

STAFF SELECTION COMMISSION
COMBINED GRADUATE LEVEL (TIER-I)

SOLVED PAPER

(10th September 2016: Shift-3)

Time Allotted: 1 hour

Max marks: 200

General Intelligence and Reasoning

- Select the related word/letters/numbers from the given alternatives.
Line : Square :: Arc : ?
1. Ring 2. Sphere 3. Circle 4. Ball
- Select the related word/letters/numbers from the given alternatives.
FJSP : DLQR :: GMIL : ?
1. EOGN 2. JNIO 3. HOGN 4. IONG
- Select the related word/letters/numbers from the given alternatives.
21 : 3 :: 574 : ?
1. 23 2. 82 3. 97 4. 113
- Find the odd word/letters/numbers from the given alternatives.
1. Tabla 2. Tanpura 3. Sarod 4. Sitar
- Find the odd word/letters/numbers from the given alternatives.
1. CBED 2. JILK 3. TSVU 4. VZXY
- Find the odd word/letters/numbers from the given alternatives.
1. 132 2. 176 3. 279 4. 352
- Arrange the following words as per the order in the dictionary
1. Sinister 2. Sinuous 3. Sinhalese 4. Sinusitis
5. Sinecure
1. 5, 3, 2, 4, 1 2. 5, 2, 4, 3, 1 3. 5, 2, 1, 3, 4 4. 5, 3, 1, 2, 4
- A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.
LMA, NOB, PQC, ?, STE
1. TUV 2. RSD 3. DOA 4. BRD
- A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.
41, 43, 47, 53, ?
1. 59 2. 63 3. 61 4. 65
- Pointing towards a boy Meera said 'He is the son of the only son of my grandfather.' How is that boy related to Meera?
1. Cousin 2. Brother
3. Uncle 4. Brother-in-law
- In a row of 15 children, when Raju was shifted three places towards the right, he became 8th from the right end. What was his earlier position from the left end of the row?
1. 14 2. 12 3. 6 4. 5
- From the given alternative words, select the word which cannot be formed using the letters of the given word.
PREDICAMENT
1. CEMENT 2. DEMENTIA
3. PREDICT 4. PRIMER
- In a certain code, 'TEACHER' is written as VGCEJGT. How will 'CHILDREN' be written in that code?
1. EJKNEGTP 2. EJKNFTGP
3. EJNFITP 4. EJKNFTGH

- If L denotes '×', M denotes '÷', P denotes '+' and Q denotes '-', then 16P24M8Q6M2L3 denotes:

1. 13/6 2. -1/6 3. 14½ 4. 10

- The missing number in the given series is:

15 (105) 14, 13 (?) 12

1. 91 2. 78 3. 65 4. 68

- Select the missing numbers from the given alternatives.

?	120	150
110	100	90
80	60	40

1. 60 2. 70 3. 80 4. 90

- Prabhu travelled from his house a distance of 20 km to his friend's house. After some time, he left his friend's house and took a turn towards the right and travelled 15 km to reach a park. After resting for a while, he again started and turned to the right and travelled 18 km to reach a petrol bunk. From there, he again turned right and covered a distance of 15 km. How many km more he has to travel to reach home?

1. 2 km 2. 18 km 3. 21 km 4. 23 km

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

Statements:

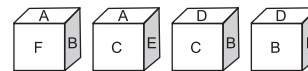
1. Some flies are ants. 2. All insects are ants.

Conclusions:

I. All flies are ants. II. Some ants are insects.

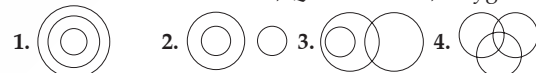
- Only conclusion I follows.
- Only conclusion II follows.
- Both conclusion I and conclusion II follow.
- Neither conclusion I nor conclusion II follows.

- From the positions of a cube shown below, which letter will be on the face opposite to face with 'A'?

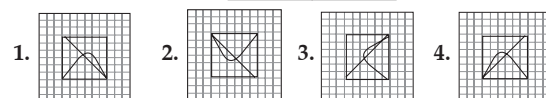
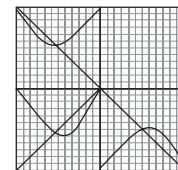


1. F 2. D 3. C 4. B

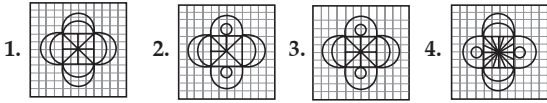
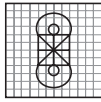
- Which one of the following Venn diagrams best illustrates the three classes Rhombus, Quadrilaterals, Polygons?



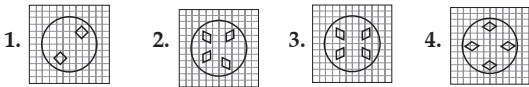
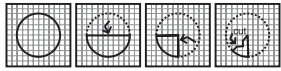
- Which answer figure will complete the pattern in the question figure?



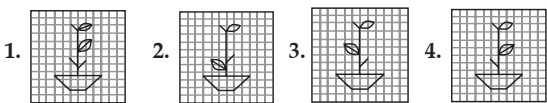
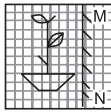
22. From the given answer figures, select the one in which the question figure is hidden/embedded.



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. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?



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., 'C' can be represented by 04, 40, etc., and 'K' can be represented by 56, 75, etc. Similarly, you have to identify the set for the word 'NICE'.

	0	1	2	3	4
0	C	D	E	F	G
1	F	G	C	D	E
2	D	E	F	G	C
3	E	F	G	C	D
4	G	C	D	E	F

	5	6	7	8	9
5	H	K	L	I	N
6	I	N	H	K	L
7	K	L	I	N	H
8	L	I	N	H	K
9	N	H	K	L	I

1. 66, 58, 33, 02
2. 87, 65, 03, 24
3. 66, 23, 68, 30
4. 59, 68, 40, 02

General Awareness

26. Bilateral monopoly situation is:
1. when there are only two sellers of a product
2. when there are only two buyers of a product
3. when there is only one buyer and one seller of a product
4. when there are two buyers and two sellers of a product
27. Lorenz curve shows:
1. Inflation
2. Unemployment
3. Income distribution
4. Poverty
28. The Preventive Detention Act curtailed:
1. Right to Freedom
2. Right to Equality
3. Right to Property
4. Education Right
29. Ornithophily is effected by:
1. snails
2. bats
3. insects
4. birds
30. To which ganarajya Gautam Buddha belonged?
1. Shibi
2. Shakya
3. Saurasena
4. Shabara
31. Which of the following is not an igneous rock?
1. Dolomite
2. Granite
3. Basalt
4. Gabbro

32. Which of the following vitamins helps in the absorption of calcium?
1. Vitamin A
2. Vitamin D
3. Vitamin B
4. Vitamin C

