Prelims test Series- 13-01-2024

1. In five flats, one above the other, live five professionals. The professor has to go up to meet his IAS officer friend. The doctor is equally friendly to all, and has to go up as frequently as go down. The engineer has to go up to meet his MLA friend above whose flat lives the professor's friend.
From the ground floor to the top floor, in what order do the five professionals live?

(a) Engineer, Professor, Doctor, IAS officer, MLA
(b) Professor, Engineer, Doctor, IAS officer, MLA
(c) IAS officer, Engineer, Doctor, Professor, MLA
(d) Professor, Engineer, Doctor, MLA, IAS officer

Ans. (d)

Professionals	Flats
IAS	5th
MLA	4th
Doctor	3rd
Engineer	2nd
Professor	1st

2. Consider the following statements:

(i) A primary group is relatively smaller in size.

(ii) Intimacy is an essential characteristic of a primary group.

(iii) A family may be an example of a primary group.

In the light of the above statements, which one of the following is true?

(a) All families are primary groups.

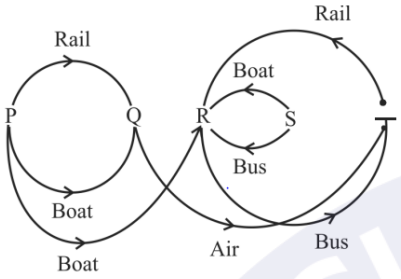
(b) All primary groups are families.

(c) A group of smaller size is always a primary group.

(d) Members of a primary group know each other intimately.

Ans. (d) As intimacy is an essential characteristic of a primary group, members of a primary group know each other intimately.

For questions 3 and 4:



(Direction for Q no 3 & 4): Five cities P, Q, R, S and T are connected by different modes of transport as follows:

P and Q are connected by boat as well as rail.

S are R connected by bus and boat.

Q and T are connected by air only.

P and R are connected by boat only.

T and R are connected by rail and bus.

3. Which mode of transport would help one to reach R starting from Q, but without changing the mode of transport?

(a) Boat

(b) Rail

(c) Bus

(d) Air

Ans. (a) Looking at the above diagram, we can see that we have only one route i.e. Q→P→R which has a single mode of transportation i.e. boat.

4. Which one of the following pairs of cities is connected by any of the routes directly without going to any other city?

(a) P and T

(b) Tand S

(c) Qand R

(d) None of these

Ans. (b) With the given options, we have only T and S

(Direction for Questions 5-7) A tennis coach is trying to put together a team of four players for the forthcoming tournament. For these 7 players are available: males A, B and C: and females W, X, Y and Z. All players have equal capability and at least 2 males will be there in the team. For a team of four, all players must be able to play with' each other. But B cannot play with W, C cannot play with Z and W cannot play with Y.

5. If Y is selected and B is rejected, the team will consist of which one of the following groups?

(a) A, C, Wand Y

(b) A, C, X and Y

(c) A, C, Y and Z

(d) A, W, Y and Z

Ans. (b) If Y is selected, W shall not be selected. So, options (a) and (d) are out. As C cannot play with Z, option (c) is also out. Hence (b) is correct answer.

6. If B is selected and Y is rejected, team will consist of which one of the following groups?

(a) A, B, C and W

(b) A, B, C and Z

(c) A, B, C and X

(d) A, W, Y and Z

Ans. (c) If B is selected, W shall not be selected. So, options (a) and (d) are out. As C cannot play with Z, option (b) is also out. Hence, (c) is correct answer.

7. If all the three males are selected, then how many combinations of four member teams are possible?

(a) 1

(b) 2

(c) 3

(d) 4

Ans. (b) If males A, B and C are selected, we need to select only one more person to make up a four members team. As B is selected, W cannot be selected and as C is selected, Z cannot be selected. So the choice is between X and Y. Then we have the following possibilities:

$(A, B, C, X)\ and\ (A, B, C, Y)$

So, we have two options of team.

(Direction for Question no 8) The music director of film wants to select four persons to work on different aspects of the composition of a piece of music. Seven persons are available for this work: they are Rohit, Tanya, Shobha, Kaushal, Kunal, Mukesh and Jaswant.

Rohit and Tanya will not work together. Kunal and Shobha will not work together. Mukesh and Kunal want to work together.

8. Which of the following is the most acceptable group of people that can be selected by the music director?

(a) Rohit, Shobha, Kunal and Kaushal

(b) Tanya, Kaushal, Shobha and Rohit

(c) Tanya, Mukesh, Kunal and Jaswant

(d) Shobha, Tanya, Rohit and Mukesh

Ans. (c) As, Rohit and Tanya will not work together. Therefore, option (b) and (d) are out. As, Kunal and Shobha will not work together. Therefore, option (a) is also out. Hence, option (c) is correct answer.

(Direction for Q no 9) Five people A, B, C, D and E are seated about a round table. Every chair is spaced equidistant from adjacent chairs.

(i) C is seated next to A.

(ii) A is seated two seats from D.

(iii) B is not seated next to A.

9. Which of the following must be true?

(I) D is seated next to B.

(II) E is seated next to A.

Select the correct answer from the codes given below:

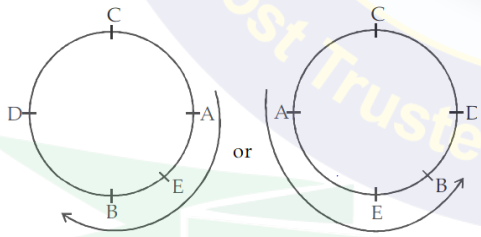
(a) I only

(b) II only

(c) Both I and II

(d) Neither I nor II

Ans. (c) From the given conditions. two cases are possible as shown below:



Hence, in any case, Both the conditions are true.

(Direction for Question no 10-12) Out of four friends A, B, C and D.

I. A and B play football and cricket.
II. B and C play cricket and hockey.
III. A and D play basketball and football.
IV. C and D play hockey and basketball.

