

**STAFF SELECTION COMMISSION**  
**COMBINED GRADUATE LEVEL (TIER-I)**

**SOLVED PAPER**

**(9<sup>th</sup> September 2016: Shift-1)**

**Time Allotted:** 1 hour

**Max marks:** 200

**General Intelligence and Reasoning**

- Select the related word/letters/numbers from the given alternative.  
Magazine : Editor :: Drama : ?  
1. Director    2. Hero    3. Heroine    4. Painter
- Select the related word/letters/numbers from the given alternative.  
ACEG : IKMO :: QSUV : ?  
1. YZCE    2. YACD    3. YACE    4. YBCE
- Select the related word/letters/numbers from the given alternatives:  
12 : 39 :: 15 : ?  
1. 48    2. 52    3. 39    4. 51
- Find the odd word/letters/number pair from the given alternatives.  
1. Torch    2. Battery    3. Candle    4. Lamp
- Find the odd word/letters/number pair from the given alternatives.  
1. CA    2. FD    3. KI    4. TQ
- Find the odd word/letters/number pair from the given alternatives.  
1. 73-61    2. 57-69    3. 47-59    4. 42-29
- Arrange the following words as per the order in the dictionary.  
1. scarf    2. scene    3. shell    4. survey    5. stream  
1. 1, 2, 4, 5, 3    2. 2, 4, 5, 1, 3    3. 3, 1, 2, 5, 4    4. 1, 2, 3, 5, 4
- A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.  
DCB, HGE, ?, PON  
1. LKJ    2. QRO    3. SUM    4. XZY
- A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.  
4, 9, 16, 25, 36, ?  
1. 49    2. 56    3. 21    4. 94
- A is D's brother. D is B's father. B and C are sisters. How is C related to A?  
1. Cousin    2. Niece    3. Aunt    4. Nephew
- At a college party, 5 girls are sitting in a row. P is positioned to the left of M and to the right of O. R is seated to the right of N, but to the left of O. Who is seated in the middle?  
1. O    2. R    3. P    4. M
- From the given alternative words, select the word which cannot be formed using the letters of the given word.  
CONSULTATION  
1. CONSTANT    2. NATION  
3. SALUTE    4. STATION
- If S = 19, SUN = 54 and CAKE = 20, then MISTAKE = ?  
1. 78    2. 68    3. 59    4. 48
- If '+' stands for multiplication, '-' stands for addition, 'x' stands for division, then what is the value of  $128 \div 9 - 16 \times 4 = ?$   
1. 73    2. 256    3. 1,156    4. 1,352
- In this question, some equations are solved on the basis of a certain system. On the same basis, find out the correct answer from the four alternatives for the unsolved equation.

$$6 \times 2 \times 9 = 269$$

$$8 \times 7 \times 1 = 781$$

$$4 \times 1 \times 3 = ?$$

1. 431    2. 413    3. 341    4. 143

16. Select the missing numbers from the given alternatives.

9	11	13
3	4	7
3	4	5
81	176	?

1. 143    2. 169    3. 455    4. 545

17. To attend an exam, Sudhir reached the school by travelling 5 km towards South, and after a sharp left turn, he travelled for about 10 km. He again made a sharp left turn and reached in front of the school by travelling 5 km more. Which direction is Sudhir's starting point from the school?

1. East    2. West    3. North    4. South

18. Consider the given statement/s to be true and decide which of the given conclusions/assumptions can definitely be drawn from the given statement. Conclusions/assumptions can definitely be drawn from the given statement.

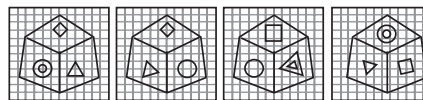
**Statements:**

- All books are novels.
- Some novels are poems.

**Conclusions:**

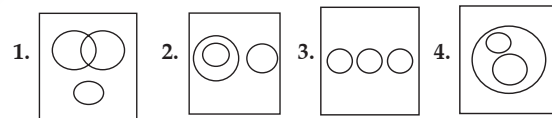
- Some books are poems.
  - Some poems are novels.
- Only conclusion I follows.
  - Only conclusion II follows.
  - Neither conclusion I nor conclusion II follows.
  - Both conclusion I and conclusion II follow.

19. Which symbol will appear on the face opposite to the face of a circle O in the cube given below?

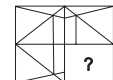


1.    2.    3.    4.

20. Which one of the following diagrams represents the relationship between Insects, Flies and Dogs?

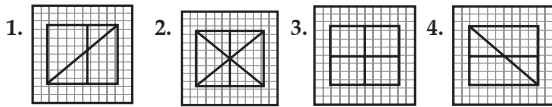


21. Which answer figure will complete the pattern in the question figure?

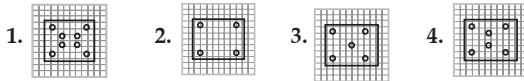
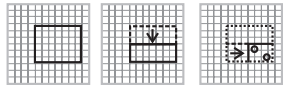


1.    2.    3.    4.

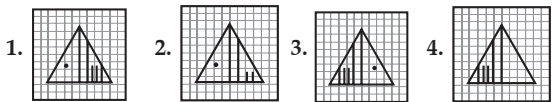
22. From the given answer figures, select the one in which the question figure is hidden.



23. A piece of paper is folded and cut as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.



24. Which of the answer figure is exactly the mirror image of the given figure, when the mirror is held on the line AB?



25. In the question, a word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns 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 row and next by its column, e.g., 'L' can be represented by 12, 24, etc., and 'R' can be represented by 55, 67, etc. Similarly, you have to identify the set for the word 'SENT'.

	0	1	2	3	4
0	L	E	O	S	C
1	S	C	L	E	O
2	E	O	S	C	L
3	C	L	E	O	S
4	O	S	C	L	E

	5	6	7	8	9
5	R	K	U	N	T
6	N	T	R	K	U
7	K	U	N	T	R
8	T	R	K	U	N
9	U	N	T	R	K

1. 10, 20, 58, 77  
2. 22, 32, 65, 78  
3. 34, 44, 67, 87  
4. 41, 13, 87, 68

**General Awareness**

26. Which of the following Greenhouse gases has the greatest heat-trapping ability?  
1. Chlorofluoro carbon 2. Methane  
3. Carbon dioxide 4. Nitrous oxide
27. Which state of India is leading in solar energy generation?  
1. Gujarat 2. Rajasthan  
3. Haryana 4. Uttar Pradesh
28. Diamond does not conduct electricity because:  
1. its structure is very compact  
2. it is of crystalline nature  
3. there are only carbon atoms present in it  
4. no free electrons are present in it
29. Ganga is a result of confluence of rivers Bhagirathi and Alakananda at which place ?  
1. Dev Prayag 2. Karan Prayag  
3. Gangotri 4. Rudra Prayag
30. What are aldehydes?  
1. Mild oxidising agents 2. Strong oxidising agents  
3. Strong reducing agents 4. Mild reducing agents