33. The outermost layer of Sun is called:

1. Lithosphere
2. Chromosphere
3. Photosphere
4. Corona

34. Constantly running system-program processes are known as:

1. Daemons
2. Processes
3. Process Block
4. Process Control Block

35. Which of the following vitamins contains nitrogen?

1. Vitamin A
2. Vitamin B
3. Vitamin C
4. Vitamin D

36. Science dealing with study of soil is called:

1. Pedology
2. Pedagogy
3. Ecology
4. Pomology

37. With which sport is P.V. Sindhu associated?

1. Shooting
2. Boxing
3. Swimming
4. Badminton

38. In a hydel power station, the motion produced in turbines is due to:

1. flow of water
2. burning of coal
3. burning of diesel
4. production of steam

39. Which of the following gases is known as "Laughing Gas"?

1. Nitrous oxide
2. Nitrogen peroxide
3. Nitrogen
4. Nitric oxide

40. The 'solid waste' is also known as:

1. Sedge
2. Toxic waste
3. Sludge
4. Scrubber

41. If waste materials contaminate the source of drinking water, which of the following diseases will spread?

1. Scurvy
2. Typhoid
3. Malaria
4. Anaemia

42. Kalamkari painting refers to:

1. A hand painted cotton textile in South India
2. A handmade drawing on bamboo handicrafts in North-East India
3. A block painted woollen cloth in the Western Himalayan region of India
4. A hand painted decorative silk cloth in the North-Western India

43. Which of the following areas makes the largest contribution to the national income in India?

1. Industry
2. Services
3. Agriculture
4. Mining

44. Chachnama records the history of which conquest?

1. Kushanas
2. Hunas
3. Arabs
4. Greeks

45. The deepest trench of the Indian Ocean is:

1. Java trench
2. Aleutian trench
3. Atacama trench
4. Tizard trench

46. "Abhinav Bharat" was founded in 1904 as a secret society of revolutionaries by:

1. Damodar Chapekar
2. V. D. Savarkar
3. Praffula Chaki
4. Khudiram Bose

47. Ideas of welfare state are contained in:

1. Fundamental Rights
2. Directive Principles of State Policy
3. Preamble of the Constitution
4. Part VII

48. Which of the following is called the 'Land of the Golden Pagoda'?

1. Myanmar
2. China
3. Japan
4. North Korea

49. Who among the following authored 'Zeba: An Accidental Supehero'?

1. Hema Malini
2. Hema Qureshi
3. Amitabh Bachchan
4. Karan Johar

50. Pneumonia is a bacterial disease caused by the type of bacteria called _____.

1. Bacilli
2. Cocci
3. Sprilli
4. Vibrio

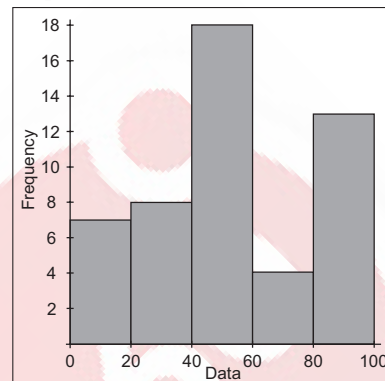
Quantitative Aptitude

51. A and B undertake a piece of work for ₹ 250. A alone can do that work in 5 days and B alone can do that work in 15 days. With the help of C, they finish the work in 3 days. If

everyone gets paid in proportion to work done by them, the amount C will get is:

1. ₹ 50 2. ₹ 100 3. ₹ 150 4. ₹ 200
52. Dealer purchased an article for ₹ 900 and fixes the list price in such a way that he gains 20% after allowing 10% discount, then the list price is:
1. ₹ 1,180 2. ₹ 1,080 3. ₹ 1,200 4. ₹ 1,100
53. The cost price of 28 articles is equal to the sale price of 21 articles, then the percentage of profit is:
1. 12% 2. $33\frac{1}{3}\%$ 3. 20% 4. 22%
54. In the last financial year, a car company sold 41,800 cars. In this year, the target is to sell 51,300 cars. By what per cent must the sale be increased?
1. $11\frac{9}{22}\%$ 2. $8\frac{9}{22}\%$ 3. $8\frac{11}{23}\%$ 4. $22\frac{8}{11}\%$
55. If the speed of a boat in still water is 20 km/h and the speed of the current is 5 km/h, then the time taken by the boat to travel 100 km with the current is:
1. 2 h 2. 3 h 3. 4 h 4. 7 h
56. If a sum of money doubles itself in 8 years, then the interest rate in percentage is?
1. $8\frac{1}{2}\%$ 2. 10% 3. $10\frac{1}{2}\%$ 4. $12\frac{1}{2}\%$
57. If $(x - 5)^2 + (y - 2)^2 + (z - 9)^2 = 0$, then value of $(x + y - z)$ is:
1. 16 2. -1 3. -2 4. 112
58. If $x + \frac{1}{x} = 3$, then $x^8 + \frac{1}{x^8}$ is equal to
1. 2,201 2. 2,203 3. 2,207 4. 2,213
59. Points P, Q and R are on a circle such that $\angle PQR = 40^\circ$ and $\angle QRP = 60^\circ$. Then, the subtended angle by arc QR at the centre is:
1. 80° 2. 120° 3. 140° 4. 160°
60. The ratio of the angles of a triangle is $1 : \frac{2}{3} : 3$. Then the smallest angle is:
1. $21\frac{4}{7}^\circ$ 2. 25° 3. $25\frac{5}{7}^\circ$ 4. $38\frac{4}{7}^\circ$
61. If $\alpha + \beta = 90^\circ$ and $\alpha : \beta = 2 : 1$, then the ratio of $\cos \alpha$ to $\cos \beta$ is:
1. $1:\sqrt{3}$ 2. 1:3 3. $1:\sqrt{2}$ 4. 1:2
62. The least number to be added to 13,851 to get a number which is divisible by 87 is:
1. 18 2. 43 3. 54 4. 69
63. Two numbers are in the ratio 3 : 5. If 6 is added to both of them, the ratio becomes 2 : 3. The numbers are:
1. 21 and 35 2. 30 and 50 3. 24 and 40 4. 18 and 30
64. The average weight of 10 parcels is 1.7 kg. Addition of another new parcel reduces the average weight by 60 gram. What is the weight, in kg, of the new parcel?
1. 1.04 2. 1.08 3. 1.4 4. 1.8
65. If $x = 999$, $y = 1,000$, $z = 1,001$, then the value of $\frac{x^3 + y^3 + z^3 - 3xyz}{x - y + z}$ is
1. 1,000 2. 9,000 3. 1 4. 9
66. If $\frac{a}{1-2a} + \frac{b}{1-2b} + \frac{c}{1-2c}$, then the value of $\frac{1}{1-2a} + \frac{1}{1-2b} + \frac{1}{1-2c}$ is
1. 1 2. 2 3. 3 4. 4
67. In an isosceles triangle $\triangle ABC$, $AB = AC$ and $\angle A = 80^\circ$. The bisector of $\angle B$ and $\angle C$ meet at D. The $\angle BDC$ is equal to:
1. 90° 2. 100° 3. 130° 4. 80°
68. The length of a chord which is at a distance of 12 cm from the centre of a circle of radius 13 cm is:
1. 10 cm 2. 5 cm 3. 6 cm 4. 12 cm

