## CFY ( $\mathbf{9}^{\text {TH }}$ )

## IG PAPER - 1

1. SECTION 1 contains 100 questions of Mental ability.
2. Each question carries +3 mark and there is negative marking ( -1 ).
$\square$
Enrolment No. :
Name:
Date of Examination :

This Section contains 100 multiple choice questions numbered 1 to 100 . Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.

1. In certain code, DEAF is written as 3587 , and FILE is written as 7465 . How is IDEAL written in that code?
(A) 43568
(B) 43586
(C) 63548
(D) 48536
2. If $E=5$ and $H O T E L=12$, how will you code $\angle A M B$ ?
(A) 7
(B) 10
(C) 26
(D) 28
3. If, in a code, MIND becomes KGLB and ARGUE becomes YPESC, then what will DIAGRAM be in that code?
(A) BGYEPYK
(B) BGYPYEK
(C) GLPEYKB
(D) LKBGYPK

Directions (Questions 4-6) : Read the following information to answer these questions.
In a certain code language, '481' means 'sky is blue', '246' means 'sea is deep ' and '698' means 'sea looks blue'.
4. What number is the code for 'deep'?
(A) 1
(B) 2
(C) 4
(D) 6
5. What number is the code for 'blue'?
(A) 1
(B) 6
(C) 8
(D) 9
6. Which word is coded as '4'?
(A) Sea
(B) Sky
(C) is
(D) deep
7. If ' $x$ ' stands for 'addition' ‘<' for 'subtraction', ' + ' for division, '>' for multiplication, ' - ' for 'equal to', ' $\div$ ' for 'greater than' and ' $=$ ' for 'less than' then state which of the following is true?
(A) $3 \times 4>2-9+3<3$
(B) $5 \times 3<7 \div 8+4 \times 1$
(C) $5>2+2=10<4 \times 8$
(D) $3 \times 2<4 \div 16>2+4$
8. The given equation becomes correct due to the interchange of two signs. Find the alternative which specifies that interchange $5+6 \div 3-12 \times 2=17$
(A) $\div$ and $\times$
(B) + and $\times$
(C) + and $\div$
(D) + and -
9. If 'bangle' is called 'cassette', 'cassette' is called 'table', 'table' is called 'game', and 'game' is called 'cupboard' , then which is played in the tape recorder?
(A) Bangle
(B) Cassette
(C) Table
(D) Cupboard
10. If 'water' is called 'food', 'food' is called 'tree', 'tree' is called 'sky', 'sky' is called 'wall' , on which of the following does a fruit grow?
(A) Water
(B) Food
(C) Tree
(D) Sky
11. I am facing south. I turn right and walk 20 m . Then I turn right and walk 10 m . Then I turn left and walk 10 m and then turning right walk 20 m . Then I turn right again and walk 60 m . In which direction am I from the starting point?
(A) North
(B) North West
(C) East
(D) North East
12. A man is performing yoga with his head down and legs up. His face is towards the west. In which direction will his left hand be?
(A) North
(B) South
(C) East
(D) West
13. A man is facing north-west. He turns $90^{\circ}$ in the clockwise direction and then $135^{\circ}$ in the anticlockwise direction. Which direction is he facing now?
(A) East
(B) West
(C) North
(D) South

Directions (Questions 14-16) : In each of these letter series, some of the letters are missing which are given in that order as one of the alternatives below it. Choose the correct alternative.
14. _ bcc _ $a c_{-} a a b b_{-} a b_{-} c c$
(A) $a \mathrm{ab} c a$
(B) abaca
(C) bacab
(D) bcaca
15. mnonopqopqrs
(A) mnopqr
(B) o qrstu
(C) pqritu
(D) qrituv
16. $a_{-} c a_{-} b c_{-} b c c \_b c a$
(A) bbaa
(B) bbab
(C) aabb
(D) baba

Directions (Questions $17 \mathbf{- 2 5 )}$ : In each of these questions, there is some relationship between the two terms (figures, objects, letter clusters or numbers) on the left of the signs (::). The same relationship exists between the two terms on the right of the sign (::) of which one is missing. Find the missing term from the four alternatives.
17.

