghat      4. Aravali
80. Which of the following marriages was NOT considered legal in the ancient India?  
 1. Daiv Vivah      2. Arsha Vivah  
 3. Gandharva Vivah      4. Brahma Vivah
81. Which of the following art did rise highest in the Sultanate period?  
 1. Painting      2. Architecture  
 3. Dance      4. Music
82. Where is the Bhatkhande Music College located?  
 1. Lucknow      2. Ahmedabad  
 3. Chandigarh      4. Allahabad
83. Which Country's passport was ranked as the world's most powerful passport in a new ranking of world passports released on 26 October, 2017 by Passport Index?  
 1. USA      2. Singapore  
 3. Canada      4. Switzerland
84. Name the writer who has been chosen for the 31st Moortidevi Award for the year 2017 for his poetry collection 'Du Dondo Phowara Matro'.  
 1. Saumeet Chakarvorthy      2. Saumeek Bhattacharya  
 3. Joy Goswami      4. Tapan Majumdar
85. Bhutan's national language is known as \_\_\_\_\_.  
 1. Dzongkha      2. Khengkha  
 3. Tshanglakha      4. Lhotshamkha
86. What is the mass number of Deuterium?  
 1. 1      2. 2      3. 3      4. 4
87. Ethanol reacts with sodium leading to the evolution of which gas?  
 1. Nitrogen      2. Hydrogen      3. Oxygen      4. Methane
88. There are \_\_\_\_\_ levels of courts present in India.  
 1. Two      2. Three      3. Four      4. Five
89. 73rd Constitutional Amendment Act gave Constitutional recognition to panchayats by adding \_\_\_\_\_.  
 1. VIII      2. IX      3. X      4. XI
90. The gustatory receptors in human beings detect \_\_\_\_\_.  
 1. taste      2. smell      3. touch      4. hear
91. When the medium surrounding the cell is a hypotonic solution, the cell is likely to \_\_\_\_\_.  
 1. Swell up      2. Stay the same size  
 3. Shrink      4. No option is correct.
92. In November 2017, 2nd phase of 'Bharat Net Project' was launched. What is the deadline to complete it?  
 1. March 2018      2. March 2019  
 3. December 2018      4. March 2020
93. The Centre for Cellular and Molecular Biology (CCMB) in association with Indian Institute of Rice Research (IIRR) developed improved variety of which of the following rice with low Glycemic Index?  
 1. Doongara      2. Samba Masuri  
 3. Kyeema      4. Langi
94. In October 2017, India's 3rd biggest Initial Public Offering (IPO) worth \_\_\_\_\_ was launched by GIC Re.  
 1. Rs 10,500 crore      2. Rs 11,370 crore  
 3. Rs 13,900 crore      4. Rs 17,000 crore
95. On 5 January 2018, Lok Sabha passed High Court and Supreme Court Judges (Salaries and Conditions of Service) Amendment Bill, 2017. The Bill seeks to revise the allowances with effect from \_\_\_\_\_.  
 1. September 22, 2017      2. June 22, 2017  
 3. April 22, 2017      4. January 22, 2017

96. Find the kinetic energy (in J) possessed by a body of mass 20 kg moving with a velocity of 4 m/s.  
1. 40      2. 120      3. 160      4. 80
97. 1 joule is equal to 1 \_\_\_\_\_.  
1. Nm      2. N/m      3. Nm<sup>2</sup>      4. N/m<sup>2</sup>
98. \_\_\_\_\_ which are used in refrigerators, air conditioners and aerosol sprays.  
1. Chlorofluorocarbons      2. Acetophenones  
3. Cyclohexanes      4. Phenols
99. Which of the statements given below are correct?  
A. In 2017, Suresh Raina captained the IPL team Sunrisers Hyderabad.  
B. In 2017, Zaheer Khan captained the IPL team Delhi Daredevils.  
C. France hosted the 2017 World Team Chess Championship.  
1. Only B      2. Only C  
3. Both B and C      4. A, B and C
100. In Microsoft Word, \_\_\_\_\_ provides a neat way to present complex information in vertical columns and horizontal rows of cells.  
1. Tab      2. Tables      3. Rows      4. Columns

### Answer Key

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

### Answers with Explanations

**1. Option (1) is correct.**

We will not use an adverb before an infinitive. Needless is an adverb. We normally use an adjective in front of an infinitive. The adverb is needless. Needless will make the sentence grammatically correct.

**2. Option (2) is correct.**

The whole construction is in the simple present tense. Here in option 2 'came' the past form of the verb is used. It is wrong. It must be 'the money comes directly' instead of 'came directly'. As per the rule of consistency of tense, when we start a sentence in one particular tense, the whole sentence must be in present and its supporting form.

**3. Option (4) is correct.**

We normally read the terms and conditions carefully and not committedly or merely. Committedly means devotedly or faithfully and merely means simply. Scrutiny is not the correct form at all and hence carefully is the right answer.

**4. Option (1) is correct.**

Bees live in hives. The place where the bees live is called hive. Live, survive and time will not make any sense here. So hive is the right answer.

