

International Olympiad Foundation (IOF)
(IOLYMPIADS LLP)

Certifying Talents Across World



Question Paper &
Answer Sheet

CLASS-12

 **IFRAO**
International Foundation
Reasoning & Aptitude
Olympiad

**International Foundation
Reasoning & Aptitude Olympiad (IFRAO)
CLASS – 12
SAMPLE PAPER**

**SECTION-A
VERBAL REASONING**

1. Find the odd one out in the given question.
A. Myanmar
B. Madrid
C. Hanoi
D. Bangkok

2. Find the odd one out which does not share that common characteristic with the other three.
A. UVW
B. BCD
C. PQR
D. XYZ

3. Directions for question: Read the argument given in the following questions and mark the appropriate answer
Plato said that art represents 'general truths' about human nature. Our city councilman is arguing in favour of the artistry — a giant mural in front of a jeep dealership, portraying a variety of four-wheel-drive vehicles. He cites Plato's conception of art as his support.
Which of the following questions weakens the above argument?
A. Can a city councilman understand Plato?
B. Which general truths about human nature does a four-wheel-drive mural not represent?
C. Could Plato have predicted a modern society filled with sophisticated machines?
D. To what extent are four-wheel-drive vehicles representative of a general advance in modern technology?

4. Direction - An interrogative sentence is followed by two arguments - one beginning with 'Yes' and the other with 'No'. You are to pick one of the following answer choices which is applicable to each of the following questions.

Should everyone in India work according to his capacity and get paid according to his needs?

I. Yes, because this is the only method to eradicate poverty from India.

II. No, because it will be unjust to the hardworking.

Mark:

- A. if only argument I is forceful
B. if only argument II is forceful
C. if both the arguments I and II are forceful
D. if neither argument I nor II is forceful
5. Directions : In the following questions, two statements are given which bear a cause and effect relationship. The four options A., B., C. and D. exhibit this nature of relationship make the answer as(Choose the correct option)
- Statement I:** The Delhi police have submitted the Israeli car blast report to home minister P Chidambaram, who has briefed the media in New Delhi.
- Statement II:** Home minister says a motorcycle rider attached a device to the right hand side rear door of the Innova and the explosion happened in seconds.
- A. if statement I is the cause and statement II is its effect.
B. if statement II is the cause and statement I is its effect.
C. if both statements I and II are independent causes.
D. if both statements I and II are independent effects.
6. In a code 'CAT' is written as '24' . How would 'BAT' be written in that code?
- A. 32
B. 21
C. 23
D. 42
7. If the watch shows a time of 4:40 and the hours hand is in the East direction then the minute hand will be in _____.
- A. West
B. South
C. North
D. East

8. Direction: question given below has a problem and two statements numbered I and II giving certain information. You have to decide if the information given in the statements is sufficient for answering the problem. Indicate your answer(Choose the correct option)

What is the time when the train will leave?

I. The train will leave between 4 pm and 5 pm

II. The train will leave exactly between 4 and 5 pm.

- A. If the data in statement I alone are sufficient to answer the question
B. If the data in statement II alone are sufficient to answer the question.
C. If the data even in both the statements together are not sufficient to answer the question.
D. If the data in both the statements are together needed.
9. A walks 2 km southward and takes a right turn and walks 5 km, then turns left and walks 3 km and again turning left walks 5 km. In which direction is he now from the starting point?
A. South-east
B. South
C. East
D. West
10. Uttam ran 40 m east, then turned right and ran 20 m and then turned to right and ran 18m and again turned to left and ran 10 m and then turned to left, ran 24 m and finally turned to left and ran 12 m. Now he is running towards which direction?
A. West
B. North
C. South
D. East

Direction : A family consists of 5 members: P, Q, R, S and T. The last one T has two sons, an unmarried daughter and a daughter-in-law. P is the brother-in-law of above mentioned daughter-in-law. Q's sister is not happy with Q's wife. But P and his father support Q's wife S.