(A)

(B)

(C)

: :
?
 $?$


(A)

(B)

(C)

(D)
19. $14: 9:: 26: ?$
(A) 12
(B) 13
(C) 15
(D) 31
20. 6:18::4:?
(A) 2
(B) 6
(C) 8
(D) 16
21. $16: 56:: 32: ?$
(A) 96
(B) 112
(C) 118
(D) 128
22. Oasis: Sand : : Island : ?
(A) River
(B) Sea
(C) Water
(D) Waves
23. Jungle: Zoo:: Sea:?
(A) Aquarium
(B) Harbour
(C) Water
(D) Fishery
24. CLOSE: DNRWJ::OPEN:?
(A) PRHR
(B) PRJQ
(C) RPJB
(D) RZWR
25.
(A) 120
(B) 150
(C) 200
(D) 256

Directions (Questions 26 - 33) : In these questions, four items (figures, objects, letter clusters, numbers) are given. Three of them are alike in a certain way. Find the one which is different from the others.
26.
(A) Wheat
(B) Paddy
(C) Jowar
(D) Mustard
27.
(A) Honest
(B) Intelligent
(C) Traitor
(D) Wise
28.
(A) 35
(B) 49
(C) 140
(D) 350
29. (A) 246
(B) 356
(C) 527
(D) 639
30. (A) BDI
(B) HKA
(C) LMO
(D) PQS
31.
(A) DG2
(B) PY8
(C) JR6
(D) RV3
32.

(A)

(B)

(C)

(D)
33.


(B)

(C)

(D)

Directions (Questions 34 -41) : In each of these questions a series is given. Find out the missing term of the series
34. $5,2,7,9,16,25, ?$
(A) 41
(B) 45
(C) 48
(D) 52
35. $3,15, ?, 63,99,143$
(A) 27
(B) 35
(C) 45
(D) 56
36. $3,7,23,95, ?$
(A) 62
(B) 128
(C) 479
(D) 575
37. PMT, OOS, NQR, MSQ, ?
(A) LUP
(B) LVP
(C) LVR
(D) LWP
38. a, d, c, f, ?, h, g, ?, i
(A) $e, j$
(B) e, k
(C) $f, j$
(D) $\mathrm{j}, \mathrm{e}$
39.
(A) DVENT
(B) VENTURE
(C) VENTUR
(D) DVENTU
40.



(A)

(B)

(C)

(D)
41.



(B)

(C)

(D)

Directions (Questions 42 - 45): Each of these questions consists of a question and two statements numbered I and II given below it. Read both the statements and give answer.
(A) If the data in statement I alone is sufficient to answer the question; while the data in statement
II alone is not sufficient to answer the question
(B) If the data in statement II alone is sufficient to answer the question; while the data in statement
I alone is not sufficient to answer the question
(C) If the data either in statement I alone or in statement II alone is sufficient to answer the question
(D) If the data in both statements I and II together are not sufficient to answer the question.
42. What is the code for 'sky' in the code language?
I. In the code language, 'sky is clear' is written as 'de ra fa'.
II. In the same code language, 'make it clear' is written as 'de ga jo'.
43. How is $J$ related to $P$ ?
I. $M$ is brother of $P$ and $T$ is sister of $P$.
II. P's mother is married to J's husband who has one son and two daughters.
44. Among A, B, C, D, E and F, who is the heaviest?
I. A and $D$ are heavier than $B, E$ and $F$ but none of them is the heaviest
II. A is heavier than D but lighter than C .
45. How many visitors saw the exhibition yesterday?
I. Each entry pass holder can take up to three persons with him/ her.
II. In all 243 passes were sold yesterday.

Directions (Questions 46-49): In each of these questions there are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and decide which of the two given conclusions logically follows from the two given statements. Give answer:
(A) if only conclusion I follows
(B) If only conclusion II follows
(C) if neither I nor II follows
(D) If both I and II follow.
46. Statements: 1. Some players are singers.
2. All singers are tall.