31. Which circuit is used to store one bit of data ?

1. Register 2. Flip Flop 3. Vector 4. Encoder

32. Why is weightlessness experienced while orbiting the earth in space ships?

1. Inertia 2. Acceleration  
3. Zero gravity 4. Orbital motion

33. Which is the largest gland in the human body?

1. Liver 2. Thyroid  
3. Pituitary 4. Salivary gland

34. Who was the President of Indian National Congress at the time of Indian independence?

1. Maulana Abdul Kalam Azad  
2. J. B. Kriplani  
3. Jawaharlal Nehru 4. Rajendra Prasad

35. What is the minimum age for membership to the Rajya Sabha?

1. 20 years 2. 25 years 3. 30 years 4. 35 years

36. What is an octroi?

1. Tax 2. Tax collection centre  
3. Tax processing centre 4. Tax information centre

37. Sextant is an instrument used in which of the following?

1. Gynaecology 2. Navigation  
3. Birth control 4. Medical treatment

38. Which of the following is not correctly matched?

1. The Mahakaal temple – Ujjain  
2. Sringeri Matha – Chikkamangalur district  
3. The Sun Temple – Konark 4. Jain temples – Khajuraho

39. What is Gol Gumbadh?

1. Mausoleum of Hyder Ali  
2. Mausoleum of Aurangazeb  
3. Mausoleum of Chand Bibi  
4. Mausoleum of Mohammed Adil Shah

40. Where is a transistor most likely to be found?

1. Wrist watch 2. Fuse  
3. Hearing aid 4. Fluorescent lamp

41. Which organ of the human body secretes insulin?

1. Pancreas 2. Kidney  
3. Gall bladder 4. Liver

42. If a healthy freshwater fish is placed in salt water, what will be the expected consequence?

1. The fish becomes dehydrated and dies.  
2. The fish becomes bloated and dies.  
3. The fish suffers from fungal or bacterial disease and dies.  
4. There is no observable effect on the fish provided there is sufficient food.

43. Which country is known as 'Land of the Midnight Sun'?

1. Sweden 2. Norway 3. Germany 4. Finland

44. Which river basin is shared by more than 10 States of India?

1. Indus 2. Brahmaputra  
3. Ganges 4. Damodar

45. Who among the following was the first grammarian of the Sanskrit language?

1. Kalhana 2. Maitreyi 3. Kalidasa 4. Panini

46. What is the total strength of the Rajya Sabha?

1. 250 2. 260 3. 270 4. 280

47. Which of the following is done at a Stock Exchange?

1. Commodities are bought and sold at wholesale price.  
2. Commodities are bought and sold at retail price.  
3. Securities are bought and sold.  
4. None of these

48. Which of the following is India's military offensive against Pakistan in the Kargil war ?

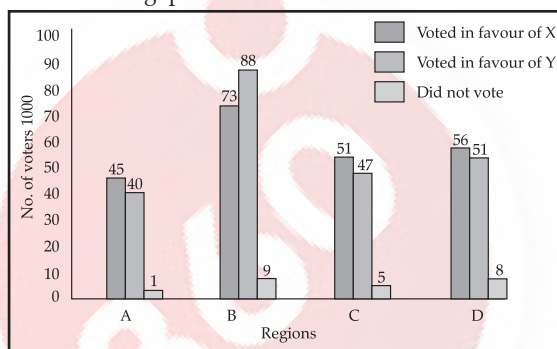
1. Operation Kargil 2. Operation LOC  
3. Operation Vijay 4. Operation Success

49. Who gave the title 'Nightingale of India' to Sarojini Naidu?  
 1. Jawaharlal Nehru      2. Rabindranath Tagore  
 3. Rajendra Prasad      4. Mahatma Gandhi
50. The headquarters of RBI is in:  
 1. Delhi      2. Kanpur      3. Mumbai      4. Nasik

### Quantitative Aptitude

51. A and B together finish a job in 24 days, while A, B and C together can finish the same job in 8 days. C alone will finish the job in:  
 1. 12 days      2. 14 days      3. 16 days      4. 24 days
52. Area of the circle inscribed in a square of diagonal  $6\sqrt{2}$  cm (in sq cm) is:  
 1.  $9\pi$       2.  $6\pi$       3.  $3\pi$       4.  $9\sqrt{2}\pi$
53. The original price of a TV set is ₹ 6,000. If the price is discounted by 20% and then raised by 10% for service contract, the price charged by the shopkeeper is:  
 1. ₹ 5,400      2. ₹ 5,280      3. ₹ 5,100      4. ₹ 4,200
54. A certain sum of money was divided between A, B and C in the ratio 5:6:9. If A received ₹ 450, the sum divided was:  
 1. 2,000      2. 1,800      3. 2,250      4. 1,000
55. By selling a bag at ₹ 230, profit of 15% is made. The selling price of the bag, when it is sold at 20% profit would be:  
 1. ₹ 250      2. ₹ 205      3. ₹ 240      4. ₹ 200
56. The weights of two iron balls are 3.5 kg and 7.5 kg. What is the percentage weight of the 1st ball with respect to the 2nd ball?  
 1.  $46\frac{2}{3}\%$       2. 35%      3.  $46\frac{1}{3}\%$       4. 45%
57. If a bus travels at the speed of 36 km/hr, then the distance covered by it in one second is:  
 1. 10 m      2. 15 m      3. 12.5 m      4. 13.5 m
58. The value of  $\frac{a}{a-b} + \frac{b}{b-a}$  is  
 1.  $(a+b)/(a-b)$       2. -1      3. 2ab      4. 1
59. The value of  $(1 - \sqrt{2}) + (\sqrt{2} - \sqrt{3}) + (\sqrt{3} - \sqrt{4}) + \dots + (\sqrt{15} - \sqrt{16})$  is:  
 1. 0      2. 1      3. -3      4. 4
60.  $\triangle ABC$  and  $\triangle DEF$  are two similar triangles and the perimeter of  $\triangle ABC$  and  $\triangle DEF$  are 30 cm and 18 cm, respectively. If length of DE = 36 cm, then length of AB is:  
 1. 60 cm      2. 40 cm      3. 45 cm      4. 50 cm
61. If the length of a chord of a circle is equal to that of the radius of the circle, then the angle subtended, in radians, at the centre of the circle by the chord is:  
 1. 1      2.  $\pi/2$       3.  $\pi/3$       4.  $\pi/4$
62. The value of  $(\sec^2 45^\circ - \cot^2 45^\circ) - (\sin^2 30^\circ + \sin^2 60^\circ)$  is:  
 1. 1      2.  $2\sqrt{3}$       3. 0      4.  $1/\sqrt{2}$
63. The average salary of male employees in a firm was ₹ 5,200 and that of females was ₹ 4,200. The mean salary of all the employees was ₹ 5,000. What is the % of female employees?  
 1. 80%      2. 20%      3. 40%      4. 30%
64. If  $4 = 5 + 24x = 5 + 2$ , then  $-116x - 16 \times 1$ ?  
 1. 1      2. -1      3. 4      4.  $2\sqrt{5}$
65. The cube of 105 is:  
 1. 11,57,625      2. 11,75,625      3. 11,85,625      4. 11,58,625
66. In  $\triangle ABC$ ,  $\angle B$  is a right angle, D is the mid point of the side AC. If AB = 6 cm, BC = 8 cm, then the length of BD is:  
 1. 4 cm      2. 5 cm      3. 8 cm      4. 12 cm
67. The diagonals of two squares are in the ratio 5:2. The ratio of their area is:  
 1. 5:6      2. 25:4      3. 5:4      4. 125:8

