

C.P : M.P = 3:5

Hence M.P = 2000

After 1<sup>st</sup> discount of 30% on 2000 = 600 will be reduce

M.P = 1400 2<sup>nd</sup> discount of 18% of 1400 = 252 will be reduced

S. P = 1148

LOSS = 1200 – 1148 = 52

% loss =  $52 / 1200 * 100 = 4\frac{1}{3}$  loss %

**TCS-NQT Reasoning Ability (Foundation Section Previous Year Questions)**

**Q1) There are five rods K, L, M, N, and O. The weight of O is twice the weight of L. The weight of L is equal to the weight of K and M taken together. The weight of M is twice the weight of K. The weight of N is thrice the weight of M. If the weight of N is 90 kg. What will be the weight of O?**

A. 105 kg

B. 60 kg

C. 120 kg

D. 90 kg

**Answer:** Option D

**Explanation:** N = 90

N is thrice the weight of M

$3M = N$

$M = 30$

M is twice of K

$M = 2K$

$K = 15$

$L = K + M = 45$

O is twice of L

$O = 2L = 90$

**Q2) Which is the wrong term in the following series? CMQ, FPT, JTX, OYC, UFI**

A. FPT

B. OYC

C. JTX

D. UFI

**Answer:** Option D

**Explanation:** The incorrect term in the series is UFI. (Option D)

The first two terms, CMQ and FPT.

The alphabets between C and F are 2 (D, E).

The alphabets between M and P are 2 (N, O).

The alphabets between Q and T are 2 (R, S).  
 Now the second and third terms, FPT and JTX.  
 The alphabets between F and J are 3 (G, H, I).  
 The alphabets between P and T are 3 (Q, R, S).  
 The alphabets between T and X are 3 (U, V, W).  
 Similarly, third and fourth terms, JTX, and OYC.  
 The alphabets between J and O are 4 (K, L, M, N).  
 The alphabets between T and Y are 4 (U, V, W, X).  
 The alphabets between X and C are 4 (Y, Z, A, B).  
 By comparing the last two terms, OYC and UFI, we found that,  
 The alphabets between O and U are 5 (P, Q, R, S, T).  
 The alphabets between Y and F were found to be 6 which does not satisfy the series.

**Q3) In a certain code,**

**A % B means 'A is the brother of B',**

**A & B means 'A is the mother of B',**

**A @ B means 'A is the daughter of B',**

**A \$ B means 'A is the father of B' and A # B means 'A is the sister of B'.**

**If K \$ Z % U & H # N @ T, how is T related to U?**

- A. Sister
- B. Husband
- C. Wife
- D. Brother

**Answer:** Option B

**Explanation:** K \$ Z % U & H # N @ T

K is father of Z, Z is brother of U, U is mother of H, H is sister of N, N is daughter of T

U is mother of H & N, T is father of N

Hence T is husband of U.

**Q4) Five teachers P, Q, R, S and T teach a group of students in sequence between 9 and 2 pm. Each teacher teaches for one hour. Q takes the first class. S teaches just after T, R teaches before P and T. Who takes the second class from 10 am to 11 am?**

- A. S
- B. R
- C. P
- D. T

**Answer:** Option B

**Explanation:** Q takes first class from 9.00 a.m. to 10 a.m.

S teaches just after T.

R teaches before P and T.

It means R teaches before P, T and S.

Hence sequence in which the teachers take class is as follows:

$Q \rightarrow R \rightarrow P \rightarrow T \rightarrow S$ .

Hence R will be second to take class from 10 a.m. to 11 a.m.

**Q5) Given below is a question followed by two statements. I and II, each containing some information. Which of the following statements is/are sufficient to answer the question? How is A related to C? Statements: I. A is the wife of B and B is the brother of C. II. C is the son of D.**

A. Both I and II together are not sufficient

B. Statement I alone is sufficient.

C. Statement II alone is sufficient

D. Both I and II together are sufficient.

**Answer:** Option B

**Explanation:** From I. A is the wife of B and B is the brother of C.

A is sister -in – law for C

From II, we can't find the relation between A&C , hence option B

**Q6) Find the wrong term in the letter cluster series given below:**

**In DRTQ. JXZU, GUWR, MAOX, JXZU**

A. JXUZ

B. JXZU

C. MAOX

D. GUWR

**Answer:** Option C

**Explanation:** the difference between 1<sup>st</sup> terms , 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> terms are like +6,-3,+6,-3 only term that doesn't follow the rule is MAOX