Conclusions: I. Some players are tall
II. All players are tall.
47. Statements : 1. Some hats are caps
2. Some caps are mats.

Conclusions: I. Some caps are hats
II. Some mats are caps.
48. Statements: 1. Some vegetables are fruits
2. No fruit is black.

Conclusions: I. Some fruits are vegetables
II. No vegetable is back.
49. Statements : 1. Some fools are intelligent.
2. Some intelligent are great.

Conclusions: I. Some fools are great
II. All great are intelligent.
50. At what time between 5 PM to $5: 30 \mathrm{PM}$ are the hands of a clock at an angle of $30^{\circ}$ ?
(A) $5: 21 \frac{9}{11} \mathrm{pm}$
(B) $5: 25 \mathrm{pm}$
(C) $5: 24 \frac{9}{11} \mathrm{pm}$
(D) $5: 29 \frac{1}{11} \mathrm{pm}$
51. How many times do the two hands of a clock coincide in a day?
(A) 11
(B) 12
(C) 22
(D) 44
52. Which year after 1957 has the same calendar as 1957 ?
(A) 1961
(B) 1962
(C) 1963
(D) 1964
53. Which day of the week did India get her independence?
(A) Wednesday
(B) Friday
(C) Saturday
(D) Thursday

Directions (Questions 54 - 59): Insert the missing character.
54.

(A) 1
(B) 731
(C) 1625
(D) 2031
55.



(A) 6
(B) 9
(C) 12
(D) 18
56.


| 24 |
| :---: |
| 6 |
| 2 |
| 1 |
| (A) 80 |

(B) 32

(C) 36

(D) 117
57.
(A) 80
(B) 85
(C) 91
(D) 96
58.

| 26 | 18 | 10 |
| :---: | :---: | :---: |
| 11 | 9 | 7 |
| 5 | 4 | 1 |
| 10 | 5 | $?$ |

(A) 2
(B) 4
(C) 5
(D) 6
59.

| B | G | N |
| :--- | :--- | :--- |
| D | J | R |
| G | N | ? |
| (A) $\cup$ | (B) $V$ | (C) $W$ |

60. In a group of 15 people, 7 read French, 8 read English while 3 of them read none of these two. How many read both of these two?
(A) 0
(B) 3
(C) 4
(D) 5
61. Today is Varun's birthday. One year from today he will be twice as old as he was 12 years ago. How old is Varun today?
(A) 20 years
(B) 22 years
(C) 25 years
(D) 27 years
62. A student got twice as many sums wrong as he got right. If he attempted 48 sums in all, how many did he solve correctly?
(A) 12
(B) 16
(C) 18
(D) 24
63. Find the mirror-image of:

(A)

(C)


Space for rough work

Directions (Questions 64-65): Refer to the following diagram

64. How many triangle are there in the figure?
(A) 28
(B) 29
(C) 30
(D) 32
65. How many lines are there in the figure?
(A) 10
(B) 12
(C) 16
(D) 24

Directions (Questions 66-67): These questions are based on the following illustrations.

(i)

(ii)

(iii)

(iv)
66. The symbol at the bottom of (iv) is:
(A)
O
(B)

(C)

(D)

67. The symbol opposite the face having the symbol $=$ is:
(A)

(B)

(C)

(D)


Directions (Questions 68 -70): A cube is coloured red on all faces. It is cut into 64 smaller cubes of equal size.
68. How many cubes have no face coloured?
(A) 24
(B) 16
(C) 8
(D) 0
69. How many cubes have only one face coloured?
(A) 4
(B) 8
(C) 16
(D) 24
70. How many cubes have three faces coloured?
(A) 24
(B) 16
(C) 8
(D) 4
71. How many dots lie opposite the face having three dots, when the given figure is folded to form a cube?
(A) 2
(B) 4
(C) 5
(D) 6