68. The angle of elevation of a ladder leaning against a wall is  $60^\circ$  and the foot of the ladder is 4.6 m away from the wall. The length of the ladder is:  
 1. 2.3 m      2. 4.6 m      3. 9.2 m      4. 7.8 m
69. The product of two 2-digit numbers is 2,160 and their HCF is 12. The numbers are:  
 1. (12, 60)      2. (72, 30)      3. (36, 60)      4. (60, 72)
70. The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 4% per annum is ₹ 1. The sum (in ₹) is:  
 1. 620      2. 630      3. 640      4. 625
71. In a mixture of 25 litres, the ratio of milk to water is 4:1. Another 3 litres of water is added to the mixture. The ratio of milk to water in the new mixture is:  
 1. 5:1      2. 5:2      3. 5:3      4. 5:4
72. A constituency is divided into four regions A, B, C and D. Two candidates X and Y contested the last election from that constituency. The adjoining graph gives the break up of voting in the four regions. Study the graph and answer the following question.



- Approximately how much per cent of voters voted in favour of X?  
 1. 45.4      2. 47.5      3. 50      4. 225
73. A constituency is divided in four regions A, B, C and D. Two candidates X and Y contested the last election from that constituency. The adjoining graph gives the break up of voting in the four regions. Study the graph and answer the following question.  
 Approximately how much per cent of voters did not cast their votes?  
 1. 4.9      2. 4.5      3. 0.23      4. 23
74. A constituency is divided in four regions A, B, C and D. Two candidates X and Y contested the last election from that constituency. The adjoining graph gives the break up of voting in the four regions. Study the graph and answer the following question.  
 In region B, Y gets A% more votes than X. Find the value of A?  
 1. 24%      2. 21%      3. 19%      4. 15%
75. A constituency is divided in four regions A, B, C and D. Two candidates X and Y contested the last election from that constituency. The adjoining graph gives the break up of voting in the four regions. Study the graph and answer the following question.  
 Nearly what percentage of his total votes did X receive from region B?  
 1. 30      2. 31      3. 32      4. 35

### English Comprehension

76. In the following question, out of the four alternatives, choose the word which best expresses the meaning of the given word and click on the button corresponding to it.  
 INSOLENT  
 1. DISTASTEFUL      2. IMPATIENT  
 3. DIABOLIC      4. RUDE

77. In the following question, out of the four alternatives, choose the word which is opposite in meaning to the given word and click on the button corresponding to it.  
VIRTUE  
1. WILES    2. CURSE    3. VICES    4. CUNNING
78. Four words are given, out of which only one word is spelt correctly. Choose the correctly spelt word and click on the button corresponding to it.  
1. Tranquility    2. Tranquillity  
3. Trankquility    4. Trankquility
79. In the following question, one part of the sentence may have an error. Find out which part of the sentence has an error and click on the button corresponding to it. If the sentence is free from error, click the "No error" option.  
Could she cite (A)/ any precedent in support (B)/ for her case? (C)/ No Error(D)  
1. A    2. B    3. C    4. D
80. In the following question, one part of the sentence may have an error. Find out which part of the sentence has an error and click on the button corresponding to it. If the sentence is free from error, click on the "No error" option.  
The General Manager of the industry has felt (A)/ that there is no use of (B)/ discussing about the problems with the labourers. (C)/No Error (D)  
1. A    2. B    3. C    4. D
81. In the following question, one part of the sentence may have an error. Find out which part of the sentence has an error and click on the button corresponding to it. If the sentence is free from error, click on the "No error" option.  
She enquired from the stranger (A)/ who was he and (B)/ what he wanted from her. (C)/ No Error (D)  
1. A    2. B    3. C    4. D
82. The sentences given with blanks are to be filled with an appropriate word(s). Four alternatives are suggested for each question. For each question, choose the correct alternative and click on the button corresponding to it.  
We acted on a \_\_\_\_\_ impulse.  
1. momentary    2. momentous  
3. memorable    4. meritorious
83. The sentences given with blanks are to be filled with an appropriate word(s). Four alternatives are suggested for each question. For each question, choose the correct alternative and click on the button corresponding to it.  
Do your best and we'll back you \_\_\_\_\_.  
1. on    2. in    3. out    4. up
84. The sentences given with blanks are to be filled with an appropriate word(s). Four alternatives are suggested for each question. For each question, choose the correct alternative and click on the button corresponding to it.  
Sanjay \_\_\_\_\_ his mother in the morning every day.  
1. calls in    2. calls up    3. calls off    4. calls down
85. In the question, four alternatives are given for the idiom/phrase. Choose the alternative which best expresses the meaning of the idiom/phrase and click on the button corresponding to it.  
Put two and two together  
1. Bad at mathematics    2. Poor financial condition  
3. Reason logically    4. Forget something
86. In the question, four alternatives are given for the idiom/phrase. Choose the alternative which best expresses the meaning of the idiom/phrase and click on the button corresponding to it.  
An axe to grind  
1. Attack aggressively    2. Suffer a lot  
3. Betray somebody    4. Have a selfish interest
87. In the question, four alternatives are given for the idiom/phrase. Choose the alternative which best expresses the meaning of the idiom/phrase and click on the button corresponding to it.  
Pick to pieces  
1. Study something superficially  
2. Complete a work entirely  
3. Analyse critically  
4. Select only what you need.
88. Out of the four alternatives, choose the one which can be substituted for the given words/sentences and click on the button corresponding to it.  
A person who lays too much stress on bookish-learning  
1. Pervert    2. Pedant  
3. Philosopher    4. Scholar
89. Out of the four alternatives, choose the one which can be substituted for the given words/sentences and click on the button corresponding to it.  
Postponement or delay permitted in the suffering of a penalty or the discharge of an obligation.  
1. Respite    2. Spire    3. Splurge    4. Scourge
90. Out of the four alternatives, choose the one which can be substituted for the given words/sentences and click on the button corresponding to it.  
Deviation from the right course  
1. Imagination    2. Amalgamation  
3. Illumination    4. Aberration
91. A sentence/a part of the sentence is underlined. Four alternatives are given to the underlined part which will improve the sentence. Choose the correct alternative and click on the button corresponding to it. In case no improvement is needed, click on the button corresponding to "No improvement".  
He likes to drive his car at a speed of eighty kilometres each hour.  
1. every hour    2. an hour  
3. hourly    4. No improvement
92. A sentence/a part of the sentence is underlined. Four alternatives are given to the underlined part which will improve the sentence. Choose the correct alternative and click on the button corresponding to it. In case no improvement is needed, click on the button corresponding to "No improvement".  
His argument against his opponent duly brought jeers from the crowd.  
1. invective    2. praise  
3. controversy    4. No improvement
93. A sentence/a part of the sentence is underlined. Four alternatives are given to the underlined part which will improve the sentence. Choose the correct alternative and click on the button corresponding to it. In case no improvement is needed, click on the button corresponding to "No improvement".  
Do you know the time when the train departs?  
1. which    2. by  
3. that    4. No improvement
94. A sentence/a part of the sentence is underlined. Four alternatives are given to the underlined part which will improve the sentence. Choose the correct alternative and click on the button corresponding to it. In case no improvement is needed, click on the button corresponding to "No improvement".  
I'm staying with some friends who are owning a farm.  
1. will be owning    2. own  
3. have been owning    4. No improvement
95. A sentence/a part of the sentence is underlined. Four alternatives are given to the underlined part which will improve the sentence. Choose the correct alternative and click on the button corresponding to it. In case no improvement is needed, click on the button corresponding to "No improvement".  
An old friend, may I give you an advice?  
1. give you some advice    2. give you an advise  
3. offer you an advice    4. No improvement