**Q7) In each of the five pairs of letter-clusters, the letter in the second term are a rearranged/ transformed form of the letters has been put together in a particular pattern. In which two pairs, has the transformation been done in the same way?**

A. PLANT: PLZMG

B. MANGO: MAMTL

C. BLACK: BLBDP

D. TABLE: ATLB E

E. CHEER: HCREE

A. D and A

B. C and D

C. B and C  
D. A and B  
**Answer:** Option D

**Q8) Statements:**

Some drills are drugs

No drug is a dam

No drill is a laker

**Conclusions:**

I. Some lakers are drugs

II. Some dams are drills

A. If neither conclusion I nor II follows

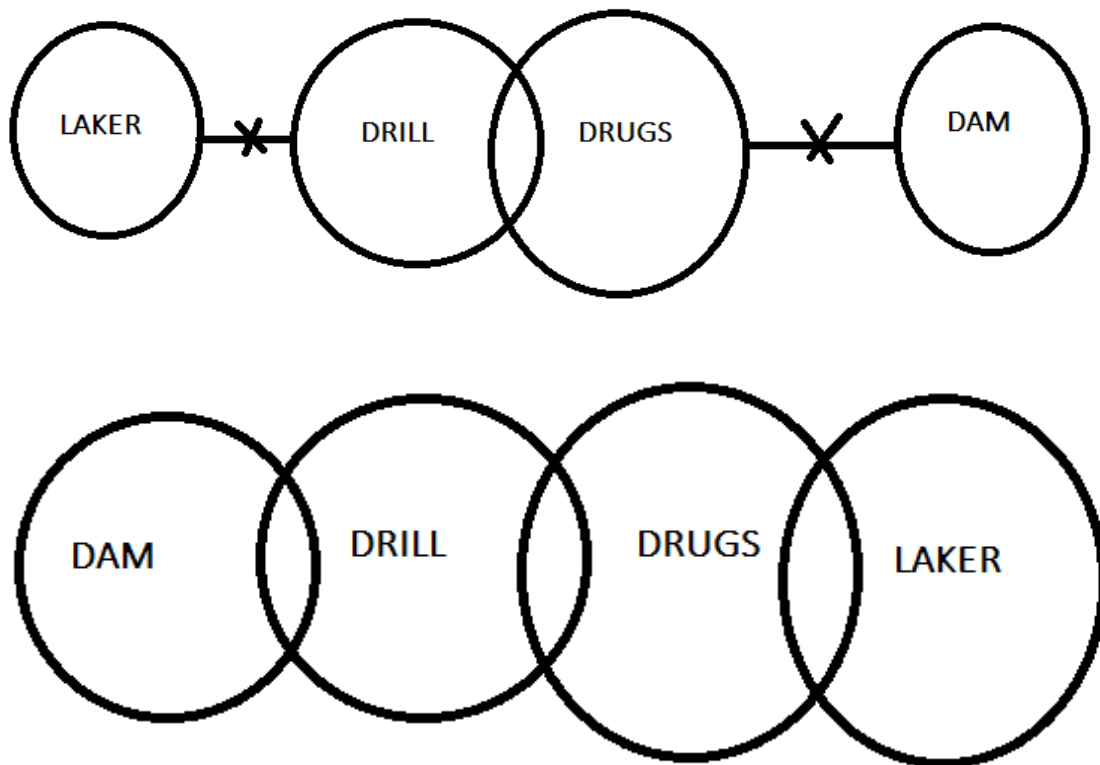
B. If only conclusion II follows

C. If either conclusion I or conclusion II follows

D. If only conclusion I follows

**Answer:** Option C

**Explanation:** either conclusion I or conclusion II follows as per the venn diagram



**Q9) Find the wrong term in the given series**

IWLZ, NSOU, SOTQ, XKAM, CGJI

A. NSOU

B. IWLZ

C. CGJI

D. XKAM

**Answer:** Option B

**Q10)** Given below is the question followed by two statements ,I and II each containing some information.Decide which if the statement(s) is/are sufficient to answer the question.  
**Five persons - A,B,C,D and E sit around a circular table , facing the centre not necessarily in that order .Who sits second to the right of D?**