69. If θ is positive acute angle and $7 \cos^2 \theta + 3 \sin^2 \theta = 4$, then value of θ is:
1. 60° 2. 30° 3. 45° 4. 90°
70. Radius of cross section of a solid right circular cylindrical rod is 3.2 cm. The rod is melted and 44 equal solid cubes of side 8 cm are formed. The length of the rod is: (Take $\pi = 22/7$)
1. 56 cm 2. 7 cm 3. 5.6 cm 4. 0.7 cm
71. The angles of elevation of the top of a tower from two points at a distance of 4 m and 9 m from the base of the tower and in the same straight line with it are complementary. The height of the tower is:
1. 4 m 2. 7 m 3. 9 m 4. 6 m
72. Study the histogram of marks (in Mathematics) distribution of 50 students of class IX and answer the following questions.



- The number of students who have secured marks less than 60 is:
1. 12 2. 15 3. 33 4. 7
73. Study the histogram of marks (in Mathematics) distribution of 50 students of class IX and answer the following questions.
The average marks of the students are
1. 53.2 2. 45.5 3. 60.2 4. 55.5
74. Study the histogram of marks (in Mathematics) distribution of 50 students of class IX and answer the following questions.
The number of students who have scored between 39 and 80 is
1. 22 2. 18 3. 37 4. 15
75. Study the histogram of marks (in Mathematics) distribution of 50 students of class IX and answer the following questions.
Percentage of students who have secured marks more than 59 is
1. 13 2. 17 3. 34 4. 26

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.
EMANCIPATE
1. LIFT 2. RISE 3. RAISE 4. LIBERATE
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.
TREACHERY
1. BETRAYAL 2. MULING
3. LOYALTY 4. REBELLION
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. Ajourment 2. Adjournmant
3. Ajornment 4. Adjournment

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 on the "No error" option. Some of the richest (A) / business magnate (B) / live in Mumbai. (C) / No Error (D)

1. A 2. B 3. C 4. D

80. In the following questions, 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. This is an urgent (A) / matter which may admit (B) / of few delays. (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. Outside, the rain beats down (A) / in floods and the sea gives forth (B) / a sound like an alarm bells. (C) / No error (D)

1. A 2. B 3. C 4. D

Instruction for Q.82–Q.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.

82. I hope you know that, once you have signed the contract, you will not be able to _____.

1. back in 2. back out 3. back up 4. back at

83. Your opening paragraph should _____ the reader's attention.

1. attest 2. address 3. attract 4. affect

84. When I visited him last evening we talked the matter _____.

1. through 2. away 3. off 4. over

In each of the questions, 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.

85. A Man of letters

1. Letter - writer 2. Proof - reader
3. Postman 4. Scholar

86. Under a cloud

1. Shocked 2. Sad 3. Sick 4. Confused

87. Bear in mind

1. Respect 2. Observe
3. Remember 4. Pretend to listen

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.

Chief of a group of workmen

1. Chieftain 2. Engineer 3. Foreman 4. Middleman

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.

Bitter quarrel between two families existing for a long period.

1. Siege 2. Feud 3. Battle 4. War

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. Animals without a backbone.

1. Marsupials 2. Mammals
3. Vertebrate 4. Invertebrates

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".

Can you be able to please tone down your excitement?

1. Can you please be able to tone down your excitement?
2. Are you able to please tone down your excitement?
3. Can you please tone down your excitement?
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".

Uneasy lies the head which wears the crown.

1. who 2. that
3. what 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".

The cities are bursting on the seams with people.

1. bursting on seams 2. bursting at seams
3. bursting at the seams 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".

Let his failure be a lesson to you all.

1. to all of you 2. to all you people
3. to all you 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".

A foolish person is some one who is easily taken-in and tricked by others.

1. sober 2. stupid
3. gullible 4. No improvement

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.

Modern civilisation is completely dependent on energy, which has therefore to be abundant and also economical. About 85% of the world's energy is supplied by oil, coal and natural gas while nuclear, hydro, wind and solar power and biomass supply the rest. Coal, nuclear and hydro are used primarily to generate electricity while natural gas is widely used for heating. Biomass is used both for heating and cooking. The wind and solar power is the future's hope as they are sustainable energy sources. Oil powers almost all machines that move and that makes oil uniquely versatile. Oil powered airplanes carry 500 people across the widest oceans at nearly the speed of sound. Oil powered machines produce and transport food. Oil powered machines are ubiquitous. Clearly, we live in the age of oil but it is drawing to a close. According to data available if oil production remains constant until it's gone, there is enough to last 42 years. Oil wells will produce less as they become depleted, which will make it impossible to keep production constant. Similarly, natural gas and coal will last another 61 years and 133 years, respectively. Naturally, as they become scarce, they become expensive, leading to a worldwide energy crisis. If we are to survive on this planet, we have to make a transition to sustainable energy sources. The transition may be willy-nilly or planned-

the choice is ours. The dawning era of limited and expensive energy will be very difficult for everyone on earth but will be even more difficult if it is not anticipated. It is of utmost importance that the public and policymakers understand the global energy crisis and act in tandem to ensure that the species 'homo sapiens' does not become extinct.

96. The theme of the passage is:
 1. Changing Lives 2. Looming Energy Crisis
 3. Energy Resources 4. Power in Today's world
97. Biomass is an energy source used in:
 1. agriculture 2. industry 3. homes 4. offices
98. The synonym for ubiquitous is:

1. omnipotent 2. omnifarious
 3. omniscient 4. omnipresent
99. The energy sources of the future are:
 1. nuclear and hydro power 2. coal and natural gas
 3. wind and solar power 4. oil and biomass
100. The survival of mankind will depend on:
 1. maximum use of available energy resources
 2. transition to sustainable energy resources
 3. regulation placed on energy consumers
 4. keeping the level of energy production constant

Answer Key

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

Answers with Explanations

General Intelligence and Reasoning

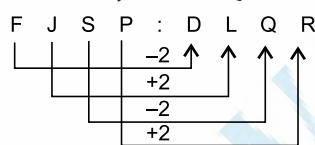
1. **Option (3) is correct.**

As we know that square is formed by a combination of lines. Similarly, a circle is formed by a combination of arcs.

2. **Option (1) 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: FJSP : DLQR



Similarly, GMIL : ?



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

The pattern is as follows:

21 : 3

21 ÷ 3 = 7

Similarly, 574 : ?