Directions (Questions 72-76) : These questions are based on the following information:
There are five persons $P, Q, R, S$ and $T$. One is football player, one is chess player and one is a hockey player. P and S are unmarried ladies and do not participate in any game. None of the ladies play chess or football. There is a married couple in which $T$ is the husband. $Q$ is the brother of $R$ and is neither a chess players nor a hockey player.
72. Who is the football player?
(A) P
(B) Q
(C) $R$
(D) S
73. Who is the hockey player?
(A) Q
(B) R
(C) S
(D) T
74. Who is the chess player?
(A) Q
(B) R
(C) S
(D) T
75. Who is the wife of $T$ ?
(A) P
(B) Q
(C) $R$
(D) S
76. The three ladies are:
(A) P, Q, R
(B) Q, R, S
(C) P, Q, S
(D) P, R, S

Directions (Questions 77-81): Read the information given below and answer the questions that follow.
I. A, B, C, D, E and F are six members of a family
II. One couple has parents and their children in the family
III. A is the son of $C$ and $E$ is the daughter of $A$.
IV. $D$ is the daughter of $F$ who is the mother of $E$.
77. Who are the male members of the family?
(A) A and C
(B) C and F
(C) A, B and D
(D) cannot be determined
78. Which of the following pairs are the parents of the children?
(A) BC
(B) CF
(C) BF
(D) $A F$
79. Which of the following pairs are the parents of the couple?
(A) $A B$
(B) BC
(C) AF
(D) FC
80. How many female members are there in the family?
(A) Two
(B) Three
(C) Four
(D) Cannot be determined
81. What relationship do $D$ and $E$ bear to each other?
(A) Sister and Brother
(B) Mother and Son
(C) Grand mother and grand daughter
(D) Sister

Directions (Questions 82 - 84) : These questions are based on the diagram below:-

82. Which number is inside all the three figures?
(A) 2
(B) 6
(C) 7
(D) 8
83. What is the sum of the numbers which belong to two figures only?
(A) 10
(B) 14
(C) 18
(D) None of these
84. Multiply the number which belongs to the square only with the sum of the numbers which belong to the trapezium only. What is the result?
(A) 45
(B) 60
(C) 75
(D) 85

Directions (Questions 85 -87): Choose the Venn Diagram which best illustrates the relationship between the three classes in each of these questions

(A)

(B)

(C)

(D)
85. Sun, Planets, Earth
86. Rhombus, Quadrilaterals, Polygons

## 87. Dogs, Cats, pets

88. Which figure can be formed from the pieces given in figure $X$ ?

89. How will the key figure look after rotation?

90. Spot the embedded figure:-

(X)

(A)

(B)

(C)

(D)

Directions (Questions 91 -92): Find the figure which satisfies the same condition of placement of the dot as in fig (X):
91.

92.


(A)

(B)

(C)

(D)

Directions (Questions 93-94) : Find the water image.
93.
DISC
${ }^{4}$ CSID
(c) DICC
(1) 9210
(0) DIJ
94. Vertical inversion.

(A)

(B)

(C)

(D)
95. In a row of boys, Rajan is tenth from the right and Suraj is tenth from the left. When Rajan and Suraj interchange positions, Suraj will be twenty -seventh from the left. What will be Rajan's positions from the right?
(A) Twenty sixth
(B) Twenty seventh
(C) Twenty eight
(D) Twenty Ninth
96. Praveen ranks $15^{\text {th }}$ from the top of a class of 60 boys, What is his position from the bottom?
(A) 45
(B) 46
(C) 47
(D) 48

Directions (Questions 97 -98): These questions are based on the letters of the word: "DISOBEDIENCE"
97. How many sets of two letters are as much apart form each other as they are in the alphabetical order?
(A) 1
(B) 2
(C) 3
(D) 4
98. If a meaningful word can be formed with the $2^{\text {nd }}, 6^{\text {th }}, 10^{\text {th }}, 11^{\text {th }}$ and $12^{\text {th }}$ letters of the word, which would be the fourth letter of that word?
(A) I
(B) E
(C) N
(D) C

Directions (Questions 99-100): Complete the pattern
99.


(A)

(B)

(C)

(D)
100.


(A)

(B)

(C)

(D)

## IQ PAPER-1

## ANSWER KEY

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