I. A sits the immediate right of E, who is not a neighbour of D.

II. B is to the immediate left of D.

A. If only statement II is sufficient to answer the question.

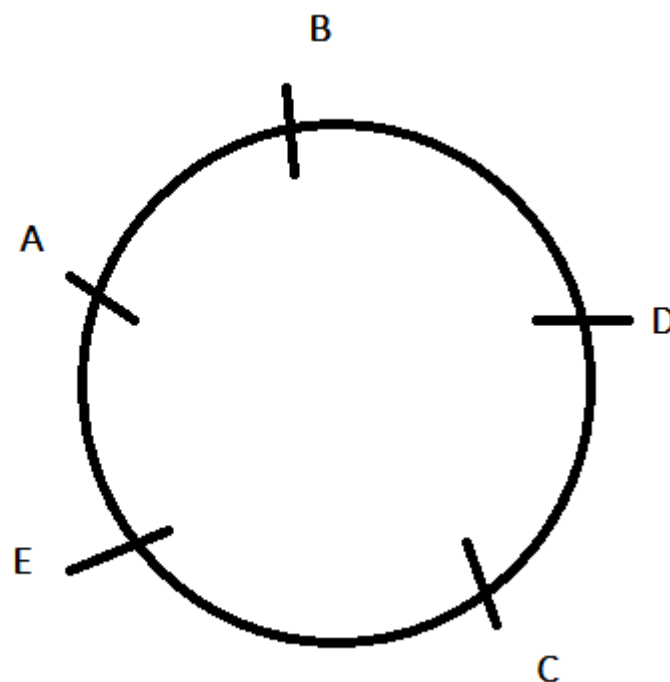
B. If the data in both the statement I and II together are necessary to answer the question.

C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.

D. If only statement I is sufficient to answer the question.

**Answer:** Option B

**Explanation:** By using both I & II



**Q11)** Five persons A,B,C,D and E are comparing the number of books which they have bought recently. A bought more number of books than C and E, but not the highest. B bought more number of books than exactly one person. Then which of the following bought the highest number of books?

A. C

B. D

C. B

D. E

**Answer:** Option B

**Explanation:**  $A > C \& E$

B is in 4<sup>th</sup> position

And a is more than c & e, and a is not the highest so only possibility for the 1<sup>st</sup> position is D

**Q12) In a certain code, if:**

**J@K means j is k's daughter.**

**J%K means j is k's wife.**

**J + K means K is j's father.**

**J / K means K is J's mother.**

**F@R%I/E%N**

**How is R related to N in the given expression?**

- A. Mother-in-law
- B. Son-in-law
- C. Daughter-in-law
- D. Mother

**Answer:** Option C

**Q13) Among P,Q,R,S and T , Q is the second tallest and S is immediately taller than the shortest. R is neither tallest nor the shortest. Who among them is in the middle when they stand in the order of their heights?**

- A. R
- B. P
- C. S
- D. T

**Answer:** Option A

**Explanation:** From the given statement, the descending order of heights is : \_\_, Q,\_\_ , S,\_\_.

From II, we have the order: \_\_, Q, R, S,\_\_ . Thus, R is in the middle.

**Q14) Given below is a question followed by two statements I and II, Decide which of the statements is/are sufficient to answer the question.**

**What is the color of human blood?**

**Statements:**

I. Red is called white and white is called yellow.

II. Yellow is called pink and pink is called green.

- A. Statement II alone is sufficient
- B. Either statement I alone or II alone is sufficient.
- C. Statement I alone is sufficient.
- D. Both statements I and II, are necessary.

**Answer:** Option C

**Explanation:** Only I is sufficient to identify the answer, Red is called white

**Q15) Given the below question followed by two statements 1 and 2, each containing some information. Decide which of the statements is /are sufficient to answer the question.**

**What is the height of triangle ABC?**

1. The height and base of triangle ABC are in the ratio of 6:5.

2. The area of triangle ABC is 60 sq. cm, its perimeter is 36cm and its base is 5/18th of the The perimeter of the triangle.

