

# CHAMPION'S REASONING

VERBAL | ANALYTICAL | LOGICAL

A Comprehensive Book

For Bank & Insurance Examination

RBI, SBI, IBPS, RRBs, SEBI, NABARD,  
LIC & others

## INCLUDES

- Crystal clear conceptual Explanation.
- Basic to Advance level questions with detailed solutions.
- Questions are Bifurcated as per Subtopics.
- Out of the Box Questions ( MAINS SPECIAL )
- Strategy & tips for Bank exam preparation.
- Trend Analysis of Questions & Cut-off.
- Previous Year Papers ( All Bank Exams 2022 )
- Useful for NRA CET.

**Saurav Singh**



## TABLE OF CONTENTS

- ♦ A message to students: Strategic Discussion
- ♦ Question Trend Analysis
- ♦ Cut off Trend Analysis

### 1. **Alphanumeric Series** ..... 14-52

- ♦ Conceptual Explanation
- ♦ Letter Series
- ♦ Digit Series
- ♦ Alphanumeric Series
- ♦ Alphanumeric Symbol Series
- ♦ Numeric Series
- ♦ Word Series
- ♦ Miscellaneous (Pair/word Formation)
- ♦ Resultant Based Series
- ♦ Step Based Series
- ♦ Multiple Series

### 2. **Coding-Decoding** ..... 53-82

- ♦ Conceptual Explanation
- ♦ Letter/Number Coding
- ♦ Substitutional Coding
- ♦ Conditional Coding
- ♦ New Pattern Coding
- ♦ Binary Coding
- ♦ Machine Coding
- ♦ Mathematical Coding
- ♦ Structure Based Coding

### 3. **Inequalities** ..... 83-106

- ♦ Conceptual Explanation
- ♦ Simple Inequalities
- ♦ Coded Inequalities
- ♦ Reverse Inequalities
- ♦ Filler Inequalities
- ♦ Out of The Box

### 4. **Syllogism** ..... 107-161

- ♦ Conceptual Explanation
- ♦ Logically Follows
- ♦ Logically does not Follows
- ♦ Definitely Follows
- ♦ Definitely does not Follows

- ♦ Coded Syllogism
- ♦ Reverse Syllogism
- ♦ New Pattern Syllogism
- ♦ Out of The Box

**5. Blood Relation. .... 162-191**

- ♦ Conceptual Explanation
- ♦ Passage Based
- ♦ Coded Blood Relation

**6. Direction & Distance. .... 192-231**

- ♦ Conceptual Explanation
- ♦ Passage Based
- ♦ Coded Direction & Distance
- ♦ Axis Based Direction & Distance
- ♦ Out of The Box

**7. Seating Arrangement. .... 232-418**

- ♦ Conceptual Explanation
- ♦ Circular Seating Arrangement
- ♦ Square Seating Arrangement
- ♦ Rectangular Seating Arrangement
- ♦ Triangular Seating Arrangement
- ♦ Pentagonal/Hexagonal Seating Arrangement
- ♦ Linear Seating Arrangement
- ♦ Parallel Row Arrangement
- ♦ 3/4 Row Arrangement
- ♦ Concentric Seating Arrangement
- ♦ Out of the Box

**8. Puzzles. .... 419-581**

- ♦ Conceptual Explanation
- ♦ Day Based Puzzle
- ♦ Month Based Puzzle
- ♦ Date + Month Based Puzzle
- ♦ Year Based Puzzle
- ♦ Floor Based Puzzle
- ♦ Floor + Flat Based Puzzle
- ♦ Box Based Puzzle
- ♦ Classification Based Puzzle
- ♦ Selection Based Puzzle
- ♦ Comparison Based Puzzle
- ♦ Post/Profession Based Puzzle
- ♦ Out of the Box

**9. Machine Input. .... 582-624**

- ◆ Conceptual Explanation
- ◆ Shifting/Arrangement Based
- ◆ Coding Logic Based
- ◆ Box Based / New Pattern

**10. Data Sufficiency. .... 625-711**

- ◆ Conceptual Explanation
- ◆ Based on Two Statement
- ◆ Based on Three Statement
- ◆ Based on Five Statement
- ◆ New Pattern Questions

**11. Logical/Critical Reasoning. .... 712-759**

- ◆ Conceptual Explanation
- ◆ Course of Action
- ◆ Statement & Argument
- ◆ Statement & Assumption
- ◆ Inference
- ◆ Cause & Effect
- ◆ Mixed Questions