**5. Option (1) is correct.**

The meaning of expand is 'enlarge', and strengthen is 'reinforce'. The meaning of intensifying is 'boosting or increasing'. The meaning of 'attenuate' is decreasing, lessening, or weakening. Hence, the right answer is 'weaken'.

**6. Option (3) is correct.**

An illiterate is a person who is not educated and knowledgeable. An arrogant is a person who is egoistical and haughty, and who won't respect or treat others properly. A local is the resident of a place. An omniscient knows everything. So the answer is all-knowing.

**7. Option (4) is correct.**

The meaning of tabby is brindled. The meaning of spotted is dotted or speckled. The meaning of stippled is speckled or dotted. Hence unflecked is the opposite or antonym of brindled.

**8. Option (3) is correct.**

The meaning of the word turbulence is commotion, turmoil, disorder, etc. The words agitation and fight are synonyms or meanings of the word turbulence. The opposite or antonym of turbulence is peace.

**9. Option (1) is correct.**

R must be the first part as the word 'crucial' fits correctly after the verb 'are.' P follows R as 'such' fits correctly after the word 'purposes.' Q completes the sentence.

**10. Option (3) is correct.**

'She found him lying on the road' is the sentence given for transformation. The sentence is in the past tense. In the given sentence, 'him' is the object, and 'found' is the verb. The object 'him' is converted as 'he' and since the verb is in past tense and the subject 'he' is singular, we use the be verb 'was'. We use the past participle form of the verb 'found' and add 'lying on the road'.

**11. Option (1) is correct.**

The given exercise is 'He said to her, "Is your name Anjali?'. Here the reporting verb is in the past tense and hence the verb to reported must be in the past tense. As the part to be reported is a question, the reporting verb must be changed as 'asked'. Since the part to be reported is a close-ended (yes/no) question we must use the connector if/whether. As the reporting verb is in the past, we change the verb to reported to 'was'. So the answer is 'He asked her whether her name was Anjali.'

**12. Option (1) is correct.**

The synonym or the meaning of the word 'presume' is: believe, assume, guess, etc. The other options are wrongly spelt and they do not convey any meaning. Hence, the answer is presume.

**13. Option (3) is correct.**

Let us have a look at the complete sentence. A stream is \_\_\_\_\_ unbroken whole from its source to its mouth... Here the author is defining and introducing a stream. When we define or introduce something, we must use the article. Here the word that follows the blank is 'unbroken' which starts with the vowel sound. So, we must use the indefinite article 'an' to introduce the stream. Hence, it must be 'an unbroken'. It cannot be a, only and that.

**14. Option (1) is correct.**

Let us have a look at the complete sentence. -an observer stationed at one point cannot see all \_\_\_\_\_ it at once. Here we are using the preposition 'of' to fill in the blank because the preposition 'of' is used to denote something coming from a particular background or living in a place and belonging to something. Here the usage of 'from' 'for' and 'off' are meaningless and the answer is of.

**15. Option (1) is correct.**

Let us have a look at the complete sentence. -He sees but the one little section which \_\_\_\_\_ to be passing his station point at the time. Here, the other options are 'happened' 'happen' and 'happening'. Here the given sentence is in the simple present form and the subject denoted is third person singular in nature. When the tense is in the present form and the subject is third person singular, we must add-s, -es, or -ies with the verb. Hence, the answer is 'happens'.

**16. Option (1) is correct.**

Let us take a look at the complete sentence. - but the component particles which constitute the stream are \_\_\_\_\_ changing.' The underlined part in the example given is 'verb'. The blank has to be filled with an adverb to modify the verb 'are changing'. In the given options, the word 'constantly' is an adverb. The other options do not make any sense.

**17. Option (4) is correct.**

Let us take a look at the complete sentence. -Its stream is continuous from birth till death, \_\_\_\_\_ we cannot see any considerable portion...'

Here the right option is 'but' as it is used to connect two contrasting ideas. The first part of the sentence is contrasting with the second part of the sentence. All the other options do not make any sense.

**18. Option (1) is correct.**

The given idiom is used to ask someone what they are thinking about and hence the answer is 'a way of asking what someone is thinking'.

**19. Option (2) is correct.**

The meaning of the given idiom is '(of something unusual or difficult) accepted as part of someone's normal routine or as a matter of course.' Hence, the given option is the right one and all the other options are incorrect.

**20. Option (1) is correct.**

A bridle is a leather strap that you put on a horse's head so that you can control it when you are riding it. Ascendancy is dominance or domination and dominion is a territory. So, the right answer to the given meaning is 'anarchy'.

**21. Option (2) is correct.**

The meaning of viscous is something that is sticky or glutinous in nature. The meaning of dulcet is something that is melodious and melodic in nature. The meaning of luscious is something that is juicy, delicious, and sweet. Potion is a liquid with healing, magical, or poisonous properties. So potion is the right answer.

**22. Option (4) is correct.**

May, might, should, would, must, etc are called modal verbs. After modal verbs, we must always use have + past participle and not has. So the right answer is 'must have started.'

**23. Option (3) is correct.**

The first part of the sentence is in passive construction. The stove is a singular subject. Hence the answer is 'was lit'. The other options won't be fitting in the space.