**Instructions [96 – 100]****Comprehension:**

A passage is given with five questions following it. Read the passage carefully and choose the best answer to each question out of the four alternatives and click on the button corresponding to it.

The Alaska pipeline starts at the frozen edge of the Arctic Ocean. It stretches southward across the largest and northernmost state in the United States, ending at a remote ice-free seaport village nearly 800 miles from where it begins. It is massive in size and extremely complicated to operate. The steel pipe crosses windswept plains and endless miles of delicate tundra that tops the frozen ground. It weaves through crooked canyons, climbs sheer mountains, plunges over rocky crags, makes its way through thick forests, and passes over or under hundreds of rivers and streams. The pipe is 4 feet in diameter, and up to 2 million barrels (or 84 million gallons) of crude oil can be pumped through it daily. Resting on H-shaped steel racks called "bents", long sections of the pipeline follow a zigzag course high above the frozen earth. Other long sections drop out of sight beneath spongy or rocky ground and return to the surface later on. The pattern of the pipeline's up-and-down route is determined by the often harsh demands of the arctic and subarctic climate, the tortuous lay of the land, and the varied compositions of soil, rock, or permafrost (permanently frozen ground). A little more than half of the pipeline is elevated above the ground. The remainder is buried anywhere from 3 to 12 feet, depending largely upon the type of terrain and the properties of the soil. One of the largest in the world, the pipeline cost approximately \$8 billion and is by far the biggest and most expensive construction project ever undertaken by private industry. In fact, no single business could raise that much money, so 8 major oil companies formed a consortium

in order to share the costs. Each company controlled oil rights to particular shares of land in the oil fields and paid into the pipeline-construction fund according to the size of its holdings. Today, despite enormous problems of climate, supply shortage, equipment breakdowns, labour disagreements, treacherous terrain, a certain amount of mismanagement, and even theft, the Alaska pipeline has been completed and is operating.

96. The Alaskan pipeline ends \_\_\_\_\_.
1. in north of Alaska
  2. at a seaport village
  3. after passing through canyons and rivers
  4. at a tundra covered village
97. What is the capacity of the Alaskan pipeline?
1. 2 million gallons of crude oil
  2. 4 million barrels of crude oil
  3. 84 million gallons of crude oil
  4. 84 billion barrels of crude oil
98. What are "bents"?
1. Zigzag shape of pipeline
  2. Pipeline's up and down route
  3. The section of the pipeline that drops out of sight
  4. The H-shaped steel racks
99. How was the fund for pipeline construction generated?
1. 8 major oil companies joined hands to share the cost
  2. 8 major oil companies borrowed \$8 billion.
  3. A single private company raised \$8 billion
  4. Oil rights were sold to 8 major oil companies
100. Which of the following was not problems faced while constructing the pipeline?
1. Supply shortages
  2. Treacherous terrain
  3. Lack of funds
  4. Equipment breakdown

**Answer Key**

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

**Answers with Explanations****General Intelligence and Reasoning****1. Option (1) is correct.**

As we know that an editor who determines the final content of a magazine. Similarly, a director is in charge of a drama.

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

A-1, B-2, C-3, D-4, E-5, F-6, G-7, H-8, I-9, J-10, K-11, L-12, M-13, N-14, O-15, P-16, Q-17, R-18, S-19, T-20, U-21, V-22, W-23, X-24, Y-25, Z-26.

Given that:

ACEG : IKMO

$$\begin{array}{cccc} \text{A} & \text{C} & \text{E} & \text{G} \\ +8 \downarrow & +8 \downarrow & +8 \downarrow & +8 \downarrow \\ \text{I} & \text{K} & \text{M} & \text{O} \end{array}$$

Similarly, for

QSUW : ?

$$\begin{array}{cccc} \text{Q} & \text{S} & \text{U} & \text{W} \\ +8 \downarrow & +8 \downarrow & +8 \downarrow & +8 \downarrow \\ \text{Y} & \text{A} & \text{C} & \text{E} \end{array}$$
**3. Option (1) is correct.**

Given that:

$$\begin{array}{l} 12 : 39 \\ 12 : 12 \times 3 + 3 \\ 12 : 36 + 3 \\ 12 : 39 \end{array}$$

Similarly,

$$\begin{array}{l} 15 : ? \\ 15 : 15 \times 3 + 3 \\ 15 : 45 + 3 \\ 15 : 48 \end{array}$$
**4. Option (2) is correct.**

Except battery, all others such as torches, candles, and lamps are source of lights, Therefore, option (2) is the odd word.

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

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



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

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

$$73 - 61 = 12, 69 - 57 = 12$$

$$59 - 47 = 12, 42 - 29 = 13$$

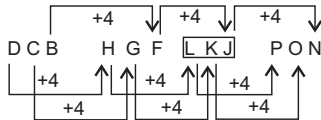
7. **Option (4) is correct.**

The sequence of the given words according to the dictionary is as follows:

Scarf 1 → Scene 2 → Shell 3 → Stream 5 → Survey 4

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

The pattern of the series is as follows:

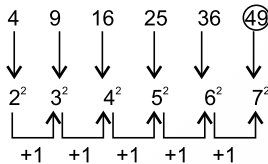


So, the next term will be LKJ.

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

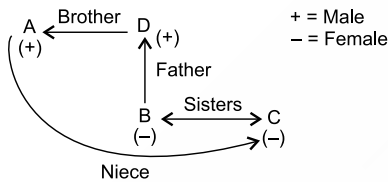
The pattern of the series is as follows:

Therefore, the next term will be 49.



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

The blood diagram of the given condition is as follows:



From the above diagram, it is clear that C is niece of A.

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

The sitting arrangement of five college girls is as follows:



From the sitting arrangement, we can say that O is in the middle in a row.

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

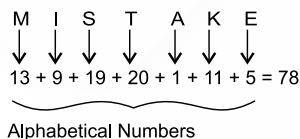
Except word SALUTE, all others can be formed from the given word CONSULTATION. The given word does not contain letter E.