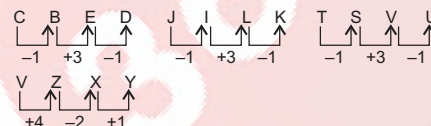
574 ÷ 3 = 82

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

Except tabla, all others such as the tanpura, sarod, and sitar are all string instruments. Therefore, tabla is the odd one.

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

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



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

Except option (3), all others are even numbers but 279 is an odd number.

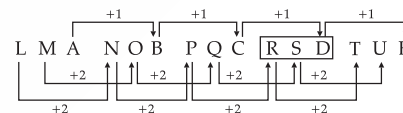
7. **Option (4) is correct.**

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

Sinecure 5 → Sinhalese 3 → Sinister 1 →
 Sinuous 2 → Sinusitis 4

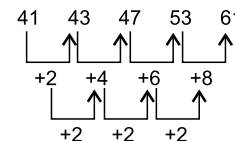
8. **Option (2) is correct.**

The pattern of the series is as follows:

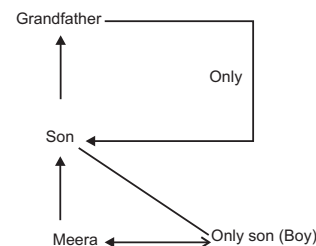


9. **Option (3) is correct.**

The pattern of the series is as follows:



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



According to the given question, the only son of Meera's grandfather is Meera's father. Now, that the boy is the son of Meera's father, i.e., Meera and the boy are siblings. Therefore, the boy is Meera's brother.

11. Option (4) is correct.

According to the given question there are total 15 children in a row. Raju's final position from right end is 8th. So, Raju's initial position from right end is $8 + 3 = 5$ th position from left end.

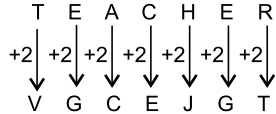
Therefore, his earlier position from left end is $(15 - 11) + 1 = 5$ th position from left end.

12. Option (4) is correct.

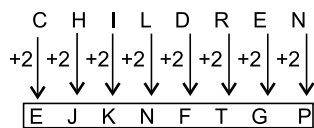
From the given word PREDICAMENT, PRIMER cannot be formed because it does not contain two R's.

13. Option (2) is correct.

Given that: TEACHER is written as VGCEJGT



Similarly, for CHILDREN is written as



14. Option (4) is correct.

Given expression:

$$16 P 24 M 8 Q 6 M 2 L 3$$

$$\begin{aligned} \text{After putting signs:} &= 16 + 24 \div 8 - 6 \div 2 \times 3 \\ &= 16 + 3 - 3 \times 3 \\ &= 16 + 3 - 9 \\ &= 19 - 9 \\ &= 10 \end{aligned}$$

15. Option (2) is correct.

The pattern is as follows:

$$\begin{aligned} 15 (105) 14 \\ 15 \times 14 / 2 \\ 15 \times 7 = 105 \end{aligned}$$

Similarly for

$$\begin{aligned} 13 (?) 12 \\ 13 \times 12 / 2 \\ 13 \times 6 = 78 \end{aligned}$$

16. Option (2) is correct.

The pattern is as follows:

For 1st row:

$$\begin{aligned} 110 + 90 / 2 \\ 200 / 2 = 100 \end{aligned}$$

For 2nd row:

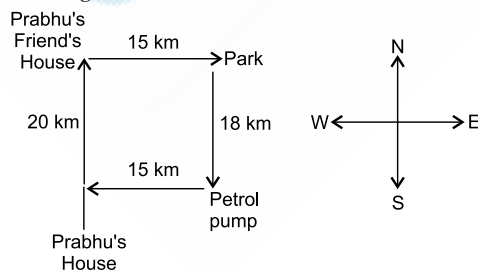
$$\begin{aligned} 80 + 40 / 2 \\ 120 / 2 = 60 \end{aligned}$$

Similarly, for 3rd row:

$$\begin{aligned} 150 + A / 2 = 120 \\ A = 240 - 150 \\ A = 90 \end{aligned}$$

17. Option (1) is correct.

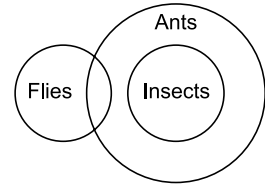
The direction diagram of Prabhu is shown below:



From the above diagram, the distance Prabhu needs to travel to reach home = $20 - 18 = 2$ km.

18. Option (2) is correct.

The Venn diagram of the given condition is as follows: So, from the given conclusions, only conclusion II follows the given condition.

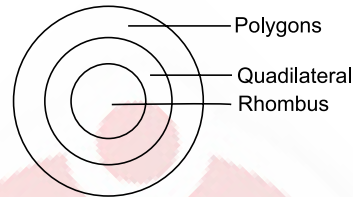


19. Option (2) is correct.

From the given cubes, it is evident that B, C, E, F are all adjacent to A. So, the only side left is D which will face A.

20. Option (1) is correct.

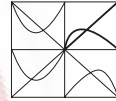
From the given question, the best suited Venn diagram is as follows:



We know that all Rhombus are Quadrilaterals, and all Quadrilaterals are polygons.

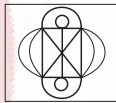
21. Option (4) is correct.

The figure part given in option will complete the figure.



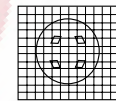
22. Option (3) is correct.

It is clearly shown that in the option (3), it is embedded which is shown in the given image.



23. Option (3) is correct.

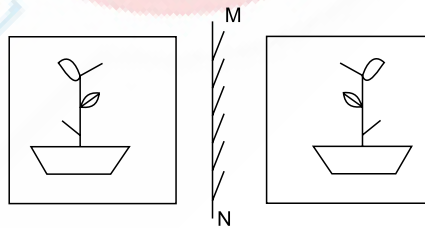
After unfolding the paper it appears as:



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 (1) is correct.

From option (1): 66, 58, 33, 02 = NICE
From option (2): 87, 65, 03, 24 = NIFC
From option (3): 66, 23, 68, 30 = NGKE
From option (4): 59, 68, 40, 02 = NKGE

General Awareness

26. Option (3) is correct.

A bilateral monopoly/oligopoly is a situation where there is a single (or few) buyer(s) and seller(s) of a given product in a market. The level of concentration in the sale of purchase of the product results in a mutual inter-dependence between the seller(s) and buyer(s). Under certain circumstances the buyer(s) can exercise countervailing power to constrain the market power of a single or few large sellers in the market and result in greater output and lower prices than would prevail under monopoly or oligopoly.

27. Option (3) is correct.

A straight diagonal line is used to illustrate the Lorenz curve; underneath it is the Lorenz curve, which depicts an estimated distribution of wealth or income. The Gini coefficient is the

region that is in between the straight and curved lines. The scalar measurement of inequality is represented by the Gini coefficient itself. The ratio of the area under the straight line serves as the Lorenz curve's expression for the Gini coefficient.