**24. Option (1) is correct.**

C must be the first sentence as it has got a proper subject and verb and object and we come across the word 'first' in the sentence, and A must be the second one which is the direct continuation of option C and B must be the last part of the sentence.

**25. Option (1) is correct.**

The meaning of the word is enthusiastically, energetically, or vibrantly. All the other options are wrongly spelled and hence 'exuberantly' is the right answer.

**26. Option (4) is correct.**

As we know that the words are antonyms of each other. So, drought is antonym of flood.

**27. Option (2) is correct.**

Given that:  $15 : 26$   
 $26 - 15 = 11$   
 Similarly,  $34 : 45$   
 $45 - 34 = 11$

**28. Option (2) is correct.**

The pattern is as follows:

H I K  
 $+3 \downarrow +3 \downarrow +3 \downarrow$   
 K L N

Similarly,

P Q S  
 $+3 \downarrow +3 \downarrow +3 \downarrow$   
 S T V

**29. Option (1) is correct.**

Black is often used to symbolize sorrow or mourning.

Red is a common indicator of danger or warning.

Wheels are often used to represent movement and development, leading to progress.

However, "Star" and "Rank" don't have an obvious direct connection or association.

**30. Option (4) is correct.**

Except for option (4), all others have the same pattern.

From option (1):  $11 - 12$   
 $12 - 11 = 1$   
 From option (2):  $23 - 24$   
 $24 - 23 = 1$   
 From option (3):  $17 - 18$   
 $18 - 17 = 1$   
 From option (4):  $19 - 21$   
 $21 - 19 = 2$  which is not equal to 1

**31. Option (3) is correct.**

Except for CIP, all others have the same pattern.

G M S  
 $\uparrow \uparrow \uparrow$   
 $+6 +6$   
 L R X C I P E K Q  
 $\uparrow \uparrow \uparrow \uparrow \uparrow \uparrow$   
 $+6 +6 +6 +7 +6 +6$

Therefore, CIP is different from others.

**32. Option (2) is correct.**

The given words in the sequence in which they occur in the dictionary is as follows:

1	2	3	4	5
Florist	Friend	Frighten	Fringe	Future

Therefore, fringe will come at fourth position.

**33. Option (1) is correct.**

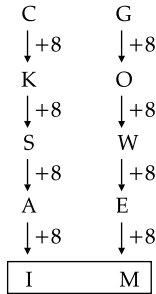
The pattern of the series is as follows:

9, 28, 86, 261, 787, 2366  
 $\uparrow \uparrow \uparrow \uparrow \uparrow$   
 $9 \times 3 + 1 \quad 28 \times 3 + 2 \quad 86 \times 3 + 3 \quad 261 \times 3 + 4 \quad 787 \times 3 + 5$

Therefore, the next term will be 2366.

**34. Option (3) is correct.**

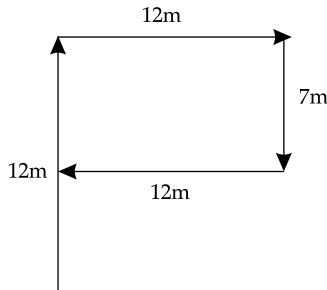
The pattern of the series is as follows:



Therefore, the next term will be IM.

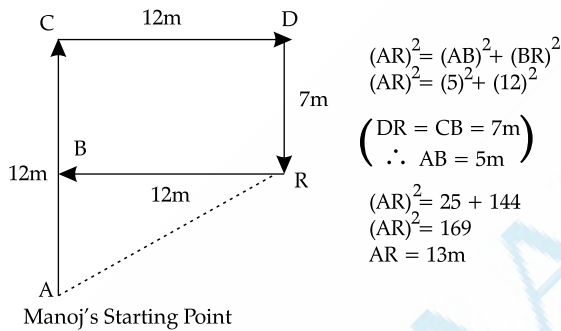
35. **Option (2) is correct.**

The direction diagram of Manoj is as follows:



Manoj's Starting Point

After labeling the diagram is as follows:



Manoj's Starting Point

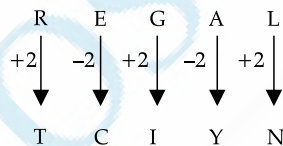
Therefore, the straight line distance between the starting point and college R is 13m.

36. **Option (3) is correct.**

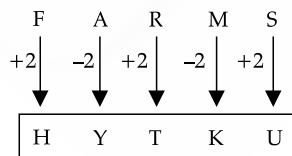
Except word Xerox, all other words can be formed. Xenophobia does not contain letter R.