10. Who does not play hockey?

(a) D

(b) C

(c) B

(d) A

Ans. (d) 11. (a) 12. (b) From below table.

Players	Football	Cricket	Hockey	Basket ball
A	√	√	×	√
B	√	√	√	×
C	×	√	√	√
D	√	×	√	√

11. Who plays football, basketball and hockey?

(a) D

(b) C

(c) B

(d) A

12. Which game do B, C and D play?

(a) Basketball

(b) Hockey

(c) Cricket

(d) Football

13. Geeta is older than her cousin Meena. Meena's brother Bipin is older than Geeta. When Meena and Bipin visit Geeta, they like to play chess. Meena wins the game more often than Geeta. Based on the above information, four conclusions, as given below, have been made. Which one of these logically follows from the information given above?

(a) While playing chess with Geeta and Meena, Bipin often loses.

(b) Geeta is the oldest among the three.

(c) Geeta hates to lose the game.

(d) Meena is the youngest of the three.

Ans. (d) From the given information, we conclude that; Bipin is older than Geeta and Geeta is older than Meena.

Hence, Meena is the youngest of the three.

14. There are five hobby clubs in a college viz, photography yachting, chess, electronics and gardening. The gardening group meets every second day, the electronics group meets every third day, the chess group meets every fourth day, the yachting group meets every fifth day and the photography group meets every sixth day. How many times do all the five groups meet on the same day within 180 days?

(a) 3

(b) 5

(c) 10

(d) 18

Ans. (a) Take the LCM. of 2, 3, 4, 5, 6 = 60

So, every 60th day all five hobby clubs meet. So, in a period of 180 days, they meet thrice i.e. on 60th, 120th and180th day.

(Direction for Question no 15) A, B, C, D and E belong to five different cities P, Q, R, S and T (not necessarily in that order). Each one of them comes from a different city. Further it is given that

1. B and C do not belong to Q.

2. B and E do not belong to P and R.

3. A and C do not belong to R, S and T.

4. D and E do not belong to Q and T.

15. Which one of the following statements is not correct?

(a) C belongs to P

(b) D belongs to R

(c) A belongs to Q

(d) B belongs to S

Ans. (d)

Cities → Person	P	Q	R	S	T
A	×		×	×	×
B	×	×	×	×	√
C	√	×	×	×	×
D	×	×	√	×	×
E	×	×	×	√	×

B belongs to S is not correct

16. Seven men, A, B, C, D, E, F and G are standing in a queue in that order. Each one is wearing a cap of different color like violet, indigo, blue green, yellow, orange and red. D is able to see in front of him green and blue, but not violet. E can see violet and yellow, but not red. G can see caps of all colors other than orange. If E is wearing an indigo-colored cap, then the color of the cap worn by F is

(a) Blue

(b) Violet

(c) Red

(d) Orange

Ans. (c) The key point is in this question is "A person can see but caps of all persons standing in front of him can't see his own cap and caps of persons standing behind him.

17. In a class of 45 students, a boy is ranked 20th. When two boys joined, his rank was dropped by one. What is his new rank from the end?

(a) 25^{th}

(b) 26^{th}

(c) 27^{th}

(d) 28^{th}

Ans. (c) Initial strength of class = 45

Now, new strength = 47

The boy's rank is dropped by one Now, his rank becomes 21.

Total number of boys in class =

Boy's rank from starting + Boy's rank from end -1

Boy's rank from end = 47-21 + 1 = 27

18. A question paper must have a question on one of the eight poets: A, B, C, D, E, F, G or H. The first four belong to the medieval period while the rest are considered modern poets.

Generally, modern poets' figure in the question paper in alternate years. Generally, those who like H like G also; and those who like F like E also. The paper-setter does not like to ask about F as he has written a book on F, but he likes F. Last year, the paper contained a question on A. On the basis of the information given, this year's paper is most likely to contain a question on

(a) C

(b) E

(c) F

(d) H

Ans. (b) Medieval Period Poets = A, B, C, D

Modern Period Poets = E, F, G, H

Option (a) is eliminated as it is a modern poet. Question on modern poet will come in next year.

Option (c) is eliminated as the paper-setter does not like to ask about F.

Option (b) is appropriate as the paper-setter likes F and those who like F like (E) also.

19. In a group of six women there are four dancers, four vocal musicians, one actress and three violinists. Girija and Vanaja are among the violinists while Jalaja and Shailaja do not know how to play on the violin. Shailaja and Tanuja are among the dancers. Jalaja, Vanaja, Shailaja and Tanuja are all vocal musicians and two of them are also violinists. If Pooja is an actress, who among the following is certainly a dancer and a violinist?

(a) Jalaja

(b) Pooja

(c) Shailaja

(d) Tanuja

Ans. (d)

	Profession			
Women	Dancers	Musicians	Actress	Violinists
Girija				√
Vanaja		√		√
Jalaja		√		×
Shailaja	√	√		×
Tanuja	√	√		√
Pooja			√	

20. The letters L, M, N, O, P, Q, R, S and T in their order are substituted by nine integers 1 to 9 but not in that order. 4 is assigned to P. The difference between P and Tis 5. The difference between N and T is 3. What is the integer assigned to N?

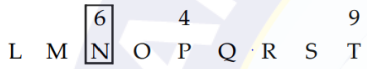
(a) 7

(b) 5

(c) 4

(d) 6

Ans. (d)



Difference between P & T is 5 i.e., T=5+4=9

Difference between N & T is 3 i.e., N=9-3=6

So, integer assigned to N = 6

21. The number of deaths among the army personnel is 8 in 1000, but among the civilian population it is 20 per 1000. Which one of the following inferences can be drawn from this statement?

(a) It is better to join the army.

(b) The relationship is fortuitous.

(c) Quality of Life Index is very high within the armed forces.

(d) The groups cannot be compared due to their heterogeneity.