11. Who is the daughter of T?
A. P
B. Q
C. R
D. S

12. Direction : A family consists of 5 members: P, Q, R, S and T. The last one T has two sons, an unmarried daughter and a daughter-in-law. P is the brother-in-law of above mentioned daughter-in-law. Q's sister is not happy with Q's wife. But P and his father support Q's wife S.

What is the relation of P with S?

- A. Brother
B. Brother-in-law
C. Sister-in-law
D. Sister
13. Read the following information carefully and answer the questions that follow.
'X - Y' means 'X is the husband of Y'.
'X + Y' means 'X is the daughter of Y'.
'X x Y' means 'X is the brother of Y'.

If A +B x C, then which of the following is true?

- A. A is the daughter-in-law of C
B. A is the aunt of C
C. A is the niece of C
D. A is the daughter of C
14. Find the choice that would replace the question mark in the question.
AG, LR, WC, HN, ?
A. SX
B. RY
C. SY
D. TX

15. Find the choice that would replace the question mark in the question.
LRX, DJP, VBH, NTZ, ?
A. ELS
B. FMR
C. GKS
D. FLR

16. In the question, certain code values are assigned to a word and you have to find out the code which will be used for the given word, from the given options.

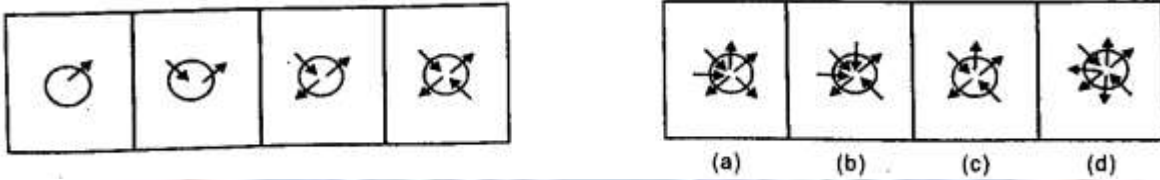
If MERCHANT is coded as NDSBIZOS, then CANCER would be coded as

- A. BZMBDQ
B. BBMBDQ
C. DBODFS
D. DZOBFQ

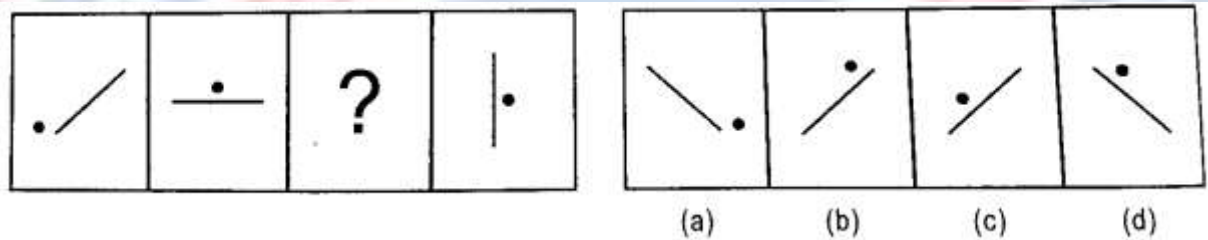
17. In a certain code, 23 is coded as OX, 529 as FOR, and 0229 as DOOR, how is 235290 coded?
- A. DOXFOR
B. FORDOX
C. OXFORD
D. FOXORD
18. The question has a main statement followed by four statements labelled P, Q, R and S. Choose the ordered pair of statements where the first statement implies the second and the two are logically consistent with the main statement.
- Sanu likes either Lemon or Orange.**
- P- Sanu does not like lemon.**
- Q- Sanu likes lemon.**
- R- Sanu likes orange.**
- S- Sanu does not like orange.**
- A. PQ
B. RS
C. PR
D. QR
19. If in the word **EXTRAORDINARY**, the letters are arranged in the alphabetical order then which of the following will be the fourth letter to the left of the third letter from left?
- A. O
B. N
C. R
D. A
20. In a certain code language, '246' means 'He is cool', '653' means 'Cool and bright' and '849' means 'India is hot'. Then code for 'is' in that language would be
- A. 2
B. 6
C. 4
D. 8