37. **Option (2) is correct.**

REGAL is written as TCIYN



Similarly, the pattern for FARMS is written in the same way,



38. **Option (4) is correct.**

Given expression:  $24 \div 14 - 5 + 10 \times 14 = ?$

After putting signs, we get

$$24 + 14 \times 5 \div 10 - 14 = ?$$

$$24 + 7 - 14 = ?$$

$$31 - 7 = ?$$

$$17 = ?$$

39. **Option (3) is correct.**

Given expression:  $12 \times 14 - 6 \div 7 + 18 = 19$

Upon checking option (3) and after interchanging sign, we get

$$12 \times 4 \div 6 - 7 + 18 = 19$$

$$4 \times 2 - 7 + 18 = 19$$

$$8 - 7 + 18 = 19$$

$$26 - 7 = 19$$

$$19 = 19$$

40. **Option (4) is correct.**

$$2 \Delta 5 \Rightarrow \frac{2 \times 5}{2} = 5$$

$$2 \Delta 3 \Rightarrow \frac{2 \times 3}{2} = 3 \text{ and } 8 \Delta 4 \Rightarrow \frac{8 \times 4}{2} = 16$$

$$\text{Similarly, } 16 \Delta 8 \Rightarrow \frac{16 \times 8}{2} = 64$$

41. **Option (1) is correct.**

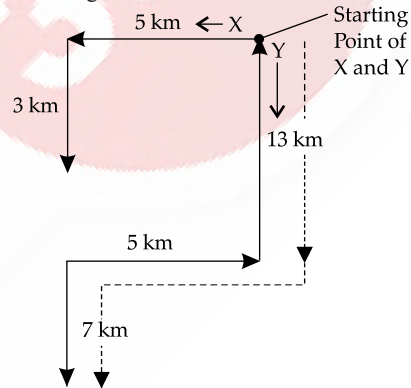
The pattern of the series is a that in each term there are combinations of X and Y and in each term, the position of Y is shifted one place to the left.

XXXXXXXXY, XXXXXYX, XXXXYXX, XXXYXXX, XXYYXXX, XYXXXXX

Therefore, the next term would be XYXXXXX.

42. **Option (2) is correct.**

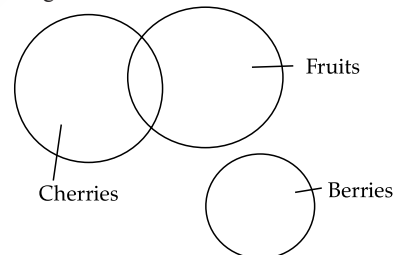
The direction diagram of X and Y is as shown below:



From the above diagram, Y is 17 km (20 km - 3 km) south with respect to X.

43. **Option (4) is correct.**

The venn diagram is as follows:



From conclusion I: All berries are cherries is false.

From conclusion II: Some cherries are berries may or may not be true. Therefore, neither conclusion I nor conclusion II follows.

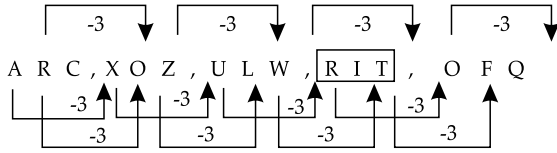
44. **Option (3) is correct.**

From the given diagram, Dieticians who are either racers or

singers are represented by FBE.

45. Option (1) is correct.

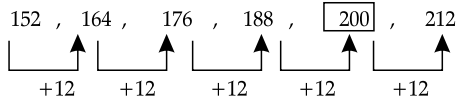
The pattern of the series is as follows:



Therefore, the term would be RIT.

46. Option (3) is correct.

The pattern of the series is as follows:



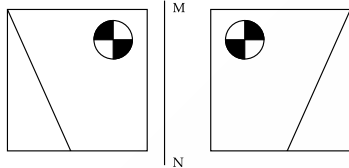
Therefore, the term would be 200.

47. Option (3) is correct.

- From option (1): (63, 74, 85)
- From option (2): (97, 108, 119)
- From option (3): (92, 103, 116)
- From option (4): (74, 85, 96)

48. Option (1) is correct.

The mirror image is as follows:



49. Option (2) is correct.

In open dice alternate pairs are opposite to each other. So, the opposite sides cannot be adjacent in the cube, thus the cube in the second option is not possible.

50. Option (1) is correct.

- From option (1): 44, 23, 96, 20 = LATE
- From option (2): 13, 96, 14, 57 = GTKQ
- From option (3): 22, 96, 43, 95 = ITGY
- From option (4): 41, 77, 30, 59 = BSFP

51. Option (3) is correct.

3	165375
3	55125
3	18375
5	6125
5	1225
5	245
7	49
7	7
	1

∴ 165375 = (3×3×3)×(5×5×5)×(7×7)  
So, if we multiply 165375 by 7, it will be a perfect cube.

52. Option (1) is correct.

$$0.99995 + 0.88885 + 0.77775 + 0.66665 + 0.55555 = 3.88875$$

53. Option (2) is correct.

Given that  $x + \frac{4}{x} = 4$

$$\Rightarrow x^2 - 4x + 4 = 0 \Rightarrow (x - 2)^2 = 0$$

$$\Rightarrow x = 2$$

Now,  $x^6 + 1 = (2)^6 + 1 = 64 + 1 = 65$

54. Option (4) is correct.

Let  $y = 4k, x = 5k$  and  $z = 6k$

$$\text{Now, } \frac{x - y + z}{x + y - z} = \frac{5k - 4k + 6k}{5k + 4k - 6k} = \frac{7k}{3k} = \frac{7}{3}$$

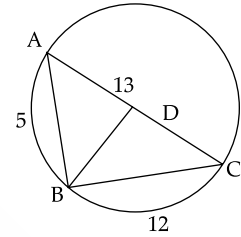
55. Option (3) is correct.