Ans. (d)

22. Given the statement: "Buses are the cause of more accidents than cars, and trucks cause fewer accidents than buses", which of the following conclusions can we draw?

(a) There are more buses on the road than trucks.

(b) Car drivers are more careful than bus drivers.

(c) Truck drivers are more skilled than either car or bus drivers.

(d) None of the above

Ans. (d)

23. If political leadership fails to emerge, there is likelihood of military taking over power in developing countries. Radical student groups or labor may try to raise revolution but they are not likely to compete with the military. Military intervention, rule, and withdrawal from politics is closely related to a society's level of political development." In the context of political development, the assumption in the above passage is that

(a) political leadership is not an effective instrument.

(b) military fills in political vacuum.

(c) military intervention is inevitable for development.

(d) None of the above

Ans. (b)

24. Four persons, Alok, Bhupesh, Chander and Dinesh have a total of 100 among themselves. Alok and Bhupesh between them have as much money as Chander and Dinesh between them, but Alok has more money than Bhupesh; and Chander has only half the money that Dinesh has. Alok has in fact ₹ 5 more than Dinesh has. Who has the maximum amount of money?

(a) Alok

(b) Bhupesh

(c) Chander

(d) Dinesh

Ans. (a)

$a + b + c + d = 100$

$Also, a + b = c + d = 50$

$c = \frac{d}{C}, : -\frac{d}{2} + d = 50 \Rightarrow d = 33.3$

:- $d > c$

: - Also, a > b & between a and d, a = d +5

: - a > d

Alok (a) has the maximum money.

25. In a row 'A' is in the 11th position from the left and 'B' is in the 10th position from the right. If 'A' and 'B' interchange, then 'A' becomes 18th from the left. How many persons are there in the row other than 'A' and 'B'?

(a) 27

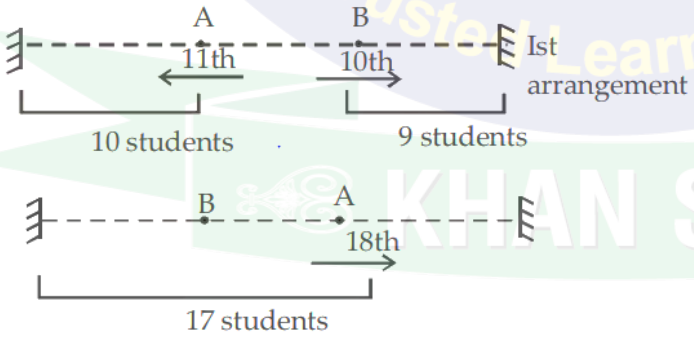
(b) 26

(c) 25

(d) 24

Ans. (c)

(c)



No. of students between A & B in the 1st arrangement =17-11 6

: - Total no. of students except A & B is,

=10+6+9=25

26. If the 3rd day of a month is Monday, which one of the following will be the fifth day from 21st of this month?

(a) Monday

(b) Tuesday

(c) Wednesday

(d) Friday

Ans. (b) Tuesday

3rd ⇒ Monday +7

10th ⇒Monday + 7

17th⇒ Monday + 7

24th ⇒Monday

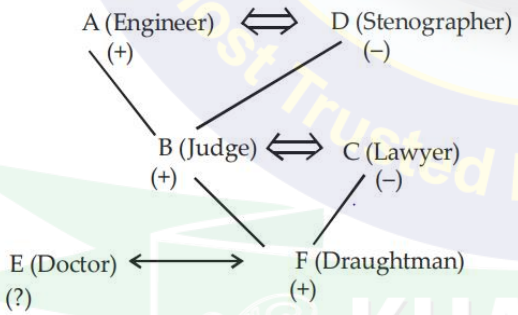
Fifth day from 21st is 25th day.

So, on 25th day is Tuesday.

For, 27 and 28.

+⇒Male

-⇒Female



(Direction for Question 27) A, B, C, D, E, F are members of a family. They are engineer, stenographer, doctor, draughtsman, lawyer and judge (not in order). A, the engineer is married to the lady stenographer.

The judge is married to the lawyer. F, the draughtsman is the son of B and brother of E. C, the lawyer is the daughter- in-law of D. E is the unmarried doctor. D is the grandmother of F. There are two married couples in the family.

27. What is the profession of B?

(a) Judge

(b) Lawyer

(c) Draughtsman

(d) Cannot be determined

Ans. (a) Judge

28. Which of the following is/are a couple/couples?

(a) AD only

(b) BC only

(c) Both AD and BC

(d) Both AC and BD

Ans. (c) Couples are AD & BC

29. There are 50 students admitted to a nursery class. Some students can speak only English and some can speak only Hindi. 10 students can speak both English and Hindi. If the number of students who can speak English is 21, then how many students can speak Hindi, how many can speak only Hindi and how many can speak only English?

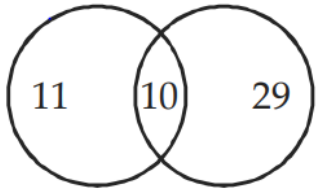
(a) 21, 11and 29 respectively

(b) 28, 18 and 22 respectively

(c) 37, 27 and 13 respectively

(d) 39, 29 and 11 respectively

Ans. (d)



Students who can speak Hindi = 29 + 10 = 39

Students who can speak only Hindi = 50 - 21 = 29

Students who can speak only English = 50-29+10=11

30. Out of a total of 120 musicians in a club, 5% can play all the three instruments, guitar, violin and flute. It so happens that the number of musicians who can play any two and only two of the above instruments is 30. The number of musicians who can play the guitar alone is 40. What is the total number of those who can play violin alone or flute alone?