28. Option (1) is correct.

Detention without charge or trial is known as preventive detention and is used to stop criminal activity. The right to freedom of a person who has been placed in a preventive detention facility is violated by this practise. The freedom guaranteed by Articles 19, 20, 21, 21A, and 22 was restricted. In certain circumstances, especially those involving preventative custody, Article-22 guarantees protection against arrest and detention.

29. Option (4) is correct.

The act of birds pollinating flowering plants is known as ornithophily or bird pollination. In some regions of the planet, particularly in the tropics and on some island chains, this coevolutionary association — which is derived from insect pollination, or entomophily — is exceptionally well developed.

30. Option (2) is correct.

The son of Suddhodana, "an elected chief of the Shakya clan," whose capital was Kapilvastu, Gautam Buddha was born as a Kshatriya. The Shakyas established the Shakya Ganarajya, an autonomous republic. His mother, Maya, was a Koliyan princess and Suddhodana's wife.

31. Option (1) is correct.

The solidification of molten rock material produces igneous rocks. There are two primary classes. Large crystals can form because of the delayed cooling that takes place in the intrusive igneous rocks underneath the surface of the Earth. The igneous rocks diorite, gabbro, granite, pegmatite, and peridotite are examples of intrusive igneous rocks. Extrusive igneous rocks rise to the surface where they rapidly cool and crystallise into minute particles. Some of them cool so quickly that an amorphous glass is created. Andesite, basalt, obsidian, pumice, rhyolite, scoria, and tuff are among these rocks.

32. Option (2) is correct.

To absorb calcium, the body needs vitamin D. One cannot produce enough of the hormone calcitriol, also referred to as "active vitamin D," without sufficient vitamin D. Insufficient calcium absorption from the diet results from this. Because of this, the body must draw calcium from the skeleton, weakening the existing bone and preventing the growth of new, strong bone.

33. Option (2) is correct.

The Sun's outermost layer, the corona, begins at a height of 1,300 miles (2,100 km) above its surface (the photosphere). The corona has a temperature of 5,00,000 K (9,00,000 F, 5,00,000 C) or higher, and possibly even up to a few million K.

34. Option (1) is correct.

Daemons, usually referred to as servers, are ongoing background programmes that carry out tasks needed by other processes. Daemons are made available by Transmission Control Protocol/Internet Protocol (TCP/IP) for the purpose of implementing specific operating system operations. These background programmes, or daemons, operate without interfering with other processes (unless that is part of the daemon function). Daemons can be started by shell scripts, other daemons, or commands issued at the system management level.

35. Option (2) is correct.

The nitrogen atoms in vitamin B enable it to take part in metabolic regulation. For instance, Vitamin B3 is a water-soluble vitamin that contains the nitrogen-containing molecule niacin or niacinamide.

36. Option (1) is correct.

A branch of soil science known as pedology focuses on comprehending and defining how soil forms, how it evolves, and the theoretical foundations for modelling soil bodies—often in the context of the natural world. The study of soil is

divided into two primary areas: pedology and edaphology. Edaphology is typically more agronomically oriented and focuses on how soil characteristics affect plant communities (natural or cultivated). When researching the basic phenomenology of soils, such as the process of soil formation (also known as pedogenesis), pedologists pay close attention to soil shape, soil distribution, and the location of soil bodies within wider temporal and spatial contexts.

37. Option (4) is correct.

A badminton player from India is named Puserla Venkata Sindhu. Sindhu, who is regarded as one of India's most accomplished athletes, has won medals at numerous competitions including the Olympics and the BWF circuit as well as a gold at the 2019 World Championships.

38. Option (1) is correct.

Kinetic energy and potential energy are both present in the moving water in the river. Water's potential energy is used in hydroelectric power plants to generate electricity. The most crucial part of a hydroelectric power plant is the dam. The dam is situated on a significant river that has an abundance of water all year long. It should be constructed in a location where the river's height is sufficient to extract the most potential energy from the water.

39. Option (1) is correct.

To help you unwind, nitrous oxide, a safe and efficient sedative, is combined with oxygen and inhaled through a little mask that fits over your nose. Your dentist may suggest nitrous oxide, also known as "laughing gas," to assist make you more comfortable during specific treatments. You won't be put to sleep by it. You'll be able to hear the dentist and follow any instructions or requests they may have. The effects of the nitrous oxide should start to take effect shortly after your dentist asks you to breathe normally through your nose.

40. Option (3) is correct.

A variety of industrial operations, including water treatment, wastewater treatment, or on-site sanitation systems, can result in the production of sludge, a semi-solid slurry. For instance, sewage sludge from wastewater treatment procedures, faecal sludge from pit latrines, and septic tank sludge can all be created. These can all be obtained via traditional drinking water treatment. The word is occasionally used to refer to solids that have been removed from suspension in a liquid; this soupy substance typically contains sizable amounts of interstitial water (between the solid particles). Animal manure is one of the many particles that can be found in sludge.

41. Option (2) is correct.

Salmonella Typhi is a bacteria that can cause the potentially fatal infection typhoid fever. Typically, contaminated food or water is how it is disseminated. Typhoid affects an estimated 11 to 20 million people, and between 1,28,000 and 1,61,000 people die from it each year. Long-lasting fever, exhaustion, headaches, nausea, abdominal pain, and constipation or diarrhoea are a few symptoms. There may be a rash on certain people. Serious complications or even death could result from severe cases. Antibiotics can treat typhoid fever, but the process is becoming increasingly challenging due to the rise in antibiotic resistance.

42. Option (1) is correct.

The Indian state of Andhra Pradesh is the source of the hand-painted cotton textile known as Kalamkari. In the twenty-three stage process of Kalamkari, only natural dyes are employed. In India, there are two distinct Kalamkari art styles: the Machilipatnam style and the Srikalahasti style. The 'kalam' or pen is used to draw the subject and fill in the colours freehand in the Srikalahasti style of Kalamkari, which is totally done by hand. This artistic movement thrived in temples that focused on forging distinctive religious identities. It can be seen on scrolls, temple hangings, chariot banners, and representations of gods and scenes from the Hindu epics (e.g. Ramayana, Mahabharata and Purana).

43. Option (2) is correct.

The largest portion of India's national income is contributed

by the service sector. The second largest contributor to national income is the industrial sector. 53.66% of India's GNP is made up of the service industry. As a result, it is the largest contributor to national income.

44. Option (3) is correct.

One of the most important historical documents for Sindh's history in the seventh and eighth centuries CE is the Chach Nama, also known as the Fateh nama Sindh and Tarekh-e-Hind was Sindh. It was written in Persian. The main part of the text describes the Arab invasions into Sindh between the seventh and eighth centuries CE.