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

The pattern is as follows:



Similarly,



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

B	Bracket in order (), [], {}
O	Of

D	Division (÷)
M	Multiplication (×)
A	Addition (+)
S	Subtraction (-)

BODMAS rule will be applied here, i.e.,

$$128 \times 9 + 16 \div 4$$

$$128 \times 9 + 4$$

$$1,152 + 4 = 1,156$$

Given expression:

$$128 + 9 - 16 \times 4 = ?$$

After interchanging signs:

$$128 \times 9 + 16 \div 4 = ?$$

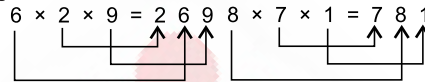
$$1,152 + 16 \div 4 = ?$$

$$1,152 + 4 = ?$$

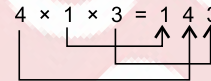
$$1,156 = ?$$

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

The pattern is as follows:



Similarly,



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

From 1st column:

$$9 \times 3 \times 3 = 81$$

From 2nd column:

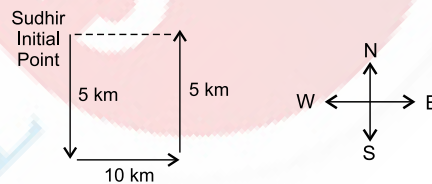
$$11 \times 4 \times 4 = 176$$

Similarly, from 3rd column:

$$13 \times 7 \times 5 = 455$$

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

The direction diagram of Sudhir is as follows:



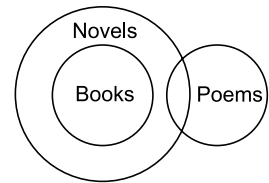
From the direction diagram, we can say that Sudhir's starting position is towards west from his final position.

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

The Venn diagram of the given condition is as follows:

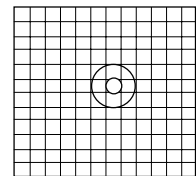
So, from conclusion I: Some books are poems is not satisfied with the given condition.

From conclusion II: Some poems are novels satisfies the given condition.



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

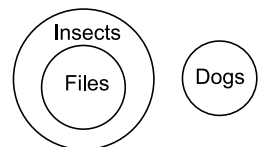
From the 2nd and 3rd figures, we can say that the sides with triangle, diamond, square, and double triangle are all adjacent to the side with a circle. Therefore, only side left which is the side with two circles is opposite to the side having a circle.



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

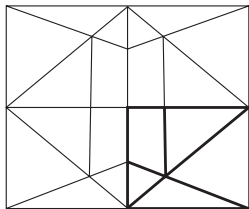
The Venn diagram of the given condition is as follows:

Here, all flies come under the category of insects, but dogs are different from them.

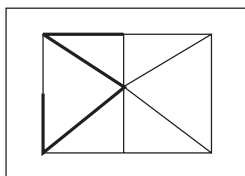


**21. Option (2) is correct.**

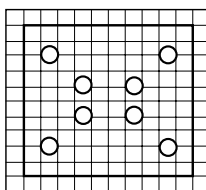
The figure part given in option (2) will complete the figure.

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

It is clearly shown that in the option (2), it is embedded which is shown in the given image.

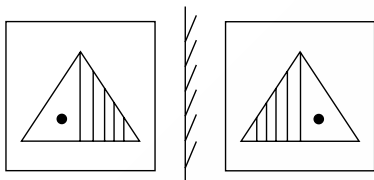
**23. Option (1) is correct.**

After unfolding the paper, it appears as:

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

The mirror image of the given figure is as follows:

In the mirror image, the left becomes right and the right becomes left.

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

From option (1): 10, 20, 58, 77 = SENN  
 From option (2): 22, 32, 65, 78 = SENT  
 From option (3): 34, 44, 67, 87 = SERK  
 From option (4): 41, 13, 87, 68 = REKK

### General Awareness

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

The gas with the highest capacity to trap heat is ChlorFluoroCarbon (CFC). Any chemical group containing carbon, hydrogen, chlorine and fluorine is known as CFCs. These are as ChlorFluoroCarbon (CFC) gases used as refrigerants and aerosol propellants. Because they produce chlorine atoms when exposed to ultraviolet light. They are bad for the ozone layer in the Earth's atmosphere.

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

The state of Rajasthan has the highest solar power generation potential in the country. Recently, Rajasthan has surpassed Karnataka as the leading state in solar installations.

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

Due to the lack of free ions or electrons to transmit the charge through, diamonds don't conduct electricity. A strong covalent link holds the carbon atoms in diamond's tetrahedral structure together.

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

The Alaknanda and Bhagirathi Rivers meet at Devprayag, one of the Panch Prayag of the Alaknanda River, and the confluence gives rise to the Ganga or Ganges River.

Devprayag is situated in the hilly regions of Uttarakhand. Both Gangotri and Badrinath, which are revered by Hindus all over the world, are the sources of Bhagirathi and Alaknanda, respectively. The Alaknanda River's Devprayag is its final Prayag. It is thought that King Dushratha and Lord Rama performed penance here.

The Five Prayags are:

- Devprayag
- Rudraprayag
- Nandprayag
- Karnaprayag
- Vishnuprayag

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

Aldehyde is any member of the organic compound family that contains a carbon atom contains a carbon atom that has three single bonds: one with hydrogen, one with oxygen and one with another atom or group of atoms (designated R in general chemical formulas and structure diagrams). These are strong reducing agents.

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

A flip-flop is a circuit used in electronics. It has two stable states and can be used to store state data. A flip-flop is also known as a latch. One of a flip-flop's states corresponds to a 'one,' and the other state corresponds to a 'zero,' and it stores a single bit (binary digit) of data.

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

The astronaut and the spacecraft are both falling towards the earth at the same rate while orbiting the planet. As a result, there is no force exerted on the astronaut by the spacecraft. It creates a sense of weightlessness or a sensation of buoyancy or you are floating.

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

The human body's largest gland is the liver. It can weigh up to 1.5 kg for an adult human and is also the largest internal organ.

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

- In 1947, J.B. Kripalani presided over the Indian National Congress. Jawaharlal Nehru presided over INC as president from 1946 until Kripalani.
- Pattabhi Sitaramayya presided over INC in 1948 and 1949 after Kripalani.
- Purushottam Das Tandon presided over INC in 1950 and Jawaharlal Nehru took over as president in 1951.

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

In order to be a member of the Rajya Sabha, an individual must meet the following criteria:

- They must be an Indian citizen.
- They must be at least 30 years old.
- They must be a registered voter in the state they wish to represent.
- They must make and subscribe before some person authorised in that behalf by the Election Commission an oath or affirmation asserting his allegiance to the constitution of India.
- They must meet any additional qualifications set by the Parliament.

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

The tax known as octroi duty which is imposed by local or state governments on a certain class of products when they enter the region. It is a fee for permitting the transportation of goods through the area. With the nationwide implementation of GST on July 1, 2017, the octroi was abolished.

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

Sextant is an instrument for determining the angle between the horizon and a celestial body such as the Sun, the Moon, or a star.