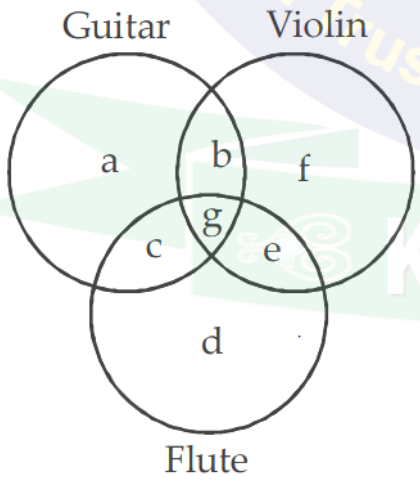
(a) 45

(b) 44

(c) 38

(d) 30

Ans. (b)



$a + b + c + d + e + f + g = 120$

$g\ \frac{5 \times 120}{100} = 6$

g=6

$c + b + e = 30$

$a\ =\ 40$

$So, a + b + c + e + d + f + g\ =\ 120$

$From\ (1), (2), (3)\ \&\ (4)$

$40 + 30 + d + f + 6\ =\ 120$

$d + f = 120 - 76$

$d\ +\ f\ =\ 44$

31. Six identical cards are placed on a table. Each card has number '1' marked on one side and number '2' marked on its other side. All the six cards are placed in such a manner that the number '1' is on the upper side. In one try, exactly four (neither more nor less) cards are turned upside down. In how many least numbers of tries can the cards be turned upside down such that all the six cards show number '2' on the upper side?

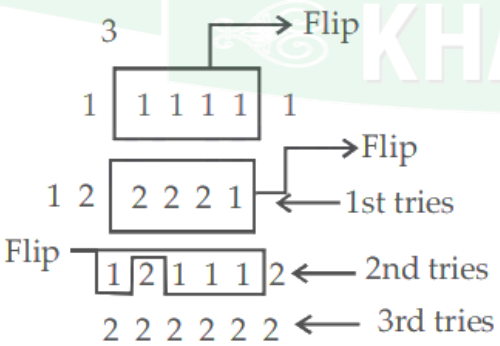
(a) 3

(b) 5

(c) 7

(d) This cannot be achieved

Ans. (a)



32. There are seven persons up on a ladder, A, B, C, D, E, F and G (not in that order). A is further up than E but is lower than C. B is in the middle. G is between A and B. E is between B and F. If F is between E and D, the person on the bottom step of the ladder will be

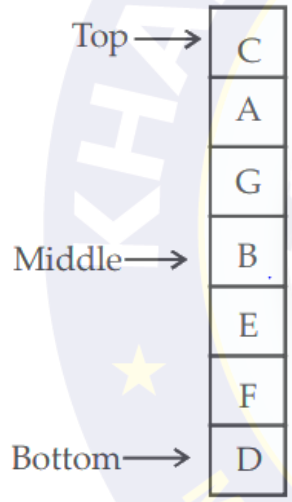
(a) B

(b) F

(c) D

(d) E

Ans. (c)



D is at the bottom step of the ladder.

(Direction for the Question no 33) Consider that:

1. A is taller than B.

2. C is taller than A.

3. D is taller than C.

4. E is the tallest of all.

33. If they are made to sit in the above order of their height, who will occupy the mid position?

(a) A

(b) B

(c) C

(d) D

Ans. (c) Sequence according to height.

E>D>C>A>B

↓

Mid Position

Therefore, 'C' occupies the mid position.

(Direction for the Question no 34) Consider the following statements:

There are six villages A, B, C, D, E and F.

F is 1 km to the west of D.

B is 1 km to the east of E.

A is 2 km to the north of E.

C is 1 km to the east of A.

Dis 1 km to the south of A.

34. Which three villages are in a line?

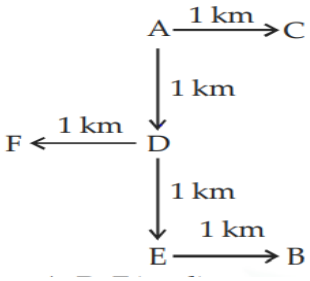
(a) A, C, B

(b) A, D, E

(c) C, B, F

(d) E, B, D

Ans. (b)



35. Four children are sitting in a row. A is occupying the seat next to B but not next to C. If C is not sitting next to D, who is/are occupying seat/seats adjacent to D?

(a) B

(b) A

(c) Band A

(d) Impossible to tell

Ans. (b)

C	B	A	D

Hence, A occupy seats adjacent to D.

36. Assume that

1. The hour and minute hands of a clock move without jerking.

2. The clock shows a time between 8 o'clock and 9 o'clock.

3. The two hands of the clock are one above the other. After how many minutes (nearest integer) will the two hands be again lying one above the other?

(a) 60

(b) 62

(c) 65

(d) 67

Ans. (c)

Two hands of clock are on one above between 8 to 9.

12 to 8 ⇒ 40 min

60 min ⇒ $\frac{60}{55} \times 40 = \frac{480}{11} min$ past 8.

two hands of clock are on one above between 9 to 10. 12 to 9 ⇒ 45 min

45 min ⇒ $\frac{60}{55} \times 45 = \frac{540}{11}$ min past 9.

So two hands be lying one above the other = $60 - \frac{480}{11} + \frac{540}{11}$

= $\frac{660+540-480}{11} = \frac{720}{11} = 65.4$

37. Consider the table given below in which the numbers bear certain relationship among themselves along the rows:

29	13	18
33	×	19
30	27	3

Which one of the following numbers is the missing number indicated above by X?

(a) 19

(b) 15

(c) 14

(d) 8

Ans. (d) Sum of numbers in 1st Row, 29+13+18 ⇒ 60

Sum of numbers in 3rd Row, 30+27+ ⇒ 360

So, 2nd Row, 33+X+19=60

X + 52 = 60

X = 60-52

X = 8

38. Price is not the same thing as value. Suppose that on a day the price of everything viz., coal, bread, postage stamps, a day's labor, the rent of houses, etc. were to double. Prices then would certainly rise, but values of all things except one would not."