SECTION-B NON VERBAL REASONING

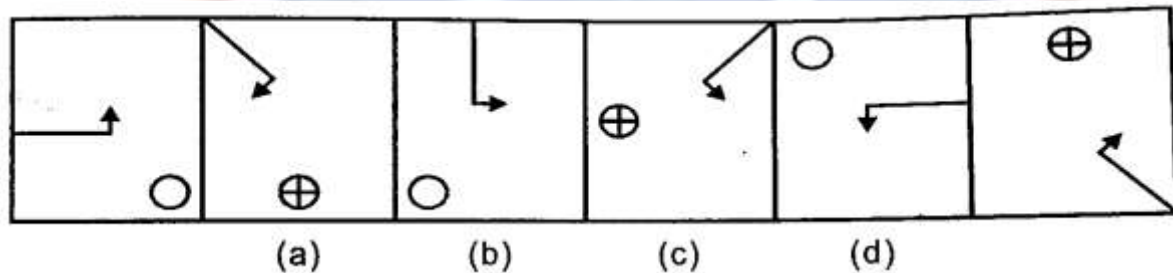
21. Select one figure from the answer-set figures after deciphering the pattern of the problem series.



- A. (a)
B. (b)
C. (c)
D. (d)
22. Find out which one of the answer figures should be in place of the question mark.



- A. (a)
B. (b)
C. (c)
D. (d)
23. A series begins with the unnumbered figure on the extreme left. One and only one of the four numbered figures (a to d) in the series does not fit into the series. The two unnumbered figures are on the extreme left and the extreme right, fit into the series. You have to take as many aspects into account as possible of the figures in the series and find out the figure which does not fit into the series. The number of the figure is the answer.

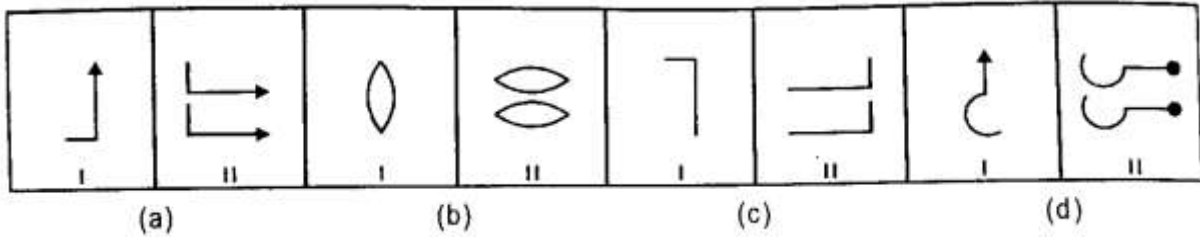


- A. (a)
B. (b)

C. (c)

D. (d)

24. In question, three out of four figures, element I is related to element II in a particular way. Find out the figure in which the element I is not so related to element II.



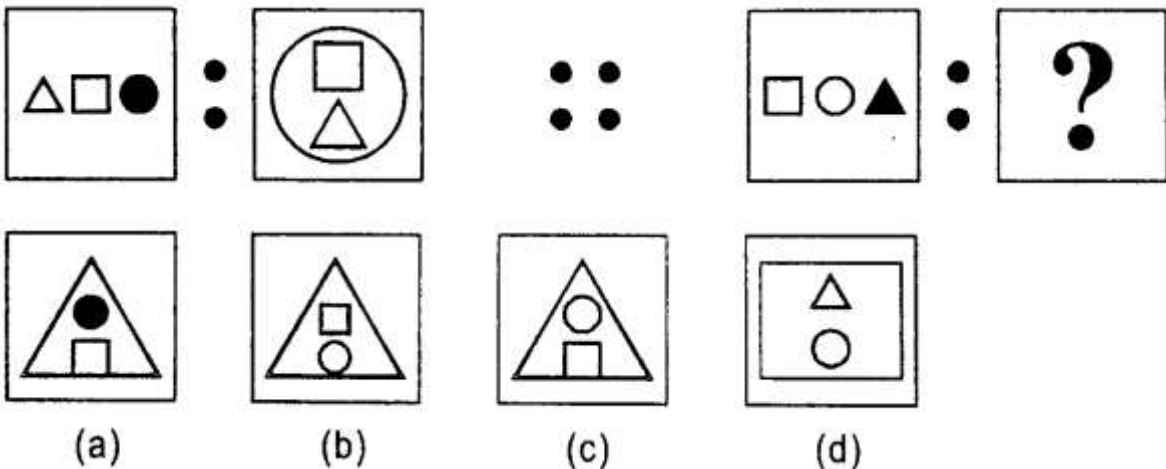
A. (a)