**12. Order and Ranking. .... 760-768**

- ◆ Conceptual Explanation
- ◆ Exercise

**Previous-Year-Question Papers**

1. IBPS RRB Clerk Prelims 2022 .....	770
2. RBI Assistant Prelims 2022 .....	773
3. IBPS Clerk Prelims 2022 .....	776
4. SBI Clerk Prelims 2022 .....	779
5. IBPS RRB PO Prelims 2022 .....	782
6. IBPS PO Prelims 2022 .....	786
7. SBI PO Prelims 2022 .....	789
8. RRB Clerk Mains Memory Based 2022 .....	792
9. RBI Assistant Mains 2021-2022. ....	796
10. IBPS Clerk Mains Memory Based - 2022. ....	801
11. SBI Clerk Mains Memory Based Paper - 2022. ....	807
12. RRB PO Mains Memory Based 2022. ....	814
13. IBPS PO Mains Memory Based Paper 2022 .....	819
14. SBI PO Mains 2022-23 Memory Based Paper. ....	825
15. RBI Grade B Phase I- 2023 (Memory Based). ....	831

## A Message to Students: Strategic Discussion

As we know, this is a world of competition, if you are not doing what is required then someone else is doing that, moreover we must expect that the number of aspirants doing exactly the same which is required would be more than that of the number of vacancies we get. Here I will try to help you in your journey of preparation to ace that competition by suggesting you some of the strategies and tips.

Let's start with the syllabus of the examination we are targeting. In Bank & Insurance examination we witness four subjects majorly - Quantitative Aptitude, Reasoning, English Language and General Awareness in addition to all these four subjects we must have awareness of computer aptitude as well. Approximately all the bank & insurance examination use to test your knowledge in two phases, first one is Preliminary Examination and second one is Mains Examination. For officer level examination (PO) we have third phase which is Interview.

Now our discussion should be towards how to build the foundation or we can say how to start preparing for bank & insurance exam from scratch?

As we know about the cut-throat competition, we must have a strong foundation. To build your foundation stronger I will suggest you to follow the below mentioned steps throughout your preparation from zero to become hero in each and every subject.

- i. **CONCEPT BUILDING:** Initially you must go through the syllabus thoroughly by getting chapterwise concepts and chapterwise practice of huge number of questions so that you can make command over the individual chapters in each subject.
- ii. **ACCURACY IS THE NEED:** Before you jump into the full-length mocks right after the completion of syllabus is not what is needed, right after the completion of a chapter by grabbing the concept and practicing huge number of questions in any subject you are advised to practice the questions (in a form of set of 5 questions else the way examination use to ask questions from that particular topic) with timer, you may use previous year paper or any book which carries huge number of questions.
- iii. **REAL HALF OF YOUR PREPARATION:** Now comes the real preparation where you are ready with all the stuffs i.e. Conceptual knowledge, a lot of practice and then speed check in the individual topic. Now we need to sync up all these to make the result in your hand. That means now you are good to go with a lot of full length mock tests of different levels and different phases.

**#Always remember that the pain which you don't want to go through is the real way to get success.**

In my long journey of teaching, what I have observed that most of the students keep themselves in comfortable zone that means most of the students prepare only prelims level syllabus, then don't even take a glimpse of Mains Syllabus which is the biggest reason of failure in the examination.

My serious concern is to convey that kindly go through the full syllabus properly that means prelims and mains both in the initial phase of your preparation only. Always try to get comfortable with the uncomfortable things you get on your way.

*“किसी काम को आप जिस ऊर्जा से शुरू करते हो, यदि उसी ऊर्जा से समाप्त करते हो, तो आप बेशक विजेता होते हो*

**- Saurav Singh**  
**Sr. Educator Reasoning**  
**Adda247**

**QUESTION TREND ANALYSIS OF REASONING OF TWO MAJOR  
EXAMINATIONS : (IBPS PO & CLERK- Prelims)**

	IBPS CLERK (PRELIMS)			IBPS PO (PRELIMS)		
Name of the Topic	2022	2021	2020	2022	2021	2020
Puzzles and Seating Arrangement	20	20	20	20	22	20
Syllogism	3	3	0	4	4	3
Blood Relation	3	0	2	3	0	3
Number based Coding	0	0	0	1	1	1
Alphabet Based	1	0	0	1	1	1
Alphanumeric Series	5	4	5	0	1	0
Coding-Decoding	0	0	0	5	0	0
Direction Sense	0	3	3	2	3	2
Order Ranking	0	1	0	0	0	0
Data Sufficiency	0	0	0	0	0	0
Inequalities	3	4	5	0	3	5
Total	35	35	35	35	35	35

Given above are the question trend analysis of two major prelims exam for your reference, which will help you in your journey of preparation.

**NOTE:** However, we have not seen questions from some of the chapters but you are advised to go through, all the chapters which is essential to cover for prelims examination.