The writer wants to say that if prices of all things were doubled

(a) the values of all things would remain constant.

(b) the values of the things sold would be doubled.

(c) the values of the things bought would be halved.

(d) the value of money only would be halved.

Ans. (d) Due to inflation the value of money only would be halved

39. Six books are labelled A, B, C, D, E and F and are placed side by side. Books B, C, E and F have green covers while others have yellow covers. Books A, B and D are new while the rest are old volumes. Books A, B and C are law reports while the rest are medical extracts. Which two books are old medical extracts and have green covers?

(a) Band C

(b) E and F

(c) Cand E

(d) Cand F

Ans. (b)

Books	Covers	Volume	Law/Medical
A	Yellow	New	Law
B	Green	New	Law
C	Green	Old	Law
D	Yellow	New	Medical
E	Green	Old	Medical
F	Green	Old	Medical

Therefore, E and F are old medical extracts and have green covers.

40. If A runs less fast than B, and B runs as fast but not

faster than C; then, as compared to A, C runs

(a) slower than A

(b) faster than A

(c) with same speed as A

(d) Given data is not sufficient to determine

Ans. (b)

A<B<C

Now, compared to A, C runs faster than A.

41. Shahid and Rohit start from the same point in opposite directions. After each 1 km, Shahid always turns left and Rohit always turns right. Which of the following statements is correct?

(a) After both have travelled 2 km, the distance between them is 4 km.

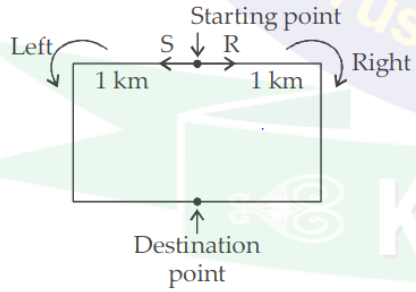
(b) They meet after each has travelled 3km.

(c) They meet for the first time after each has travelled 4 km.

(d) They go on without ever meeting again.

Ans. (b)

After both have travelled 3 km, their positions would be on follows.



Hence, (b) is correct.

42. Out of 130 students appearing in an examination, 62 failed in English, 52 failed in Mathematics, whereas 24 failed in both English and Mathematics. The number of students who passed finally is

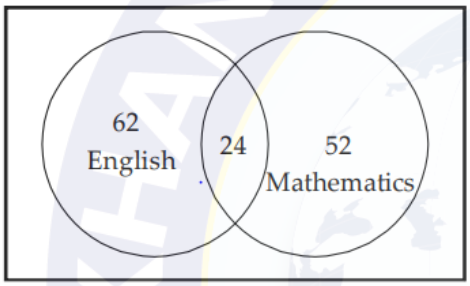
(a) 40

(b) 50

(c) 55

(d) 60

Ans. (a)



Total students = 130

Total students failed = (62 +52) - 24

= 114-24

= 90

Number of students passed finally = 130 - 90 = 40

43. In a group of persons travelling in a bus, 6 persons can speak Tamil, 15 can speak Hindi and 6 can speak Gujarati. In that group none can speak any other language. If 2 persons in the group can speak two languages only and one person can speak all the three languages, then how many persons are there in the group?

(a) 21

(b) 22

(c) 23

(d) 24

Ans. (c)

Let a = Speaks one language

Let b = Speaks two languages

Let c = Speaks three languages then

$a + 2b + 3c = 6 + 15 + 6$

$a + 4 + 3 = 27$

$a = 20$

: - Total number of persons in the group = 20 + 2 + 1 = 23.

44. In a parking area, the total number of wheels of all the cars (four-wheelers) and scooters/motorbikes (two- wheelers) is 100 more than twice the number of parked vehicles. The number of cars parked is

(a) 35

(b) 45

(c) 50

(d) 55

Ans. (c)

Let number of cars be x

Let number of scooters / motor bikes = y

: - Total number of parked vehicles = x + y

According to question

$4x + 2y = 2(x + y) + 100$

$4x + 2y = 2x + 2y + 100$

$2x = 100$

$x = 50$

Hence, Number of cars parked is 50.

45."By liberty I mean the eager maintenance of that atmosphere in which men have the opportunity to be their best selves."

Which one of the following expresses the view implied in the above statement?

(a) Liberty is the absence of restraint on human action.

(b) Liberty is what law permits people to perform.

(c) Liberty is the ability to do what one desires.

(d) Liberty is the maintenance of conditions for the growth of human personality.

Ans. (d)

(a) is wrong because the sentence says that liberty means the eager maintenance of that atmosphere which might require restrictions as well.

(b) is wrong because if the people work only according to the law they might become good citizens but might not work to their best selves.

(c) is wrong because if people do what they desire it might lead to materialist thinking which is not the best self.

(d) is correct because with the growth of human personality the people would be their best selves.

46. Consider the following matrix:

3	8	10	2	?	1
6	56	90	2	20	0

What is the missing number at '?' in the matrix?

(a) 5

(b) 0

(c) 7

(d) 3

Ans. (a)

In each column, let the number at the top be 'x' and the one at the bottom is '$(x\ -\ 1)'$. The relation between columns is given by

$$(x)(x-1) = 3(3-1) = 6$$

$Therefore,\qquad 5(5-1)\ =\ 20$

47. What is the missing number 'X' of the series 7, X, 21, 31, 43.

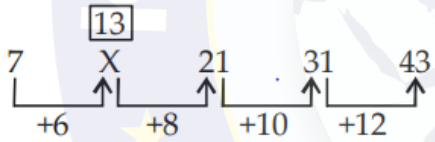
(a) 11

(b) 12

(c) 13

(d) 14

Ans. (c)



48. Geeta: Naresh has become a better boxer since he started meditation.

Radha: Impossible, A boxer's most important asset is his aggressiveness.

Radha's statement reflects her belief that

(a) meditation tends to make a person less aggressive.

(b) meditation has little or no effect on the person who practises it.