B. (b)

C. (c)

D. (d)

25. In the following question there are two sets of figures. The set on the top is Problem figures and the set given under it is Answer figures. The Problem figures are presented in two units. The first unit contains two figures which are related to each other by a certain logic and the second unit contains one figure and a question mark. You have to find out which of the Answer figures should replace the question mark.



A. (a)

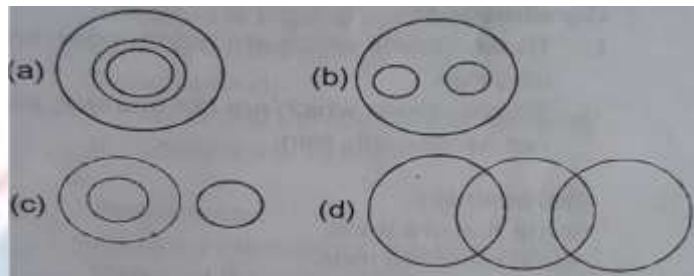
B. (b)

C. (c)

D. (d)

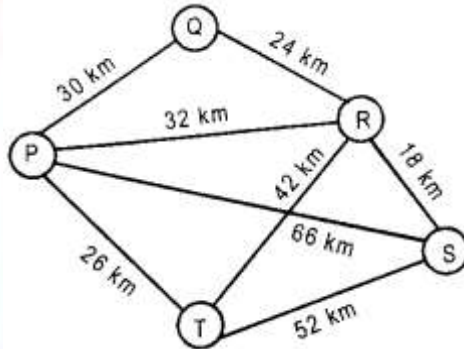
26. Choose the diagram that best illustrates the relationship among the three given classes in the question.

Eatables, Meat, Venison



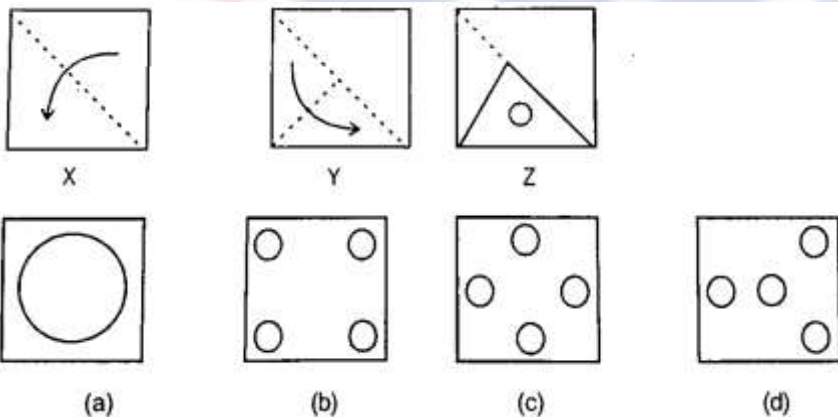
- A. a
B. b
C. c
D. d

27. The following figure is a geometrical representation of a route map. Refer to this diagram and answer the following question.



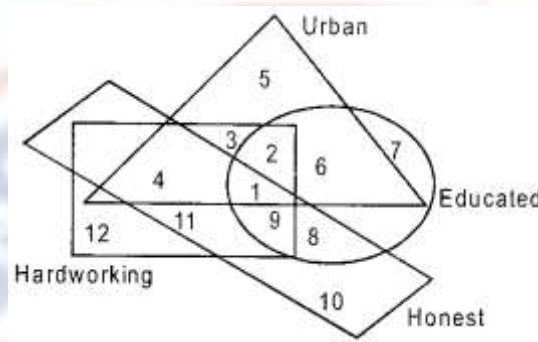
If Nidhi drives from P to R via Q only, with a speed of 36km/hr, then how much time will it take to reach R?