It is used in celestial navigation to determine latitude and longitude.

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

From the given options, Jain temples – Khajuraho is incorrect. Khajuraho, a UNESCO World Heritage Site located in Madhya

Pradesh. Khajuraho is renowned for its sexual sculptures and temples.

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

Gol Gumbaz (the tomb of Mohammed Adil Shah) is the most famous monument in Bijapur, a city in Karnataka, India. It is the second largest dome ever built. It is next in size only to St Peter's Basilica in Rome. Mohammed Adil Shah of Adil Shahi Empire ruled from 1627–1657.

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

John Bardeen, Walter Brattain, and William Shockley are the inventors of transistor. Transistors were created to replace vacuum tubes. They were small, required less battery power. They had less distortion and heat than their predecessor.

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

Endocrine glands release hormones (chemical messengers) into the bloodstream to be transported to various organs and tissues throughout the body. For instance, insulin is secreted by the pancreas, which allows the body to regulate levels of sugar in the blood.

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

A healthy freshwater fish will quickly pass away if put in salt water because their bodies cannot withstand the salinity.

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

Norway is known as the 'Land of the Midnight Sun' because from late May to late July, the Sun never completely sets in the north of the Arctic Circle, while up to 20 hours of daylight are experienced across the remainder of the nation.

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

With a catchment area that accounts for 26% of India's total land area, the Ganga basin is the largest river basin in the nation. India makes up over 79% of the Ganga basin's area. Uttarakhand, U.P., M.P., Rajasthan, Haryana, Himachal Pradesh, Chhattisgarh, Jharkhand, Bihar, West Bengal and Delhi are among the 11 states that make up the basin.

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

In ancient India, Panini was a grammarian and Sanskrit philologist. The Ashtadhyayi, or perfect model, of grammar is found in Panini. "Ashtadhyayi" is more similar to Vedic. The first grammarian text of the Sanskrit language was written by Panini.

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

The upper chamber of India's bicameral Parliament is known as the Rajya Sabha, or Council of States. The maximum number of members in the Rajya Sabha is 245 as of 2022 with 233 being elected by state and territorial legislatures through open elections using a method called single transferable vote. Additionally, the president has the power to appoint an additional 12 members for their achievements in fields such as the arts, literature, sciences, and social services.

Article 80 of the Indian Constitution states that the Rajya Sabha has a maximum seating capacity of 245 members. One third of the 238 designations are up for election every two years, in even-numbered years, and members serve staggered six-year terms.

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

An exchange where stockbrokers and traders can purchase and sell assets, such as shares of stock, bonds, and other financial instruments, is known as a stock exchange, securities exchange, or bourse. The creation and redemption of such securities and instruments as well as capital events, such as the payment of income and dividends, may be accommodated by stock exchanges.

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

From May to July 1999, India and Pakistan engaged in a confrontation known as the Kargil War along the Line of Control and in the Kargil area of Jammu & Kashmir (LoC). Action Vijay, the codename for the Indian military operation in the area, is another term for the fighting in India.

Operation Safed Sagar, which the Indian Air Force participated in with the Indian Army, was tasked with driving the Pakistani Army and paramilitary forces from vacated Indian positions along the LOC.

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

Sarojini Naidu was an Indian political activist, feminist and poet who lived from 13 February 1879 to 2 March 1949. She played a significant role in India's fight for independence from colonial control as a supporter of civil rights, women's emancipation and anti-imperialist beliefs. She was also the first Indian woman to be selected as governor of an Indian state and to serve as president of the Indian National Congress (United Provinces). Because of the colour, imagery and lyrical nature of her poems, Naidu received the moniker "Nightingale of India" or "Bharat Kokila" from Mahatma Gandhi.

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

The Reserve Bank of India was founded on April 1st, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934. The Reserve Bank's Central Office was initially constructed in Kolkata before being relocated permanently to Mumbai in 1937. The Governor sits at the Central Office, which is also where policies are created. The Reserve Bank was initially privately owned, but since being nationalised in 1949, the Indian government has full ownership of the institution.

### Quantitative Aptitude

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

Because A and B together finish a job in 24 days.

$$\therefore \text{A and B together finish a job in 1 day} = \frac{1}{24} \text{ Part}$$

Also, A, B and C together can finish a job in 8 days

$$\therefore \text{A, B and C finish a job in 1 day} = \frac{1}{8} \text{ Part}$$

$\therefore$  C alone finishes a job in 1 day

$$= \frac{1}{8} - \frac{1}{24} = \frac{3-1}{24} = \frac{2}{24}$$

$$= \frac{1}{12} \text{ Part}$$

Hence C alone finishes a job in 12 days

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

Let the side of the square be  $a$  cm.

Given that diagonal

$$AC = 6\sqrt{2} \text{ cm}$$

In  $\triangle ABC$ ,

$$a^2 + a^2 = (6\sqrt{2})^2$$

$$\Rightarrow 2a^2 = 72$$

$$\Rightarrow a^2 = 36$$

$$\Rightarrow a = 6 \text{ (-6 is not possible)}$$

we have, diameter of circle is equal to side of square

$$\therefore 2r = 6 \text{ cm}$$

$$r = 3 \text{ cm}$$

$$\text{Now, area of circle} = \pi r^2$$

$$\pi (3)^2 = 9\pi$$

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

$$\text{Given that CP} = ₹ 6,000$$

$$\text{Discount} = 6,000 \times \frac{20}{100}$$

$$= ₹ 1,200$$

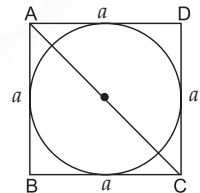
$$\text{Price after discount} = 6,000 - 1,200$$

$$= ₹ 4,800$$

$$\text{Raised amount} = 4,800 \times \frac{10}{100} = 480$$

$$\text{Final price} = ₹ 4,800 + 480$$

$$= ₹ 5,280$$





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

Let the money received by A be  $5x$ ,  
money received by B be  $6x$  and  
money received by C be  $9x$ .

Since A received money is ₹ 450

$$\therefore 5x = 450$$

$$x = 90$$

$$\begin{aligned} \text{Total money} &= 5x + 6x + 9x = 20x \\ &= 20 \times 90 = ₹ 1,800 \end{aligned}$$

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

Given that SP = ₹ 230

Profit = 15%

$$\begin{aligned} \therefore \text{CP} &= \frac{\text{SP} \times 100}{100 + \text{profit}} \\ &= \frac{230 \times 100}{100 + 15} = \frac{23,000}{115} \\ &= ₹ 200 \end{aligned}$$

Now SP when profit is 20%

$$\begin{aligned} \therefore \text{SP} &= \text{C.P.} \left( \frac{100 + \text{profit}}{100} \right) \\ &= 200 \left( \frac{100 + 20}{100} \right) \\ &= 200 \times \frac{120}{100} = 240 \\ &= ₹ 240. \end{aligned}$$

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

Weight of 1st iron = 3.5 kg

Weight of 2nd iron = 7.5 kg

$\therefore$  Percentage weight of the 1<sup>st</sup> ball with respect to 2<sup>nd</sup> ball

$$= \frac{3.5 \times 100}{7.5} = 46 \frac{2}{3} \%$$

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

Speed = 36 km/h

$$= \frac{36 \times 1,000}{60 \times 60} \text{ m/s} = 10 \text{ m/s}$$

$\therefore$  Distance travels by bus in 1 s is 10 m.