- A. The data given in both statements 1 and 2 together is not sufficient to answer the question.
- B. The data in either statement 1 alone or in statement 2 alone is sufficient to answer the question.
- C. The data in statement 2 alone is sufficient to answer the question while statement 1 is not alone sufficient to answer the question.
- D. The data in statement 1 alone is sufficient to answer the question while statement 2 is not alone sufficient to answer the question.

**Answer:** Option C

**Explanation:** By using 2. The area of triangle ABC is 60 sq. cm, its perimeter is 36cm and its base is  $\frac{5}{18}$ th of the perimeter of the triangle.

Base =  $\frac{5}{18}$ th of perimeter =  $\frac{5}{18} \times 36 = 10\text{cm}$

Area =  $\frac{1}{2} \times \text{base} \times \text{height}$

$60 = \frac{1}{2} \times 10 \times \text{height}$

Height = 12cm

**Q16) Sohan and Saurabh are brothers. Tanya and Tashima are sisters. Saurabh's father is the only son-in-law of Tanya's mother's mother. How is Tasima related to Sohan's father ?**

**'#'** is sister-in-law, **'>'** is daughter, **'<'** is granddaughter, and **'@'** is sister?

- A. #
- B. >
- C. <
- D. %

**Answer:** Option B

**Explanation:** Saurabh's father is the only son-in-law of Tanya's mother's mother

Hence saurabh's father is married to Tanya's mother

Tanya and saurab are brothers and sister

Tasima will be daughter to sohan's father.

**Q17) Read the given information carefully and answer the following questions**

- I. 'A#B' means 'A' is the mother of 'B'
- II. 'A\*B' means 'A' is the father of 'B'
- III. 'A&B' means 'A' is the brother of 'B'
- IV. 'A%B' means 'A' is the sister of 'B'

Which among the following expression shows that R is the maternal uncle of T?

- A. P&Q\*R#S#T
- B. P#Q\*R%S#T
- C. P#Q\*R\*S#T
- D. P%Q\*R&S#T

**Answer:** Option D

**Explanation:** Going through options only D satisfy

P%Q\*R&S#T

P is the sister of Q

Q is father of R

R is brother of S

S is mother of T

Hence, R is maternal uncle of T

**Q18) Given below is the question followed by three statements, I II and III, each containing some information. Decide which of the given statement is CORRECT?**

**The question consists of three statements numbered I, II and III, given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.**

**Eight people P, Q, R, S, T, U, V, and W were ranked based on their weights. Who is the 4th lightest person?**

I. U is heavier than only two persons. T is heavier than U but lighter than P, who is lighter than only three persons.

II. R is heavier than P but lighter than Q. S is heavier than V.

III. P is heavier than S, who is lighter than U.

A. Data are given in all statements I, II, and III together are required to answer the question.

B. Data given in both statements I and II together are required to answer the question.

C. Data given in statements I and III together are required to answer the question.

D. Data given in statement I alone is required to answer the question.

**Answer:** Option D

**Explanation:** Only I is sufficient U is heavier than only two persons. T is heavier than U but lighter than P, who is lighter than only three persons.

U will be in 6<sup>th</sup> place

P will be in 4<sup>th</sup> place

T will be in 5<sup>th</sup> place

**Q19) Statements:**

All taps are mats.

All cats are rats

All mats are rats.