45. Option (1) is correct.

Deep submarine depression in the eastern Indian Ocean known as the Java Trench, or Sunda Double Trench, stretches over about 2,000 miles (3,200 km) in a northwest-southeast arc along the southwestern and southern Indonesian archipelago. It extends eastward south of the western Lesser Sunda Islands and is situated around 190 miles (305 km) off the southwestern shores of Sumatra and Java.

46. Option (2) is correct.

A renowned secret society for Indian independence was the Abhinav Bharat Society. The Abhinav Bharat Society was established by activist, politician, lawyer and writer Vinayak Damodar Savarkar. A group of socialists called the Abhinav Bharat Society carried out a few assassinations of British officials because they supported an armed uprising to topple British rule.

47. Option (2) is correct.

The purpose of Directive Principles of State Policy is to establish the social and economic frameworks necessary for citizens to live fulfilling lives. Through the creation of a welfare state, they also seek to build social and economic democracy. The State is required by Article 37 to apply the Directive Principles in the creation of laws, despite the fact that they are fundamental societal rights that are not subject to judicial review. Additionally, these ideas should serve as a guide for all federal and state executive agencies. Even the legal system must consider them while making decisions.

48. Option (1) is correct.

The land of golden pagodas is Myanmar. Around the 11th to the 13th century, during its golden age, its rulers erected countless exquisite temples and pagodas. Bagan is where the earliest temples were constructed.

49. Option (2) is correct.

The Book 'Zeba- An Accidental Superhero' was authored by Bollywood actor Hema Qureshi.

50. Option (2) is correct.

An acute respiratory infection of the lungs is pneumonia. It is also a pneumococcal disease brought on by the pneumococcus, also known as Streptococcus pneumoniae. It can arise from fungus, viruses, or bacteria in the air. Pneumonia is more likely to affect children with undeveloped immune systems (such as newborns) or weaker immune systems, such as those caused by malnutrition or illnesses like HIV. Contagious pneumonitis can be spread through sneezing or coughing. It can also be transferred by contaminated surfaces or by fluids, such as blood after childbirth.

Quantitative Aptitude

51. Option (1) is correct.

Since, A alone can do work in 5 days

B alone can do work in 15 days

and A, B and C can do work in 3 days

$$\therefore \text{C can do work alone in 1 day} = \frac{1}{3} - \left(\frac{1}{5} + \frac{1}{15} \right) = \frac{1}{3} - \frac{4}{15} = \frac{1}{15}$$

Ratio of proportion of work done is

$$\frac{1}{5} : \frac{1}{15} : \frac{1}{15} = 3 : 1 : 1$$

$$\text{Now, the amount of C} = \frac{1}{5} \times 250 = ₹ 50$$

52. Option (3) is correct.

Let the list price be ₹ x.

$$\text{Price after discount} = x \left(1 - \frac{10}{100} \right) = \frac{9x}{10}$$

Given that CP = ₹ 900, Profit = 20%

$$\therefore \text{SP} = 900 \left(1 + \frac{20}{100} \right) = 900 \times \frac{6}{5}$$

We have price after discount = SP

$$\Rightarrow \frac{9x}{10} = 900 \times \frac{6}{5}$$

$$\Rightarrow x = \frac{900 \times 6 \times 10}{5 \times 9} = ₹ 1,200$$

53. Option (2) is correct.

Let SP of 1 articles is ₹ 1

\therefore SP of 21 articles is = ₹ 21

SP of 28 articles = ₹ 28

CP of 28 articles = SP of 21 articles = ₹ 21

\therefore Profit = 28 - 21 = ₹ 7

$$\text{Profit \%} = \frac{7}{21} \times 100 = 33\frac{1}{3}\%$$

54. Option (4) is correct.

Last year sale = 41,800 cars

This year sale = 51,300 cars

Increased in sale = 51,300 - 41,800 = 9,500

$$\text{Per cent increased in sale} = \frac{9,500}{41,800} \times 100 = 22\frac{8}{11}\%$$

55. Option (3) is correct.

Speed of a boat with the current

$$= \text{Speed of a boat in still water} + \text{Speed of current}$$

$$= 20 + 5 = 25 \text{ km/h}$$

Distance = 100 km

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{100}{25} = 4 \text{ h}$$

56. Option (4) is correct.

Let principal be ₹ x

\therefore Amount = 2x

Time = 8 year

Interest = 2x - x = x

$$\therefore \text{S.I} = \frac{PRT}{100} \quad x = \frac{x.R.8}{100}$$

$$\Rightarrow x = \frac{100}{8} = \frac{25}{2} = 12\frac{1}{2}\%$$

57. Option (3) is correct.

Given that $(x-5)^2 + (y-2)^2 + (z-9)^2 = 0$

$\therefore x-5 = 0, y-2 = 0, \text{ and } z-9 = 0$

So, $x = 5, y = 2$ and $z = 9$

Now, $x + y - z = 5 + 2 - 9 = -2$

58. Option (3) is correct.

Given that $x + \frac{1}{x} = 3$

$$\left(x + \frac{1}{x} \right)^2 = 9$$

$$\Rightarrow x^2 + \frac{1}{x^2} + 2 = 9$$

$$\Rightarrow x^2 + \frac{1}{x^2} = 7$$

$$\Rightarrow \left(x^2 + \frac{1}{x^2}\right)^2 = 49$$

$$\Rightarrow x^4 + \frac{1}{x^4} + 2 = 49$$

$$\Rightarrow x^4 + \frac{1}{x^4} = 47$$

$$\Rightarrow \left(x^4 + \frac{1}{x^4}\right)^2 = (47)^2$$

$$\Rightarrow x^8 + \frac{1}{x^8} + 2 = 2,209$$

$$\Rightarrow x^8 + \frac{1}{x^8} = 2,207$$

59. Option (4) is correct.

In ΔPQR

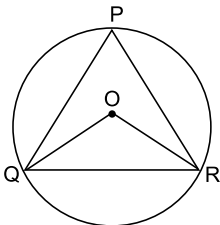
$$\angle P + \angle Q + \angle R = 180^\circ$$

$$\angle P + 40^\circ + 60^\circ = 180^\circ$$

$$\angle P = 80^\circ$$

$$\angle QOR = 2 \angle QPR$$

$$= 2 \times 80 = 160^\circ$$



60. Option (3) is correct.

Let angle of triangle be x , $\frac{2x}{3}$ and $3x$

$$\text{Now, } x + \frac{2x}{3} + 3x = 180^\circ$$

$$\frac{3x + 2x + 9x}{3} = 180^\circ$$

$$\Rightarrow x = \frac{180 \times 3}{14} = \frac{270}{7}$$

$$\text{Smallest angle} = \frac{2x}{3} = \frac{2}{3} \times \frac{270}{7} = \frac{180}{7} = 25\frac{5}{7}$$

61. Option (1) is correct.

Let α and β be $2x$ and x , respectively.