(c) Naresh was a poor boxer earlier because he was not aggressive enough.

(d) Naresh would not have taken to meditation as he was a boxer.

Ans. (a)

Radha did not accept the argument that a person becomes a better boxer after meditation. The reason for this is that a boxer, according to her, should be

aggressive. This indicates that Radha believes that meditation makes a person less aggressive.

49. All good athletes want to win and all athletes who want to win eat a well-balanced diet; therefore, all athletes who do not cat a well-balanced diet are bad athletes.

The best conclusion from this statement is that

(a) no bad athlete wants to win.

(b) no athlete who does not eat a well-balanced diet is a good athlete.

(c) every athlete who eats a well-balanced diet is a good athlete.

(d) all athletes who want to win are good athletes.

Ans. (b)

The given statements can be represented as-

It is stated that all good athletes want to win. It does not mean that no one wants to win. Hence, (b) is true. There can be people other than good athletes, who eat well balanced diet.

50. A society consists of only two types of people fighters and cowards. Two cowards are always friends. A fighter and a coward are always enemies. Fighters are indifferent to one another. If A and B are enemies, C and D are friends, E and F are indifferent to each other, A and E are not enemies, while B and F are enemies.

Which of the following statements is correct?

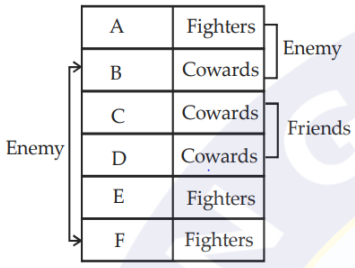
(a) B, C and F are cowards.

(b) A, E and F are fighters.

(c) B and E are in the same category.

(d) A and F are in different categories.

Ans. (b)



From above table, it is clear that A, E and F are fighters.

51. Consider the following statements followed by two conclusions:

Statements:

Some men are great.

Some men are wise.

Conclusion I: Men are either great or wise.

Conclusion II: Some men are neither great nor wise Which one of the following is correct?

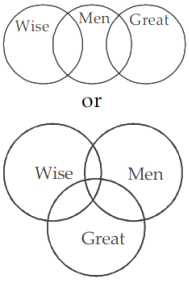
(a) Only conclusion I is valid

(b) conclusion II in valid

(c) Both the conclusions are valid

(d) Neither of the conclusions is valid

Ans. (d)



Conclusion I: False

Conclusion II: False

52. Consider the following statements:

1. Some claim to have seen UFOS (Unidentified Flying Objects).

2. Life on other heavenly bodies is considered to be a possibility.

3. Voyage to space is now an established fact.

From the above statements, it may be concluded that

(a) UFOs are heavenly bodies

(b) UFOs are sent from other heavenly bodies

(c) Some living species in other heavenly bodies are more intelligent than man

(d) Nothing definite can be said about the UFOS

Ans. (d)

53. If ABC ×DEED = ABCABC; where A, B, C, D and E are different digits, what are the values of D and E?

(a) D=2, E=0

(b) D=0, E=1

(c) D=1, E=0

(d) D=1, E=2

Ans. (c)

ABC×DEED = ABCABC

We know that, when we write any Number in form of ABCABC then that number must be divisible by 13, 11 and 7 or ABCABC is multiple of 1001

So, 1001 = DEED

1001 $13 \times 11 \times 7$

ABC $\times$ DEED = ABC ABC

$\Rightarrow$ ABC$\times$ 1001 = ABC ABC

On comparing

D=1, E=0

54. Usha runs faster than Kamala, Priti runs slower than Swati, Swati runs slower than Kamala. Who is the slowest runner?

(a) Kamala

(b) Priti

(c) Swati

(d) Usha

Ans. (b)

According to question,

Priti < Swati < Kamala < Usha

From the above, it can be concluded that Priti is the slowest runner.

55. If in a certain language, NALANDA is coded as PCNCPFC, how is NOIDA in that code?

(a) PRJEC
(b) QPKFD
(c) PQKFC
(d) PQJED

Ans. (c)

Adding two (2) in each alphabet i.e. next to next alphabet is in the code. NOIDA => PQKFC

56. In a certain code CSAT is written as 420221 and MATHS is written as 14221920, how is LOGIC written in that code?

(a) 14188104
(b) 14166106
(c) 13166126
(d) 13168104

Ans. (d)adding one (1) in position value of each alphabet.

So right answer: 13168104

57. If DISTANCE is coded as 15 and JOURNEY as 12, what is the code number for HAPPINESS?

(a) 18
(b) 21
(c) 24
(d) 16

Ans. (a)

Explanation: Number of consonants multiply by 3. i.e. 6*3=18

58. If "ONTIME" is "*? # @ ! $ "

"MENS" is "! $? &"

then, "MISSION" is:

(a) ? ! $ $ # * #
(b) ! $ $ @ @ * ?
(c) ! @ & & @ * ?
(d) ? @ & @ ? # !

Ans. (c)

Explanation: M =! I = @, S = &, O=*, and N=?

59."RAT CAT COW" MEANS "SINGING IS APPRECIABLE",
"COW OX DOG" MEANS DANCING IS GOOD",
"CAT FOX OX" MEANS "SINGING AND DANCING",

Find the code for "APPRECIABLE" on the basis of above statements.

(a) OX
(b) FOX
(c) COW
(d) RAT

Ans. (d)

Explanation:

OX = DANCING

FOX = AND

COW = IS

RAT = APPRECIABLE

60. If Rani runs slower than Babli, Babli runs not faster than Chandan, then as compared to Rani, Chandan runs
(a) Slower than Rani
(b) Faster than Rani
(c) As fast as Rani
(d) Option (B) OR (C)

Ans. (b)

Explanation: According to question, Chandan cannot run slower or same speed as Rani.