$$\therefore 13^2 = 5^2 + 12^2$$

$$169 = 25 + 144$$

$$169 = 169$$

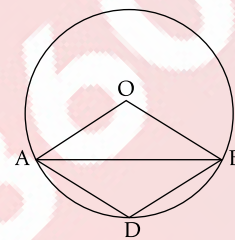
∴ Δ ABC is right triangle  
∴ AC is diameter of circum circle  
Let D is mid point of AC then it is also centre of circle



$$\therefore \text{Median } BD = \frac{1}{2} \times AC (\text{radius}) = \frac{1}{2} \times 13 = 6.5 \text{ cm}$$

56. Option (2) is correct.

- Given that AB = OA = OB (radius)
- ∴ Δ OAB is equivalent triangle
- ∴ ∠AOB = 60°
- Major ∠AOB = 360 - 60° = 300



Angle subtended by the chord in the minor segment,

$$\angle ADB = \frac{1}{2} \text{ Major } \angle AOB = \frac{1}{2} \times 300 = 150^\circ$$

57. Option (2) is correct.

30% of 125 + 45% of 300

$$= \frac{30}{100} \times 125 + \frac{45}{100} \times 300 = 37.5 + 135 = 172.5$$

58. Option (1) is correct.

Given that  $\frac{A}{B} = \frac{5}{3}$

By componendo and dividendo

$$\frac{A+B}{A-B} = \frac{5+3}{5-3} = \frac{8}{2} = \frac{4}{1} = 4 : 1$$

59. Option (4) is correct.

Let  $x$  kg of nice at ₹ 54 per kg.

∴ Total cost =  $54x + 30 \times 40 = 1200 + 54x$

Selling price of  $(x + 30)$  kg =  $(x+30) 48.4$

$$\text{S.P.} = \text{C.P.} \left( \frac{100 + \text{profit}\%}{100} \right)$$

$$(x+30) 48.4 = (1200 + 54x) \left( \frac{100 + 10}{100} \right)$$

$$(x+30) 484 = 11 (1200 + 54x)$$

$$484x + 30 \times 484 = 11 \times 1200 + 594x$$

$$\Rightarrow 594x - 484x = 14520 - 13200$$



$$\Rightarrow 110x = 1320$$

$$\Rightarrow x = \frac{1320}{110} = 12$$

Rice at ₹ 54 per kg = 12 kg

**60. Option (1) is correct.**

Since, average of  $x$ ,  $y$  and  $z$  is 35 kg. So, sum of  $x$ ,  $y$  and  $z$  =  $35 \times 3 = 105$  kg

$$\text{i.e., } x + y + z = 105 \quad \dots(i)$$

Average of  $x$  and  $y$  is 33 kg

$$\therefore x + y = 66 \quad \dots(ii)$$

Average of  $y$  and  $z$  is 29 kg

$$\therefore y + z = 58 \quad \dots(iii)$$

Adding equations (ii) and (iii), we get

$$x + y + z + y = 124$$

$$\Rightarrow 105 + y = 124 \quad [\text{from (i)}]$$

$$\Rightarrow y = 124 - 105 = 19$$

**61. Option (3) is correct.**

Let two parts of ₹ 9500 in  $x$  and  $9500 - x$

According to the question,

$$x \times \frac{3}{2} \times \frac{15}{100} + (9500 - x) \times \frac{3}{2} \times \frac{20}{100} = 2565$$

$$\Rightarrow \frac{3}{2} \times \frac{5}{100} [3x + 4(9500 - x)] = 2565$$

$$\Rightarrow 3x + 4 \times 9500 - 4x = \frac{2565 \times 100 \times 2}{3 \times 5}$$

$$\Rightarrow -x = 34200 - 38000 = -3800$$

$$\therefore x = 3800$$

$\therefore$  Two parts = 3800, 5700

$$\text{Ratio} = \frac{3800}{5700} = \frac{2}{3} = 2 : 3$$

**62. Option (3) is correct.**

Let total cost of articles be ₹  $x$

$$\text{S.P. of 80% of articles} = \frac{80}{100} x \left(1 - \frac{15}{100}\right) = \frac{8x}{10} \times \frac{17}{20} = \frac{136x}{200}$$

$$\text{S.P. of 20% of articles} = \frac{20}{100} x \left(1 + \frac{15}{100}\right) = \frac{x}{5} \times \frac{23}{20} = \frac{23x}{100}$$

$$\text{Total S.P.} = \frac{136x}{200} + \frac{23x}{100} = \frac{182x}{200}$$

$$\text{Total loss} = x - \frac{182x}{200} = \frac{200x - 182x}{200} = \frac{18x}{200}$$

$$\text{Loss percentage} = \frac{\frac{18x}{200} \times 100}{x} = 9\%$$

**63. Option (3) is correct.**

Let mark price be ₹ 100

$$\therefore \text{Total S.P.} = 100 \left(1 - \frac{10}{100}\right) \left(1 - \frac{15}{100}\right) \left(1 - \frac{30}{100}\right)$$

$$= 100 \times \frac{9}{10} \times \frac{17}{20} \times \frac{7}{10} = 53.55$$

Total discounts =  $100 - 53.55 = 46.45\%$

**64. Option (4) is correct.**

$$\text{I: } \sqrt{324} + \sqrt{3.24} + \sqrt{0.0324}$$

$$= 18 + 1.8 + 0.18 = 19.98$$

$$\text{II: } \sqrt{129 + \sqrt{121} + \sqrt{361} + \sqrt{100}}$$

$$= \sqrt{129 + 11 + 19 + 10} = \sqrt{169} = 13$$

**65. Option (3) is correct.**

$\therefore$  B alone can complete a work in 42 days

$$\therefore \text{Work done by B in 1 day} = \frac{1}{42} \text{ parts}$$

Since A is 40% more efficient than B.