Given that $\alpha + \beta = 90^\circ$

$$\Rightarrow 2x + x = 90^\circ$$

$$\Rightarrow 3x = 90^\circ$$

$$\Rightarrow x = 30^\circ$$

$$\therefore \alpha = 60^\circ \text{ and } \beta = 30^\circ$$

$$\text{Now, } \frac{\cos \alpha}{\cos \beta} = \frac{\cos 60^\circ}{\cos 30^\circ} = \frac{\frac{1}{2}}{\frac{\sqrt{3}}{2}} = \frac{1}{\sqrt{3}} = 1 : \sqrt{3}$$

62. Option (4) is correct.

$$\begin{array}{r} 87 \overline{)13851 \overline{)159}} \\ \underline{87} \\ 515 \\ \underline{435} \\ 801 \\ \underline{783} \\ 18 \end{array}$$

Number should be added = $87 - 18 = 69$

63. Option (4) is correct.

Let the numbers be $3x$ and $5x$.

ATQ

$$\frac{3x + 6}{5x + 6} = \frac{2}{3}$$

$$\Rightarrow 9x + 18 = 10x + 12$$

$$\Rightarrow x = 6$$

Hence, numbers are 18 and 30.

64. Option (1) is correct.

Total weight of 10 parcels = 17 kg

Total weight of 11 parcels = $1.640 \times 11 = 18.04$ kg

So, weight of new parcel = $18.04 - 17 = 1.04$ kg

65. Option (4) is correct.

$$\begin{aligned} & \frac{x^3 + y^3 + z^3 - 3xyz}{x - y + z} \\ &= \frac{(x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)}{(x - y + z)} \\ &= \frac{(x + y + z)(2x^2 + 2y^2 + 2z^2 - 2xy - 2yz - 2zx)}{2(x - y + z)} \\ &= \frac{(x + y + z)[(x - y)^2 + (y - z)^2 + (z - x)^2]}{2(x - y + z)} \end{aligned}$$

Put $x = 999, y = 1,000$ and $z = 1,001$

$$= \frac{3,000(1 + 1 + 4)}{2 \times 1,000} = 9$$

66. Option (4) is correct.

$$\begin{aligned} & \frac{a}{1 - 2a} + \frac{b}{1 - 2b} + \frac{c}{1 - 2c} = \frac{1}{2} \\ \Rightarrow & \frac{2a}{1 - 2a} + \frac{2b}{1 - 2b} + \frac{2c}{1 - 2c} = 1 \quad [\text{multiply by 2 to both sides}] \\ \Rightarrow & \frac{2a}{1 - 2a} + 1 + \frac{2b}{1 - 2b} + 1 + \frac{2c}{1 - 2c} + 1 = 4 \\ \Rightarrow & \frac{2a + 1 - 2a}{1 - 2a} + \frac{2b + 1 - 2b}{1 - 2b} + \frac{2c + 1 - 2c}{1 - 2c} = 4 \\ \Rightarrow & \frac{1}{1 - 2a} + \frac{1}{1 - 2b} + \frac{1}{1 - 2c} = 4 \end{aligned}$$

67. Option (3) is correct.

because $AB = AC$

$\therefore \angle B = \angle C = x$ (say)

$$\angle A + \angle B + \angle C = 180^\circ$$

$$80^\circ + x + x = 180^\circ$$

$$2x = 100^\circ$$

$$\Rightarrow x = 50^\circ$$

$$\angle DBC = \angle DCB = \frac{1}{2} \times 50^\circ = 25^\circ$$

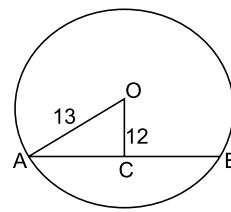
$$\angle BDC + \angle DBC + \angle DCB = 180^\circ$$

$$\angle BDC + 25^\circ + 25^\circ = 180^\circ$$

$$\angle BDC = 180^\circ - 50^\circ = 130^\circ$$

68. Option (1) is correct.

$$AC = \sqrt{13^2 - 12^2} = \sqrt{169 - 144}$$



$$= \sqrt{25} = 5$$

Length of a chord $AB = 2 \times 5 = 10$ cm.

69. Option (1) is correct.

$$\begin{aligned} 7 \cos^2 \theta + 3 \sin^2 \theta &= 4 \\ \Rightarrow 7 \cos^2 \theta + 3(1 - \cos^2 \theta) &= 4 \\ \Rightarrow 4 \cos^2 \theta + 3 &= 4 \\ \Rightarrow \cos^2 \theta &= \frac{1}{4} \\ \Rightarrow \cos \theta &= \frac{1}{2} \\ \Rightarrow \theta &= 60^\circ \end{aligned}$$

70. Option (2) is correct.

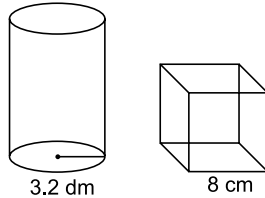
Let the height of the rod is h cm.

Volume of cylinder = $44 \times$
Volume of cube

$$\therefore \pi (32)^2 \times h = 44 \times (8)^3$$

(because 1 dm = 10 cm)

$$\Rightarrow h = \frac{44 \times 8 \times 8 \times 8 \times 7}{22 \times 32 \times 32} = 7 \text{ cm}$$



71. Option (4) is correct.

Let the height of the tower is h meter.

In rt. $\triangle ABC$

$$\tan \theta = \frac{h}{4}$$

$$\tan (90 - \theta) = \frac{h}{9}$$

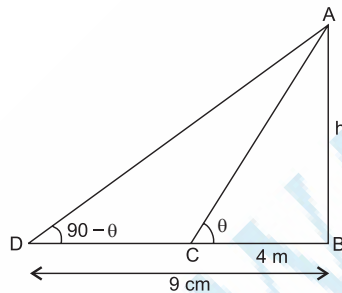
$$\cot \theta = \frac{h}{9}$$

$$\Rightarrow \tan \theta = \frac{9}{h}$$

$$\Rightarrow \frac{h}{4} = \frac{9}{h}$$

....(i)

[from (i)]



$$\Rightarrow h^2 = 36$$

$$\Rightarrow h = 6 \text{ cm}$$

72. Option (3) is correct.

The number of students whose marks less than 60

$$7 + 8 + 18 = 33$$

73. Option (1) is correct.

C.I	f_i	x_i	$f_i x_i$
0 - 20	7	10	70
20 - 40	8	30	240
40 - 60	18	50	900
60 - 80	4	70	280
80 - 100	13	90	1170
	50		2660

$$\text{Average marks} = \frac{2,660}{50} = 53.2$$

74. Option (1) is correct.

$$\begin{aligned} \text{Number of student who have scored between 39 and 80} \\ = 18 + 4 = 22 \end{aligned}$$

75. Option (3) is correct.

$$\begin{aligned} \text{Number of student who have scored more than 59} \\ = 4 + 13 = 17 \end{aligned}$$

$$\text{Total student} = 50$$

Percentage of students who have scored more than 59

$$\begin{aligned} &= \frac{17}{50} \times 100 \\ &= 34\% \end{aligned}$$

English Comprehension

76. Option (4) is correct.

Explanation: The word "emancipate" means "liberate, free, release." Example: "It is estimated that he emancipated 8,000 slaves." The meanings of the rest of the words are:

Rise: move from a lower position to a higher one; come or go up. Example: "The tiny aircraft rose from the ground."