61.P, Q, R and S has Rs 500 each. P pays Rs 100 to Q, Q pays Rs50 to R and R gets 100 from S, then which of the statement is NOT correct?
(a) P is the richest
(b) S is the poorest
(c) R is as richer as Q
(d) R is the richest

Ans. (d)

Explanation: Final amount with P is 400, with Q is 550, with R is 650 and with S is 400.

62. How many letters of the English alphabet (capitals) appears same when looked at the mirror?

(a) 11
(b) 12
(c) 13
(d) 15

Ans. (a)

Explanation: These are 11 such letters: A, H, I, M, O, T, U, V, W, X and Y.

63. Four children are sitting in a row. Dipak is occupying the seat next to Ravi but not next to Suraj. If Suraj is not sitting next to Ajit, who is/are occupying seat/seats adjacent to Ajit?

(a) Ravi
(b) Dipak
(c) Ravi and Dipak
(d) Impossible to tell

Ans. (b)

Explanation: seating will be in order of Suraj, Ravi, Dipak and Ajit, or reverse of this i.e. Ajit, Dipak, Ravi and Suraj.

64. If 2 textbooks and 2 notebooks are to be arranged in a row so that the notebooks are not next to each other, how many possible arrangements are there?

(a) 12
(b) 6
(c) 16
(d) 18

Ans. (a)

If there is no restriction, 2 textbooks and two notebooks can be arranged in 4! Ways that are 4x3x2x1 =24 ways.

Among this 24, find out how many arrangements are there where both the notebooks are together. For this assume both the notebooks to be one unit. Now there can be 3! Ways in which both the notebooks be together.

But again, the girls can be themselves arranged in 2! Ways.

Therefore, total no. of ways in which both the notebooks will not be together is

4! -3! ×2! =24-12=12

So, Correct Answer: (A)

65. In a school, there were four teachers.

I. Nitish and Ramesh were teaching Physics and CSAT.
II. Rekha and Tilak were teaching CSAT and Economy.
III. Tilak and Nitish were teaching Chemistry and Physics

Who among the teachers was teaching maximum number of subjects?

(a) Nitish
(b) Tilak
(c) Rekha
(d) Ramesh

Ans. (b)

Explanation:

	Physics	CSAT	Economy	Chemistry
Nitish	✓			
Ramesh		✓		
Rekha		✓		
Tilak			✓	✓

66. If a person is standing on the 2nd step from the bottom of a ladder. If he has to climb 6 more steps to reach exactly the middle step how many steps does the ladder have?

(a) 13
(b) 15
(c) 17
(d) 14

Ans. (b)

Explanation: Initially there was only 1 step was below Khan Sir, after he climbed 6 steps upward there are 7 steps blow him, so there must be 7 steps above him. And on one step he is standing. So total number of steps are 15.

Therefore, correct answer: (B)

67. A group of 150 children is to be arranged in rows for a group photograph session. Each row contains 2 fewer children than the row in front of it. If in the first row there are 30 children. Then what is the total number of rows?

(a) 5
(b) 8
(c) 6
(d) 7

Ans. (c)

Explanation: Sum of 30, 28, 26, 24, 22 and 20= 150.

Total Rows = 6

68. What is the number of selections of 5 consecutive things out of 8 things in circle taken in the antilock wise direction?

(a) 5
(b) 8
(c) 13
(d) 40

Ans. (b)

Explanation: Let us start with 1, Starting Selections will be (1 to 5), (2to 6), (3 to 7), (4 to 8), (5to 1) (6 to 2), (7 to 3), and (8 to 4).

So Correct answer is (b)

69. A, B, C and D are four cities such that:

A is hotter than both B and C

D hotter than C only but cooler than A.

Which is the coldest city among given four:

(a) C
(b) B
(c) None of the above
(d) Incomplete Data

Ans. (a)
Explanation: From 2nd statement D is hotter than C only, So, C is the coldest city. So, option (A) is the right answer.

Direction for Q 70-74: Study the following statements and decide which of the given conclusions logically follows from the given statements disregarding the commonly known facts.

70. Statements:

- All Mathematics are Logic.
- Some logics are reasoning.
- Only few Reasonings are Formula.
- No formula is Ratta.

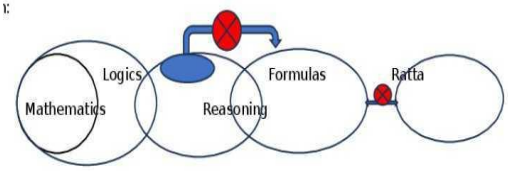
Conclusions:

I)Some reasoning are not Ratta.

II)All Logics are Ratta is a possibility.

(a) Only conclusion I follows
(b) Both conclusions I and II follow
(c) Neither conclusion I nor II follows
(d) Only conclusion II follows

Ans. (b)
Explanation:



71. Statements:

- Some water is oil.
- Only a few oils are tea.
- Only tea is liquid.
- No tea is coffee.

I. Conclusions:
II. Some Oil is not coffee.
III. Some liquid is water is a possibility.

(a) Only conclusion I follows
(b) Both conclusions I and II follow
(c) Neither conclusion I nor II follows
(d) Only conclusion II follows

72.Statements:

- Some eyes are ears.
- Only a few ears are mouths.
- No mouth is nose.
- Only a few noses are feet.