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

$$\frac{a}{a-b} + \frac{b}{b-a} = \frac{a}{a-b} - \frac{b}{a-b}$$

$$\frac{a-b}{a-b} = 1$$

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

$$(1 - \sqrt{2}) + (\sqrt{2} - \sqrt{3}) + (\sqrt{3} - \sqrt{4}) + \dots + (\sqrt{15} - \sqrt{16})$$

$$= 1 - \sqrt{2} + \sqrt{2} - \sqrt{3} + \sqrt{3} + \sqrt{4} + \dots + \sqrt{15} - \sqrt{16}$$

$$= 1 - \sqrt{16}$$

$$= 1 - 4$$

$$= -3$$

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

$\triangle ABC \cong \triangle DEF$

we have

$$\frac{\text{Perimeter of } \triangle ABC}{\text{Perimeter of } \triangle DEF} = \frac{AB}{DE}$$

$$\Rightarrow \frac{30}{18} = \frac{AB}{36}$$

$$\Rightarrow AB = \frac{30 \times 36}{18}$$

$$= 60 \text{ cm}$$

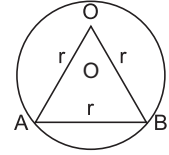
**61. Option (3) is correct.**

Since, chord is equal to radius.

$\therefore \triangle OAB$  is equilateral

So,  $\angle AOB$  = angle subtend at centre by

the chord of circle =  $\frac{\pi}{3}$ .

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

$$(\sec^2 45^\circ - \cot^2 45^\circ) - (\sin^2 30^\circ + \sin^2 60^\circ)$$

$$= \left[ (\sqrt{2})^2 - (1)^2 \right] - \left[ \left( \frac{1}{2} \right)^2 + \left( \frac{\sqrt{3}}{2} \right)^2 \right]$$

$$= [2 - 1] - \left[ \frac{1}{4} + \frac{3}{4} \right]$$

$$= 1 - 1 = 0$$

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

Let the number of males and females be  $x$  and  $y$  respectively.

Since average of male's salary = ₹ 5,200

Total salary of males = ₹ 5,200 $x$

and average of females salary = ₹ 4,200

Total salary of females = ₹ 4,200 $y$

Mean salary of all the employees = ₹ 5,000

$$\frac{5,200x + 4,200y}{x + y} = 5,000$$

$$\Rightarrow 5,200x + 4,200y = 5,000x + 5,000y$$

$$\Rightarrow 200x = 800y$$

$$\Rightarrow x = 4y$$

Now, % of female employees =  $\frac{y}{x+y} \times 100$

$$\frac{y}{4y+y} \times 100 = \frac{y}{5y} \times 100$$

$$\frac{1}{5} \times 100 = 20\%$$

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

Given that  $4x = \sqrt{5} + 2$

$$x = \frac{\sqrt{5} + 2}{4}$$

$$\therefore \frac{1}{x} = \frac{4}{\sqrt{5} + 2} \times \frac{\sqrt{5} - 2}{\sqrt{5} - 2}$$

$$= \frac{4(\sqrt{5} - 2)}{5 - 4} = 4(\sqrt{5} - 2)$$

$$\text{Now, } x - \frac{1}{16x} = \frac{\sqrt{5} + 2}{4} - \frac{1}{16} \times 4(\sqrt{5} - 2)$$

$$= \frac{\sqrt{5} + 2}{4} - \frac{\sqrt{5} - 2}{4}$$

$$= \frac{\sqrt{5} + 2 - \sqrt{5} + 2}{4}$$

$$= \frac{4}{4} = 1$$

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

$$(105)^3 = (100 + 5)^3$$

$$= (100)^3 + 3 \times 100 \times 5(100 + 5) + (5)^3$$

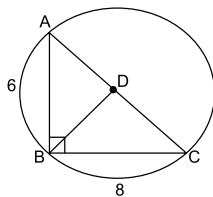
$$= 10,00,000 + 1,50,000 + 7,500 + 125$$

$$= 11,57,625$$

66. Option (2) is correct.

In  $\Delta ABC$

$$\begin{aligned} AC^2 &= AB^2 + BC^2 \\ &= 36 + 64 \\ AC^2 &= 100 \\ AC &= 10 \end{aligned}$$



$$F \quad \text{radius} = AD = DC = BD = \frac{AC}{2}$$

$$\therefore BD = \frac{10}{2} = 5 \text{ cm}$$

67. Option (2) is correct.

Let the length of diagonals of both the squares are  $5x$  and  $2x$ , respectively.

Ratio of area of squares

$$\begin{aligned} &= \frac{\frac{1}{2} \times \text{product of diagonals of 1<sup>st</sup> square}}{\frac{1}{2} \times \text{product of diagonals of 2<sup>nd</sup> square}} \\ &= \frac{\frac{1}{2} \times (5x)^2}{\frac{1}{2} \times (2x)^2} = \frac{25}{4} = 25 : 4 \end{aligned}$$

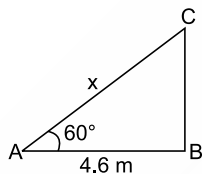
68. Option (3) is correct.

In rt.  $\Delta ABC$

$$\cos 60^\circ = \frac{4.6}{x}$$

$$\Rightarrow \frac{1}{2} = \frac{4.6}{x}$$

$$\Rightarrow x = 2 \times 4.6 = 9.2 \text{ cm}$$



69. Option (3) is correct.

Given that product of number of 2,160 and HCF is 12

12	2,160
12	180
3	15
	5

$\therefore$  Number are  $12 \times 3$  and  $12 \times 5$   
i.e., 36 and 60

70. Option (4) is correct.

Let principal = ₹  $x$

ATQ

$$CI - SI = 1$$

$$x \left[ \left( 1 + \frac{4}{100} \right)^2 - 1 \right] - \frac{x \times 2 \times 4}{100} = 1$$

$$\Rightarrow x \left[ \left( \frac{26}{25} \right)^2 - 1 \right] - \frac{2x}{25} = 1$$

$$\Rightarrow x \left( \frac{676 - 625}{625} \right) - \frac{2x}{25} = 1$$

$$\Rightarrow \frac{51x - 50x}{625} = 1$$

$$\Rightarrow x = 625$$

Hence sum is ₹ 625

**Shortcut:**

We have, difference between CI and SI for two years

$$= P \left( \frac{r}{100} \right)^2$$

$$\text{So,} \quad 1 = P \left( \frac{4}{100} \right)^2$$

$$P = 625$$

So, principal amount = ₹ 625

71. Option (2) is correct.

Given that mixture = 25 litre

Ratio of milk to water = 4 : 1

$$\therefore \text{Milk} = \frac{4}{5} \times 25 = 20 \text{ litres}$$

$$\text{Water} = \frac{1}{5} \times 25 = 5 \text{ litres}$$

New water quantity = 5 + 3 = 8 litres

New milk quantity = 20 litres

$$\text{Required ratio} = \frac{20}{8} = \frac{5}{2} = 5 : 2$$

72. Option (2) is correct.

Voters voted in favour of  $x$

$$= 45 + 73 + 51 + 56 = 225$$

Voter voted in favour of  $y$

$$= 40 + 88 + 47 + 51 = 226$$

Voters did not vote = 1 + 9 + 5 + 8 = 23

$$\text{Total voters} = (45 + 40 + 1) + (73 + 88 + 9) + (51 + 47 + 5) + (56 + 51 + 8) = 474$$