- A. 54 min
B. 1 hr 30 min
C. 2 hr 24 min
D. 1 hr 42 min
28. Consider the following three figures, marked X, Y, Z showing one fold in X another in Y and cut in Z. From amongst answer figures A., B., C. and D.. Select the one showing the unfolded position of Z.



- A. (a)
- B. (b)
- C. (c)
- D. (d)

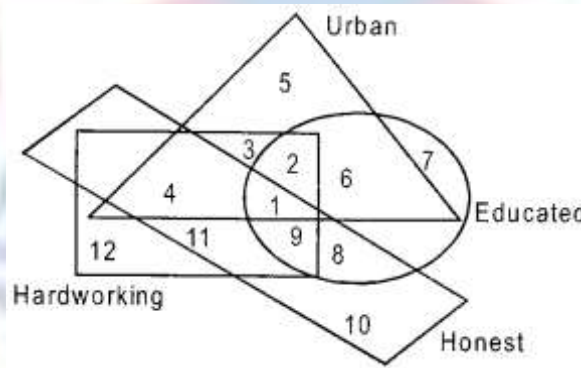
29. Answer the questions based on the following diagram.



Urban people who are Hardworking and Educated but not Honest are indicated by

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

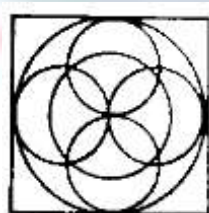
30. Answer the question based on the following diagram.



Educated, Hardworking and Honest Urban people are indicated in the diagram by

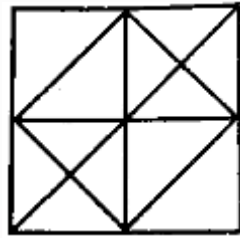
- A. 1
- B. 2
- C. 3
- D. 4

31. The number of circles in the figure is



- A. 6
- B. 5
- C. 2
- D. 3

32. How many triangles are there in the figure?

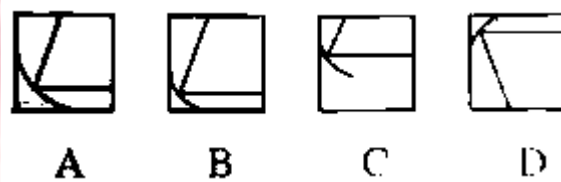


- A. 26
 B. 25
 C. 28
 D. 27

33. Complete the Pattern

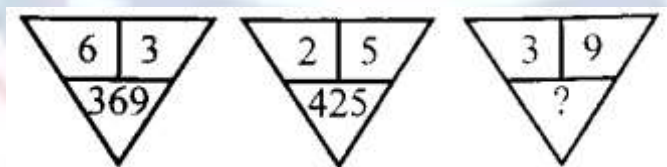


Answer figures



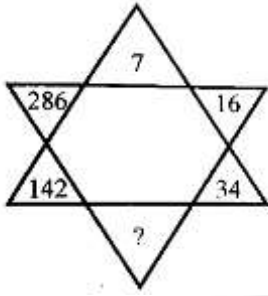
- A. A
 B. B
 C. C
 D. D

34. In the question given below which one number can be placed at the sign of interrogation?



- A. 693
 B. 939
 C. 981
 D. 993

35. Choose the correct option



- A. 70
 B. 68
 C. 56
 D. 92

36. In the question given below which one number when placed at the sign of interrogation shall complete the number matrix.

1	4	9	?
1	2	3	4
2	4	6	?

- A. 16 and 8
 B. 25 and 5
 C. 36 and 4
 D. 49 and 7

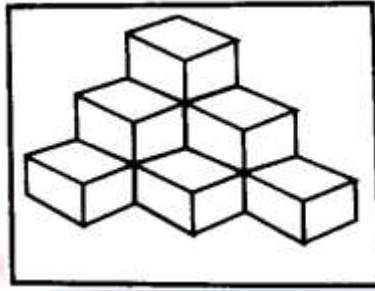
37. In the question given below, a word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in the 2 matrices given below. The columns and rows of matrix I are numbered from 0 to 4 and that of matrix II from 5 to 9. A letter from these matrices can be represented first by its row and next by column number. Identify the set for the word given in each question.