**Conclusions:**

I. All cats are mats.

II. Some rats are taps.

III. Some taps are cats is not a possibility.

IV. All taps are rats.

A. Only IV follow

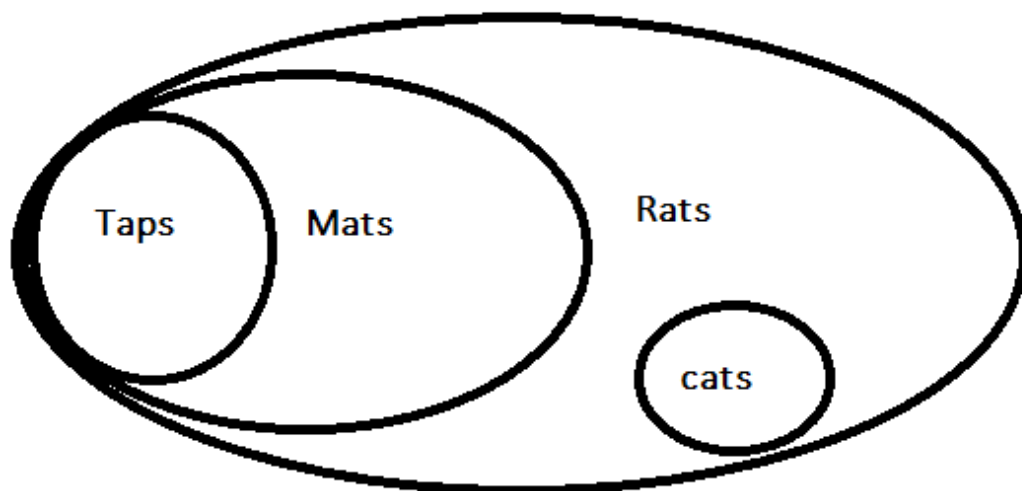
B. Only II and IV follow

C. Only I, III and IV follow

D. All follow

**Answer:** Option B

**Explanation:** As per Venn diagram only II & IV follows





Q20) Eight persons A, B, C, D, E, F, G, and H are sitting around a square table. All of them are facing towards the center, Only one person sits on each of the sides and only one person sits on each of the corners. Four of them sit on the sides and four of them sit on the corners. C is sitting 3rd to the left of B, who sits on a side. D is sitting opposite to H, who is sitting 3rd to the right of B. A is sitting 2nd to the right of G. G is not sitting opposite to either E or F. F is not an immediate neighbor of H. Who among the following is sitting opposite to A?

A. F

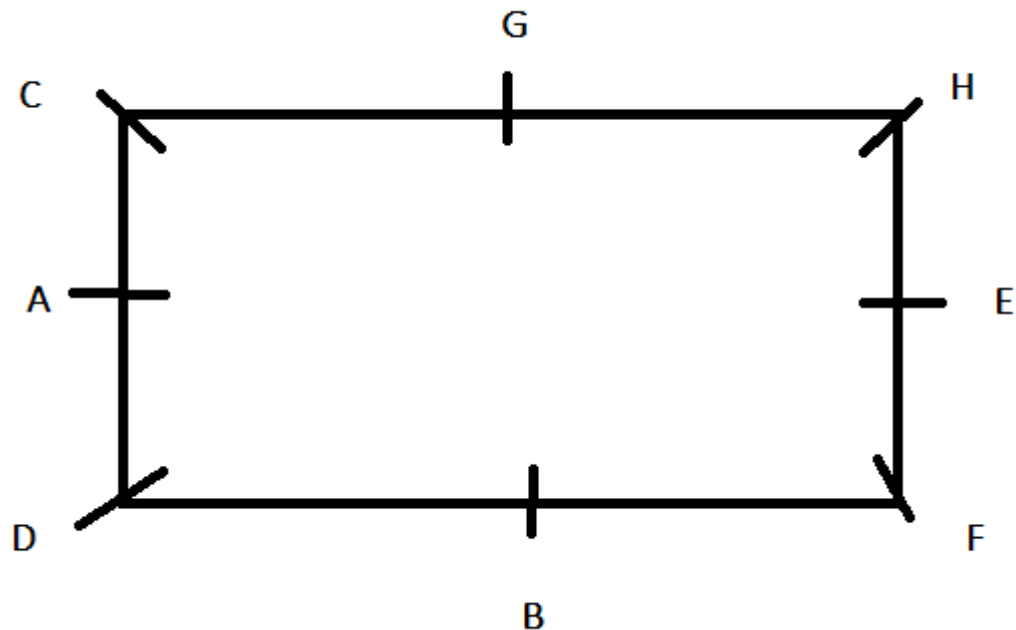
B. B

C. E

D. C

Answer: Option C

Explanation:



#### TCS NQT Advanced Coding Previous Year Questions

Q1) Given an array of integers where every element appears even number of times except one element which appears odd number of times, write a program to find that odd occurring element in  $O(\log n)$  time. The equal elements must appear in pairs in the array but there cannot be more than two consecutive occurrences of an element.

For example :

3

2 3 2