$\therefore$  A alone can complete the work in

$$= \frac{1}{42} \left(1 + \frac{40}{100}\right) = \frac{1}{42} \times \frac{7}{5} = \frac{1}{30} \text{ parts}$$

$\therefore$  A alone can complete a work in 30 days.

**66. Option (1) is correct.**

Since first train of length 180m crosses a tree in 15 sec.

$$\therefore \text{Speed of first train} = \frac{180}{15} = 12 \text{ m/s}$$

Let the speed of second train be  $x$  m/s

Since, first train crosses the second train of same length in opposite direction in 20 sec

$$\therefore \text{Relative speed} = \frac{180 + 180}{20}$$

$$12 + x = \frac{360}{20} = 18$$

$$x = 18 - 12 = 6 \text{ m/s}$$

$$\therefore \text{Speed of second train} = \frac{6 \times 60 \times 60}{1000}$$

$$= \frac{216}{10} = 21.6 \text{ km/h}$$

**67. Option (1) is correct.**

Since, profits of years 2013, 2015 and 2017 greater than that of the previous year.

**68. Option (4) is correct.**

Profit in year 2014 = 65

Profit in year 2013 = 100

Difference =  $100 - 65 = 35$

**69. Option (3) is correct.**

Profit in year 2012 = 15

Profit in year 2016 = 10

Difference =  $15 - 10 = 5$

Percentage of greater profit in 2012 than 2016

$$= \frac{5 \times 100}{10} = 50\%$$

**70. Option (3) is correct.**

Total profits in last four years

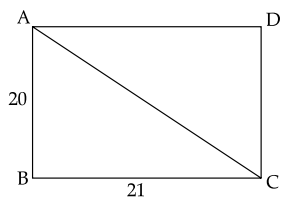
$$= 65 + 90 + 10 + 50 = 255$$

**71. Option (4) is correct.**

$$\text{Diagonal} = \sqrt{l^2 + b^2}$$

$$= \sqrt{(21)^2 + (20)^2}$$

$$= \sqrt{441 + 400} = \sqrt{841} = 29$$



72. Option (1) is correct.

Given that

$$\text{Interior angle} = 108^\circ + \text{exterior angle}$$

$$\left(\frac{n-2}{n}\right) 180^\circ = 108^\circ + \frac{360^\circ}{n}$$

$$\Rightarrow \frac{n-2}{n} \times 180^\circ = 36 \left(3 + \frac{10}{n}\right)$$

$$\Rightarrow \frac{n-2}{n} \times 5 = \frac{3n+10}{n}$$

$$\Rightarrow 5n - 10 = 3n + 10$$

$$\Rightarrow 2n = 20$$

$$\Rightarrow n = 10$$

73. Option (1) is correct.

$$\begin{aligned} \text{Volume of sphere} &= \frac{4}{3} \pi r^3 = \frac{4}{3} \times \frac{22}{7} \times \frac{21}{2} \times \frac{21}{2} \times \frac{21}{2} \\ &= 441 \times 11 = 4851 \end{aligned}$$

74. Option (3) is correct.

$$\text{Given equation: } \frac{1}{3} - \sec 45^\circ$$

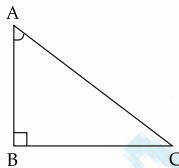
On simplifying we get,

$$= \frac{1}{3} - \sqrt{2} = \frac{1-3\sqrt{2}}{3}$$

75. Option (1) is correct.

$$\text{Given that: } \sec A = \frac{5}{3} = \frac{AC}{AB}$$

$$\operatorname{cosec} C = \frac{H}{P} = \frac{AC}{BA} = \frac{5}{3}$$



76. Option (1) is correct.

The Human Poverty Index (HPI) was a measure of a community's poverty in a country. The United Nations created it to supplement the Human Development Index (HDI), and it was first reported as part of the Human Deprivation Report in 1997. In comparison to the HDI, it was thought to better reflect the extent of deprivation in deprived countries. It was replaced in 2010 by the United Nations' Multidimensional Poverty Index.

77. Option (4) is correct.

Morar Ji Desai became India's first Janta Prime Minister on March 24, 1977. The Janta Government terminated the fifth plan in 1977-78, and they launched their own sixth plan, dubbed the "rolling plan," for the period 1978-83. The fifth five-year plan ran from 1974 to 1978. D.P. Dhar prepared and launched the draught of the fifth plan against the backdrop of an economic crisis caused by runaway inflation caused by an increase in oil prices and the failure of the government takeover of the wholesale trade in wheat. The targeted rate of growth was 4.4%, but the actual rate of growth was 4.8%.