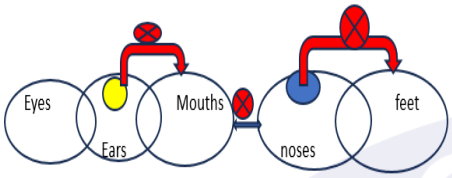
Conclusions:

I. Some noses are not feet is a possibility.
II. All eyes can be ears.
III. No foot is ears is a possibility.

(a) Only conclusions II and III follow
(b) Both conclusions I and III follow
(c) None follows

(d) Only conclusion III follows

Ans. (a)



73. Statements:

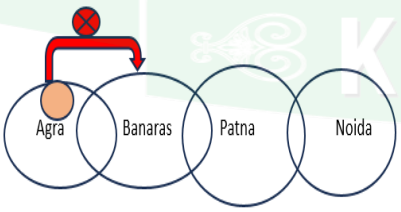
- Only a few Agra is Banaras
- Some Banaras is Patna
- Some Patna is Noida

Conclusions:

I. All Agra is Banaras
II. All Banaras being Noida is a possibility

(a) Only conclusions II
(b) Both conclusions I and II follow
(c) None follows
(d) Only conclusion I follows

Ans. (a)



74.Statements:

- Only a few cats are dogs
- No rat is a dog

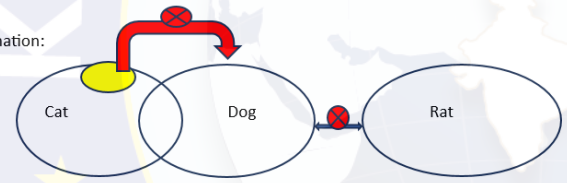
Conclusions:

I. Some cats are not rats
II. No rat is cat

(a) only conclusion I follow
(b) only conclusion II follow
(c) Either conclusion I or II follows
(d) Both conclusion I and II follows

Ans. (a)

Explanation:



75. In a certain code language 'RAID' is written as '% # £ $' and 'RIPE' is written as '% £ @ ©', then how will 'DEAR' be written in that language?

(a) % $ @ #
(b) % @ $ #
(c) @ © # %
(d) None of these

Ans.(d)

As, R → % A → # I → £ D → $ and R → % I → £ P → @ E → ©

Similarly, D → $ E → © A → # R %

Therefore, DEAR ⇒ $ © # %, none of the above.

76. An engineer is planning to build a housing complex on an empty block of land. Exactly seven different designs of houses—F, G, H, I, J, K, and L—will be built in the complex. The complex will contain several blocks, and the engineer plans to put houses of at least three different designs on each block.

The engineer will build the complex according to the following rules:

- Any block that has design L on it must also have design J on it.
- Any block adjacent to one that has on it both design H and design K must have on it design I and design L.
- No block adjacent to one that has on it both design R and design L can have on it either design I or design J
- No block can have on it both design H and design F.

Which of the following can be the complete selection of house designs on a block?

(a) F, G, H
(b) F, H, K
(c) G, T, L
(d) H. J, L

Ans. (d)

House Design F, G, H, I, J, K, L

Several Blocks Each block consist of at least three house designs

Rules

Rule I, L ↔ J

Rule II, Bn ⇒ (H+ K) then Bn±1 ⇒ (I + L)

Rule III, Bn ⇒ (G + L) then B n±1 ≠ $(I + J)$

Rule IV, H ≠ F

1st Step Check Rule I C, E is wrong

2nd Step Check Rule IV B, A is wrong

So, Option D is correct.

77. In a game, exactly six inverted caps stand side by side in a straight line, and each has exactly one paper hidden under it. The caps are numbered consecutively 1 through 6. Each of the papers is painted a single solid color. The colors of the papers are gold, mauve, olive, pink, silver, and white. The papers have been hidden under the caps in a manner that conforms to the following conditions:

- The pink paper must be hidden under a lower-numbered cap than the olive paper.
- The silver paper must be hidden under a cap immediately adjacent to the cap under which the mauve paper is hidden.
- The gold paper must be hidden under cap 5.

Which of the following could be the colours of the papers under the caps, in order from 1 through 6?

(a) Gold, white, mauve, silver, pink, olive
(b) Mauve, gold, pink, silver, olive, white
(c) Mauve, silver, pink, white, gold., olive
(d) Olive, white, silver, mauve, gold, pink

Ans. (c)

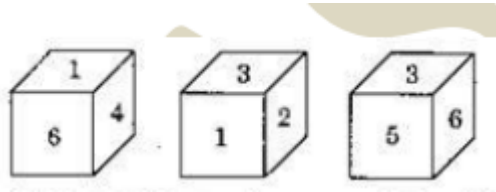
New Rule I, as per Rule III and II, G=5 & S=M±1. Then (S/M) < G, because if M=6 then S = 5, 7 and as G= 5 so S ≠ 5, and S ≠ 7 as only 6 caps, so M≠ 6. Then (S/M) < G,

New Rule II, As Rule III & II, G= 5 and P< O, then P < G, because P ≠ 6. If P =6 then Rule I cannot be fulfilled, So P < G.

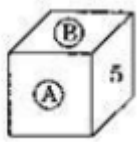
1st Step	Check Rule III	A, B is wrongs
2nd Step	Check Rule I	D is wrong
3rd Step	Check Rule II	E is wrong

So, Option C is correct.

78. A cube has six numbers marked 1, 2, 3, 4, 5 and 6 on its faces. Three views of the cube are shown below:



What possible numbers can exit on the two faces marked (A) and (B) respectively on the cube?



(a) 2 and 3
(b) 6 and 1
(c) 1 and 4
(d) 3 and 1

Ans. (a)

follow the statement 1 and see from side way, 2,3,4 and 6 are the adjacent numbers of 5 only. So right option is (a)

79. All the faces of a cube are painted with blue color. Then it is cut into 125 small equal cubes. How many small cubes will be formed having one face colored?
(a) 81
(b) 64
(c) 54
(d) 27

Ans. (c) After cutting into 125 pieces, 25 pieces will be visible from one side. And on sone face only 9 pieces will have only one side painted. So total (including 6 faces) = 6*9 =54, so, (c) is the right answer.

80. Complete the series:

1004, 1202, 1251.5, 1268, (?)

(a) 1267.5

(b) 1276.25

(c) 1324.5

(d) 1367.25

Ans. b

Pattern is:

14 +990 = 1004

1004+ 990/5 = 1202

1202+ 198/4= 1251.5

1251.5 +16.5(= 49.5/3) = 1268

1268 +8.25 = 1276.25