Per cent of voters voted in favour of  $x$

$$\frac{225}{474} \times 100 = 47.468 = 47.5\%$$

73. Option (1) is correct.

Voters did not vote = 1 + 9 + 5 + 8 = 23

$$\text{Total voters} = (45 + 40 + 1) + (73 + 88 + 9) + (51 + 47 + 5) + (56 + 51 + 8) = 474$$

Percent of voters did not vote

$$= \frac{23}{474} \times 100 = 4.85 = 4.9\%$$

74. Option (2) is correct.

In region B

Voters voted in favour of  $X = 73$

Voters voted in favour of  $Y = 88$

More votes of  $Y$  than  $X = 88 - 73 = 15$

$$\text{More \% of } Y \text{ than } X = \frac{15}{73} \times 100$$

$$A = 20.54 = 21\%$$

75. Option (3) is correct.

Total voters voted in favour of  $X$

$$= 45 + 73 + 51 + 56 = 225$$

In regions in B, voters in favour of  $X = 73$

$$\% \text{ of voters} = \frac{73}{225} \times 100 = 32.4$$

$$= 32\%$$

### English Comprehension

76. Option (4) is correct.

"Insolent" means "showing a rude and arrogant lack of respect." Example: "She hated the insolent tone of his voice." Hence, option (4) is the correct synonym of the given word. The rest of the words are:

Diabolic: disgracefully bad or unpleasant. Example: "A singer with an absolutely diabolical voice."

Impatient: having or showing a tendency to be quickly irritated or provoked. Example: "an impatient motorist blaring his horn." Example: "She can be impatient with people who don't see things her way."

Distasteful: causing dislike or aversion. Example: "He found such cynicism distasteful."

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

"Virtue" means "behaviour showing high moral standards." Example: "There's no virtue in suffering in silence." The opposite of virtue is "vice." The rest of the words are:

Wile: devious or cunning stratagems employed in manipulating or persuading someone to do what one wants. Example: "She didn't employ any feminine wiles to capture his attention." Example: "The devious wiles of the politicians."

Curse: a solemn utterance intended to invoke a supernatural power to inflict harm or punishment on someone or something. Example: "She'd put a curse on him."

Cunning: having or showing skill in achieving one's ends by deceit or evasion. Example: "A cunning look came into his eyes."

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

The correctly spelt word is "tranquillity."

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

We use the phrase "in support of something." The preposition "of" should be used instead of "for." The error is in part (C) of the sentence.

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

Explanation: The error is in part (C). The verb "discuss" is a transitive verb and it is followed by an object. So, the preposition "about" is incorrectly placed after "discuss."

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

In indirect speech, where reported speech is kept in an assertive form, question words like what, why, where, etc. work only as conjunctions, and the remaining sentence is written in normal form (subject + verb). Thus, part B must be written as "who he was and." Hence, the error is in part (B).

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

An impulse is a sudden, strong, and unreflective urge or desire to act. Momentary refers to something that lasts for a very short period of time; it is brief. "Momentous" means of great importance or significance. Memorable means worth remembering or easily remembered. "Meritorious" means deserving of reward or praise. Since impulse is a sudden urge, the only option appropriate in this context is "momentary."

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

This question checks a student's knowledge of phrasal verbs. Back up: assistance and support. Back out: to withdraw from something before completion. Here, up is the right option.

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

This question checks a student's knowledge of phrasal verbs. Call up: to make a telephone call

Call in: summon to enter      Call off: postpone indefinitely

Call down: censure severely/angrily

In the given context, "call up" is best suited.

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

This question checks a student's knowledge of phrases and idioms. "Put two and two together" means "to draw an obvious conclusion from what is known or evident." Example: You weren't home, so I put two and two together and went back to your office to find you. This is closest to the option "reason logically."

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

This question checks a student's knowledge of phrases and idioms. "An axe to grind" means "to have a selfish motive."

Example: Environmentalists have no political axe to grind; they just want to save the planet.

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

"Pick to pieces" means "to make an effort to find flaws or negative aspects in something through excessive analysis or criticism." That makes "analyse critically" correct.

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

A person who lays too much stress on bookish learning is known as a pedant. "Pervert" means "to lead into deviant or perverted beliefs or behaviour; corrupt." "Philosopher" means "a person engaged in or learning philosophy, especially as an academic discipline."

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

Postponement or delay permitted in the suffering of a penalty or the discharge of an obligation is known as "respite." "Spire" means "a tall, pointed structure on top of a building, especially on top of a church tower." A splurge is an act of spending money freely or extravagantly. "Scourge" means a person or thing that causes great trouble or suffering.

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

Deviation from the right course is known as "aberration." "Amalgamation" means "the action, process, or result of combining or uniting." "Illumination" means "lighting or shining."

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

The correct idiomatic expression is per hour.

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

"Invective" means "rude language and unpleasant remarks." In the given sentence, "invective" is a better usage than "arguments."

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

The sentence has no grammatical error.

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

Certain verbs are stative verbs, i.e., have, own, think, etc., and they can't be used in progressive form. So "own" is the correct usage.

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

"Advice" is an uncountable noun, so it can't be preceded by "a" or "an." So, replace "an" with "some."

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

From the very first line of the passage, it can be deduced that the pipeline ends at a remote, ice-free seaport village.

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

Refer to the line: "The pipe is 4 feet in diameter, and up to 2 million barrels (or 84 million gallons) of crude oil can be pumped through it daily." When we read the first line of the paragraph, we can predict that, option (3) is the correct answer.

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

Refer to the line: "Resting on H-shaped steel racks called "bents," long sections of the pipeline follow a zigzag course high above the frozen earth." From this line, answer option (4) can be derived.

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

Refer to the lines: "In fact, no single business could raise that much money, so 8 major oil companies formed a consortium in order to share the costs. Each company controlled oil rights to particular shares of land in the oil fields and paid into the pipeline-construction fund according to the size of its holdings." From these lines, we can understand that eight companies join hands in generating money for the pipeline.

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

Refer to the lines: "Today, despite enormous problems of climate, supply shortage, equipment breakdowns, labour disagreements, treacherous terrain, a certain amount of mismanagement, and even theft, the Alaska pipeline has been completed and is operating." From these lines, we can understand that all the challenges are discussed except for the lack of funding.