78. Option (4) is correct.

The crater is the bowl-shaped opening at the volcano's summit. The crater also refers to the steep-sided lava walls that surround the main vent. Although lava can flow from the main vent, not all volcanoes eject a large amount of it. Molten rock and massive amounts of gas are ejected from the main vent of some volcanoes. Volcanoes do not always erupt,

and the crater may simply be a bubbling caldron of lava with insufficient pressure to erupt.

79. Option (4) is correct.

The Aravalli or 'Aravali' ranges are located in northern India. Some of the rocky hills of this 560-kilometre-long range that runs through the northeastern region of the state of Rajasthan have made their way to the south of Delhi.

Aravalli is the oldest mountain in India's geographical structure. It is the world's oldest mountain range, dividing Rajasthan into two parts from north to south. Pipli ghat is located in this stunning mountain range.

80. Option (3) is correct.

This is a distinct type of marriage that is distinct from other types of marriage. Both the girl and the boy have mutually agreed to marry. This mutual agreement is the result of pure lust. The approval of parents is irrelevant. Today's "Love Marriage" is similar to Gandharva Vivah. This is the destination where a groom and his bride will marry without their parent's knowledge. It is incorrectly classified as a type of marriage because the parents' consent is not present.

81. Option (2) is correct.

The mingling of Indian and Turkish styles resulted in the development of the Indo-Islamic style of art and architecture during the Sultanate period. Indian decoration and techniques were used in Islamic buildings, with their own domes and arches. The forts were simple but effective. They used arches above doorways and windows instead of beams, which were used by Indians prior to the arrival of Muslims. As a result, they used an arch opening but with a pointed arch style.

82. Option (1) is correct.

Bhatkhande Music Institute Deemed University was the first university in Uttar Pradesh to offer music education. Previously, it was known as the Bhatkhande Music Institute or the Bhatkhande Hindustani Music University. Lucknow is the location. Vishnu Narayan Bhatkhande established the Bhatkhande Music Institute in 1926.

83. Option (2) is correct.

Singapore was ranked first in the 2017 Global Passport Power Rank by advisory firm Arton Capital. It ranked all of the world's passports based on their 'total visa-free score,' which assigns a point for each country that their holders can visit without a visa, with a visa on arrival, or with electronic travel authorization.

84. Option (3) is correct.

The Moortidevi Award is a literary award given annually in India by the Bharatiya Jnanpith organisation for a work that focuses on Indian philosophy and culture. Joy Goswami, a renowned Bengali poet, has been awarded the 31st Moortidevi Award for his poetry collection "Du Dondo Phowara Matro" for 2017. The award was first given to Kannada writer C. K. Nagaraja Rao in 1983 for his novel "Pattamahadevi Shantala Devi".

85. Option (1) is correct.

Bhutan's official language is Dzongkha. Dzongkha, also known as Bhutanese, is a Sino-Tibetan language spoken by over 500,000 people in Bhutan and serves as the Kingdom of Bhutan's sole official and national language.

86. Option (2) is correct.

Deuterium (D), also known as heavy hydrogen, is a stable hydrogen isotope. There is one proton, one electron, and no neutrons in the simple hydrogen molecule. In contrast, deuterium is made up of one proton, one electron, and one neutron. Deuterium is "heavier" than normal hydrogen due to the extra particle. Harold C. Urey discovered deuterium in 1931. Urey was awarded the Nobel Prize in Chemistry in 1934 for this discovery. Hydrogen isotopes include protium, deuterium, and tritium.

87. Option (2) is correct.

Ethanol is a type of alcohol with a molecular formula. It basically reacts with sodium metals to form sodium alkoxide, and hydrogen gas is produced as a byproduct. Along with the evolution of hydrogen gas, ethanol reacts with sodium metal to form sodium ethoxide. When

ethanol reacts with sodium, hydrogen gas is produced.  
 $2\text{Na} + 2\text{CH}_3\text{CH}_2\text{OH} + \text{H}_2 \rightarrow 2\text{CH}_3\text{CH}_2\text{O-Na}$  (Sodium ethoxide)  
 (g) Alcohols react with sodium, causing hydrogen to form. The other product of ethanol is sodium ethoxide.

**88. Option (2) is correct.**

In India, there are three levels of court. The district court, high court, and Supreme Court are the three. To maintain the Constitution's supremacy, an independent and impartial authority must be established to resolve disputes between the Centre and the states, as well as between states themselves (among States). The Supreme Court of India has been entrusted with this function. The Indian Constitution established a single integrated and unified judicial system for the entire country. It means that there is a single unified judicial system for the entire country.

**89. Option (2) is correct.**

The 73rd Constitutional Amendment Act of 1992 added Part IX, "The Panchayats," to the Constitution, as well as the Eleventh Schedule, which contains the 29 functional items of the panchayats.

Articles 243 to 243 O of the Constitution are found in Part IX. The Amendment Act gives shape to Article 40 of the Constitution, which directs the state to organise village panchayats and provide them with powers and authority so that they can function as self-government.