	0	1	2	3	4		5	6	7	8	9
0	C	A	F	E	D	5	T	R	R	S	M
1	C	D	A	E	D	6	S	T	M	R	S
2	D	E	C	F	E	7	R	S	P	T	P
3	A	D	D	D	C	8	P	S	T	R	T
4	D	C	A	C	A	9	P	M	P	M	S

FARM

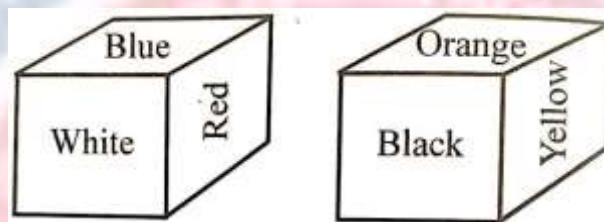
- A. 02, 30, 85, 65
 B. 20, 31, 76, 68
 C. 23, 12, 68, 96
 D. 44, 43, 87, 57

38. The number of cubes arranged one over the other in this figure will be:



- A. 8
- B. 6
- C. 5
- D. 10

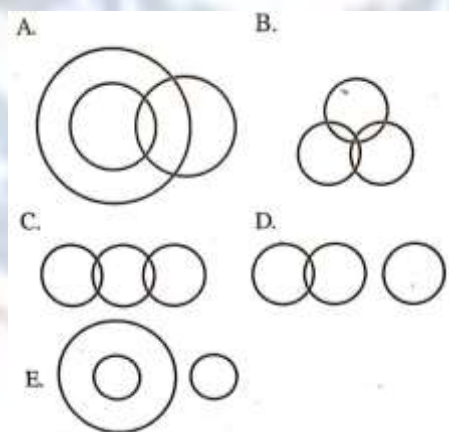
39. Six sides of a cube are coloured in the following manner



If blue and orange are opposite and red is on the top, which colour will be at the bottom?

- A. Orange
- B. Purple
- C. Black
- D. Yellow

40. From the five logical diagrams select one which best illustrates the relationship among **Sisters, Cousins, Females**



- A. A
- B. B
- C. C
- D. D

SECTION – C

Mathematical Reasoning & Data Interpretation

41. In the following question, find the wrong term in the series.

7, 13, 27, 53, 106, 213, 427

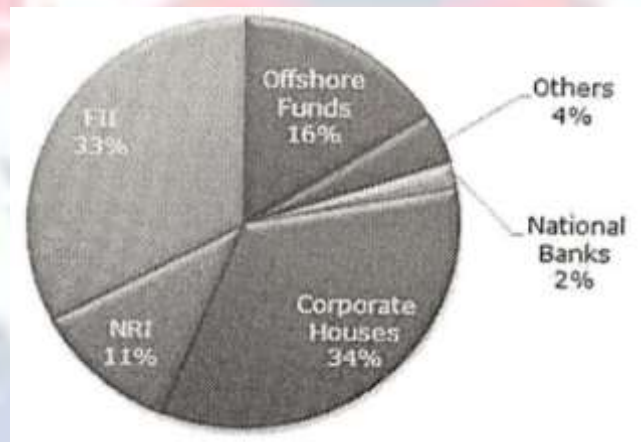
- A. 13
B. 106
C. 213
D. 427

42. Choose the correct option.

94, 166, 258, ?, 4912

- A. 3610
B. 1644
C. 1026
D. 516

Direction (43 to 46) : Following is a pie-chart representing investments made by NRI's through various means:



43. How many degrees should be there in the central angle for the corporate sector?

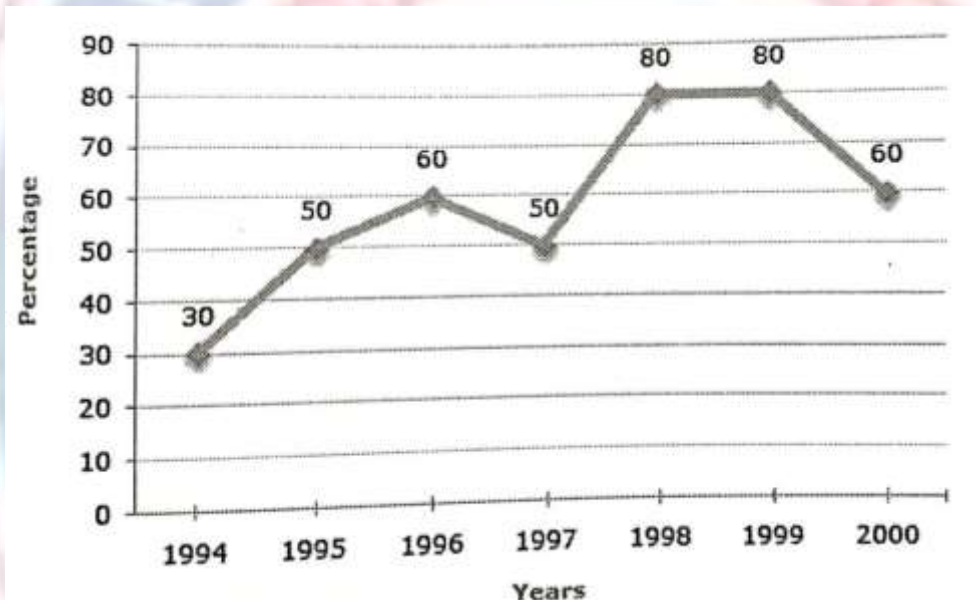
- A. 105
B. 122.4
C. 111
D. 133

44. If Rs 4,000 crore is the investment made by NRI's, accordingly investments by corporate houses and FII's cumulatively would be:

- A. 24,200 crore
B. 25,123 crore
C. 24,363 crore
D. 25,620 crore

45. Percentage of total investment derived from FII's and NRI's:
 A. 12% B. 36%
 C. 23% D. 44%
46. Cumulative investment other than FII and corporate house is 3,35,000 crore, accordingly investment made by others would be?
 A. 40,606.06 B. 42,000.06
 C. 41,211.7 D. 44,000.05

Direction 47 to 50:- Following is a graphical representation of percentage of candidates qualifying to show up in an examination since 1994-2000.



47. Difference between percent of candidates qualified to show up was minimum in which amongst the following years?
 A. 1994 and 1995 B. 1998 and 1999
 C. 1997 and 1998 D. 1999 and 2000
48. Qualifying number of candidates was same in which amongst the following years?
 A. 1995 and 1997 B. 1998 and 1999
 C. 1995 and 2000 D. Cannot be determined

49. Number of candidates qualified in 1998 was 21,200, number of candidates appearing in 1998 were:
- A. 25,200
B. 27,100
C. 26,500
D. 32,300
50. Cumulatively, candidates qualifying in 1999 and 2000 combined were 33,500 and number of candidates appearing in the year 1999 was 26,500. The number of candidates in 2000?
- A. 17,000
B. 23,100
C. 20,500
D. 25,700





International Olympiad Foundation

Certifying Talents Across World

IFRAO

International Foundation Reasoning
& Aptitude Olympiad

ANSWER SHEET

Question No.	Answer	Question no.	Answer
1.	B	26.	A
2.	B	27.	B
3.	C	28.	C
4.	B	29.	B
5.	A	30.	A
6.	C	31.	A
7.	B	32.	
8.	B	33.	A
9.	C	34.	C
10.	B	35.	A
11.	C	36.	A
12.	B	37.	C
13.	C	38.	D
14.	C	39.	D
15.	D	40.	A
16.	D	41.	B
17.	C	42.	A
18.	C	43.	C
19.	A	44.	B
20.	C	45.	D
21.	C	46.	A
22.	D	47.	B
23.	C	48.	D
24.	D	49.	C
25.	C	50.	C