Raise: "to lift or move to a higher position or level; build (a structure)." Example: "She raised both arms above her head."

Lift: "raise to a higher position or level, increase (a price or amount)." Example: "The building society lifted its interest rates by 0.75 of a point."

77. Option (3) is correct.

Explanation: The word "treachery" means "betrayal, disloyalty, perfidy." Example: "Many died because of his treachery." Students have to select an option that is opposite in meaning to the given word 'treachery'. Hence, the correct answer is 'loyalty'. The meanings of the rest of the words are:

Mulling: "think about (a fact, proposal, or request) deeply and at length." Example: "She began to mull over the various possibilities."

Rebellion: "an act of armed resistance to an established government or leader or authority". Example: "The authorities put down a rebellion by landless colonials"

78. Option (4) is correct.

Explanation: The correct spelling is 'adjournment'.

79. Option (2) is correct.

Explanation: This is a question of subject-verb agreement. 'One of the' is followed by a plural noun and a singular verb. Hence, the noun must be 'magnates' instead of 'magnate'. The sentence should be read as: "one of the richest business magnates..."

80. Option (3) is correct.

Explanation: The sentence conveys a sense that the matter is very urgent, and no delay should be there. But the given sentence states that few delays are acceptable, which is wrong. Change 'of few delays' to 'of no delays'.

81. Option (3) is correct.

Explanation: There is an error in the usage of the noun. In the sentence, after the indefinite article 'an' a plural noun 'alarm bells' is used, which is incorrect. The sentence conveys that the sea creates a sound like an alarm bell.

82. Option (2) is correct.

Explanation: This sentence tests your knowledge of phrasal verbs and idiomatic expression. The sentence conveys the meaning that, after signing the agreement, one can't retreat. The given options are:

- back in: To move (a vehicle) backwards into a parking space.
- back out: to withdraw from something, such as a given commitment, promise, plan, or situation.
- back up: To give one's support or assistance to someone or something.
- back at: having returned to some activity, especially school or work, after a hiatus.

Of all the given options, this meaning is conveyed by option (2).

83. Option (3) is correct.

Explanation: The sentence tests your understanding of word usage. The sentence is talking about gaining the reader's attention. Hence, the apt option is 'attract'.

84. Option (4) is correct.

Explanation: This sentence tests your knowledge of phrasal verbs and idiomatic expression. The sentence implies that a conversation took place between two people. The appropriate expression will be 'talk over', which means "to discuss something thoroughly or exhaustively". "Talk through" usually means to guide someone step by step through something. The phrase "talk over" usually means a more general discussion. In the given sentence, 'talk over' is better suited.

85. Option (4) is correct.

Explanation: This sentence tests your knowledge of phrasal verbs and idiomatic expression. The phrase "man of letters" means 'Someone who is educated and a scholar'. Example: As a man of letters, the professor could easily speak for hours on the works of Shakespeare.

86. Option (2) is correct.

Explanation: This sentence tests your knowledge of phrasal verbs and idiomatic expression. The phrase "under a cloud" means "under suspicion, ashamed." The only option closest to this meaning is option (2) 'sad'.

87. Option (4) is correct.

Explanation: This sentence tests your knowledge of phrasal verbs and idiomatic expression. The phrase "bear in mind" means "to remember, think about, or consider someone or something." Example: Regulators can be very picky about details, so bear that in mind when you're filling out the application.

88. Option (3) is correct.

Explanation: This sentence tests your knowledge of vocabulary and usage. A chief of a group of workmen is known as 'foreman'.

89. Option (2) is correct.

Explanation: This sentence tests your knowledge of vocabulary and usage. A "feud" is a long-term feud between two families. A battle is a military conflict between two or more armed forces that are well defined in duration, area, and force commitment. War is an intense armed conflict between Militaries, Governments characterised by extreme violence, aggression, destruction and mortality that stretches for many months or years.

90. Option (4) is correct.

Explanation: This sentence tests your knowledge of vocabulary and usage. Animals without a backbone are known as 'invertebrates'. Marsupials are mammals of an order whose members are born incompletely developed and are typically carried and suckled in a pouch on the mother's belly, like kangaroos. Mammals are warm-blooded vertebrate animals of a class that is distinguished by the possession of hair or fur, females that secrete milk for the nourishment of

the young, and (typically) the birth of live young.

91. Option (3) is correct.

Explanation: The sentence is a request to someone to tone down; it is not about someone's ability to tone down. Hence, the correct expression is: "Can you please tone down your excitement?"

92. Option (2) is correct.

Explanation: The expression 'uneasy lies the head that wears a crown' means that you're dealing with stress and anxiety caused by carrying a heavy burden in your life. "The person feels stressed and on edge all the time and operates under huge pressure."

93. Option (3) is correct.

Explanation: Bursting at the seams means "extremely full; full to the breaking points." Example: Because of all the delays this morning, the train station is bursting at the seams. Good luck finding a place to sit!

94. Option (1) is correct.

Explanation: The correct idiomatic expression is 'to all of you'. Hence, the correct answer is (1). The rest of the options are incorrect because the needed preposition is missing.

95. Option (3) is correct.

Explanation: This sentence tests your knowledge of vocabulary and usage. A person who is easily taken-in and tricked by others is known as gullible, not foolish. Hence, 'foolish' should be replaced by 'gullible'.

96. Option (2) is correct.

Explanation: The passage is primarily about human beings' dependency on energy and the exhaustible sources leading to energy crises. Hence, the central idea of the passage is "a looming energy crisis."

97. Option (3) is correct.

Explanation: Refer to the line: "Biomass is used both for heating and cooking." From this line of the passage, we can easily deduce that biomass is used in homes.

98. Option (4) is correct.

Explanation: The meaning of 'ubiquitous' is 'present everywhere'. The meaning of 'omnipotent' is 'all powerful'. "All knowledge" is the definition of "omniscient." The meaning of 'omnifarious' is 'comprising or relating to all sorts or varieties.'

99. Option (3) is correct.

Explanation: From the second paragraph of the passage, we can deduce that future hope lies in sustainable energy resources like, solar and wind energy.

100. Option (2) is correct.

Explanation: The passage focuses on the crises that arise as a result of humanity's reliance on finite energy resources. The solution to this problem is mentioned in the penultimate paragraph: "If we are to survive on this planet, we have to make a transition to sustainable energy sources."