**90. Option (1) is correct.**

Sensory receptors can be found in specialised organs like the eyes, ears, nose, and mouth, as well as internal organs. Each receptor type conveys a distinct sensory modality that will eventually be integrated into a single perceptual frame. Gustatory and olfactory receptors are sensory receptors associated with the senses of taste and smell. Gustatory receptors on the tongue are evenly distributed across the taste buds. Their primary purpose is to provide a sense of taste.

**91. Option (1) is correct.**

When a cell is immersed in a hypotonic solution, there is a net flow of water into the cell, and the cell expands. If the solute concentration outside the cell is lower than the solute concentration inside the cell, and the solutes are unable to cross the membrane, the solution is hypotonic to the cell. When a cell is immersed in an isotonic solution, there is no net flow of water into or out of the cell, and the volume of the cell remains constant. If the concentration of solutes outside the cell is the same as the concentration inside the cell and the solutes cannot cross the membrane, the solution is isotonic to the cell.

**92. Option (2) is correct.**

BharatNet is a national-level project that aims to build a highly scalable network capable of providing on-demand, affordable broadband connectivity ranging from 2 Mbps to 20 Mbps to all rural households and institutions by 2017. BSNL, Railtel, and Power Grid are carrying out the project. It is supported by the Universal Service Obligation Fund (USOF). The project will be divided into three phases. The first phase entails providing broadband connectivity to one lakh gramme panchayats via optic fibre cable. The second phase, which is scheduled to be completed in March 2019, will extend the cable to 2,50,500 gramme panchayats across the country by utilising an optimal mix of underground fiber, fiber over power lines, radio, and satellite media.

**93. Option (2) is correct.**

Improved Samba Mahsuri (ISM) is a bacterial blight-resistant rice variety developed and released in collaboration with the ICAR-Indian Institute of Rice Research (ICAR-IIRR) in Hyderabad and the CSIR-Centre for Cellular and Molecular Biology (CCMB) in Hyderabad using the novel tool of molecular marker-assisted selection.

**94. Option (2) is correct.**

GIC Re launched India's third largest 'Initial Public Offering (IPO)' in October 2017, raising ₹ 11,370 crores. The General Insurance Corporation of India (GIC Re) is the largest reinsurance company in India. Reinsurance is insurance that an insurance company purchases from other insurance companies in order to manage its risk. GIC Re has launched an IPO worth ₹ 11,370 crores, the third largest after Coal India and Reliance Power. An IPO is a flotation in which an issuer or company offers ordinary stock or shares to the public. It is a company's first public offering of stock.

**95. Option (1) is correct.**

The Minister for Law and Justice introduced the High Court and Supreme Court Judges (Salaries and Conditions of Service) Amendment Bill, 2017 in Lok Sabha. The purpose of the Bill is to amend the High Court Judges (Salaries and Conditions of Service) Act of 1954 and (ii) the Supreme Court Judges (Salaries and Conditions of Service) Act of 1958. These Acts govern the salaries and working conditions of the judges of the High Courts and the Supreme Court. A sumptuary allowance is paid to judges of the High Court and the Supreme Court under the two Acts to compensate for expenses incurred as a result of entertaining visitors. The Bill proposes to revise this allowance beginning September 22, 2017.

**96. Option (3) is correct.**

The kinetic energy of a moving body with mass ( $m$ ) and velocity ( $v$ ) can be calculated as  $\text{KE} = \frac{1}{2} mv^2$

From the question, it is given that  
 the mass of the body,  $M = 20 \text{ kg}$   
 the velocity of the moving body,  $V = 4 \text{ m/s}$   
 hence the kinetic energy of that body is

$$= \text{KE} = \frac{1}{2} \times 20 \times (4)^2 \Rightarrow \text{KE} = 160 \text{ J}$$

**97. Option (1) is correct.**

One joule is equal to the work done (or energy expended) by the force of one newton (N) acting over a one-meter distance (m). A newton is defined as a force that produces an acceleration of one metre per second (s) per second on a mass of one kilogramme (kg). As a result, one joule is equal to one newton meter.

**98. Option (1) is correct.**

Refrigerators, air conditioners, and aerosol spray cans all contain chlorofluorocarbons. When CFCs are released into the atmosphere, they deplete the ozone layer. As a result, the earth is exposed to more harmful ultraviolet rays. Contact with ultraviolet rays causes skin cancer, eye damage, and the death of aquatic plants and animals. Chlorofluorocarbons are therefore used in refrigerators, air conditioners, and aerosol spray cans.

**99. Option (1) is correct.**

From the 17th to the 26th of June 2017, Khanty-Mansiysk (Russia) hosted the 11th World Team Chess Championship. China took the men's title, while Russia took the women's. Suresh Raina captained the IPL team Gujarat Lions in 2017. The Chess World Cup 2017 was a 128-player single-elimination chess tournament held from September 2 to September 27, 2017, in Tbilisi, Georgia. Levon Aronian, an Armenian grandmaster, won.

**100. Option (2) is correct.**

Tables in Microsoft Word are a convenient way to present complex information in vertical columns and horizontal rows of cells. A table is a column and row arrangement that organises and positions data or images. Tables can be created on Wikipedia pages using special wikitext syntax, and they can be customised in a variety of ways. Tables can be used for formatting, but a multi-column list is a better option.