## REFERENCES ARE IMPORTANT: CUT-OFF TREND ANALYSIS OF VARIOUS BANK EXAMINATIONS

Cut-off Trend Analysis				
EXAM NAME	Marks Out Of	2022	2021	2020
IBPS PO (Prelims)	100	49.75	50.50	58.75
SBI PO (Prelims)	100	59.50	63.00	58.50
IBPS PO (Mains)	225	71.25	80.75	83.50
SBI PO (Mains)	250	88.93	94.85	88.93
RBI (GRADE- B) PHASE-I	200	66.75	66.75	122
RBI (GRADE -B) PHASE-II	300	187.75	187.75	193.25

	SBI CLERK (Prelims)			IBPS CLERK (Prelims)			RRB PO (Prelims)			RRB CLERK (Prelims)		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
Andhra Pradesh			68	76.5	71	78	53.50	52.50	52.75	71	69.25	76.25
Arunachal Pradesh		69.25	-		-	-		52.5	52.75		-	-
Assam	69.25	68.5		80.75	68	-	49.5	45.75	41	64.25	71	-
Bihar			68.75	87.75	76	71.25	56.75	56.25	48	70	73	75.5
Chandigarh		76.5	76		62.75	79		-	-		-	-
Chhattisgarh	72.75	76.5	68.75	81.25	74	72.25		48.50	43.25		71	70.5
Delhi		83	76.25	84.50	77.25	77.5		-	-		-	-
Goa					62.5	53.75		-	-		-	-
Gujarat	72.25	64.5	56.5	81	72	72	56.75	57.25	59.75	72.75	76.75	78.25
Haryana		79.75	72.75	85.5	78.5	76.75	61.75	59.50	60.50	75.50	75.75	
Himachal Pradesh		80	66	86.50	78.5	72	59.75	57.50	56.5	72.25	74.25	71.25
Jammu & Kashmir	77				72	77.5	51.25	47	52	64.50	72	73.25
Jharkhand		69.25	68.25	84.75	79.25	-	59.25	55	54.25	72.25	76.25	-
Karnataka	64.50	64.25	58.75	74.75	67.25	-	36	44.75	-	67.25	70.75	-
Kerala	68	80.25	69.75	85.5	78	77.25	58.25	57.75	-	76	77	-
Madhya Pradesh	74.75	81.25	68.75	85	77	77.75	55.25	54.25	-	70.25	73.75	66.75
Maharashtra	65.5	66.25	59.75	75.5	70.25	69.75	51.75	53.75	47.25	68.25	72.75	67
Manipur		-	-		69.75	-	48.25	-	-	62.75	-	-
Odisha	77	82	68.25	87.50	77	75		58.50	62.75	77	78.5	79.75
Punjab	80.75	75.5	77.5	83.25	75.5	75.25	60.50	60.25	59	75.25	76.5	78.5
Rajasthan	75	77.75	68.75	86.25	81.5	78.25	60.25	60.75	66	75	76.75	78.75
Tamil Nadu	62.25	61.75	62	78	67.75	-		50.5	54	61.25	70.5	-
Telangana	69	73.75	66		-	-		51	48.25	61.5	69	71.25
Uttar Pradesh	77.5	81.25	71	84	77	68.25	62.75	54.50	47	76.50	76.5	73
Uttarakhand	78.75	81.75	69.5	89.50	81.25	76	62.50	60.75	61	75.50	77.5	
West Bengal	78.50	79.75	67.5	86	79	70.75	58.25	56.50	52	74.75	75.75	77.75

NOTE: Cut-offs provided in all the above table is of General Category. However, you may belong to any other category as well but you are advised to take the above cut-offs as your target/reference.

# CHAPTER 01

# Alphanumeric Series



## Introduction

In this topic we use to have questions which carries a string/series of elements to test our concentration level particularly. As we see that, questions carry a series of elements and we are supposed to find a particular element after we deduce the real demand of the question, so it is advised to go through questions and the given series carefully to avoid any silly mistake.

Though the questions seem to be easier you are suggested to practice a lot of questions to have command over this topic. It is one of the most productive topics where we can score good marks in both prelims as well as mains examination. In prelims five to ten questions are expected to be asked and in mains approximately 5 questions are expected to be asked.

## Types of Question

### Prelims

1. Letter Series
2. Digit Series
3. Alphanumeric Series
4. Alphanumeric Symbol Series
5. Word Series
6. Numeric Series
7. Miscellaneous
  - i Pair formation - Word & Number Based
  - ii Word formation - Meaningful Word
  - iii Vowel/consonant Based
  - iv Odd/Even Based

### Mains

1. Resultant based Series
2. Step Based Series
3. Multiple Series

## Let understand each type of questions more closely

- i. **Letter Series** – which carries alphabets only.  
Ex - D B G P R T I Z Y A C T O P
- ii. **Digit Series** – which carries digits/numerals only.  
Ex - 5 7 6 9 2 3 1 5 8 3 1 6 7
- iii. **Alphanumeric Series** – Carries a combination of both alphabets & digits.  
Ex - 3 D C 4 A C P 9 2 Q R 1 4 Z Y 5
- iv. **Alphanumeric Symbol Series** – Carries a combination of alphabets, & symbols  
Ex - # P 3 Q \* 4 9 & D A 2 % @ Z Y 5 T !
- v. **Word Series** – Carries Set of words of 3 or 4 letters, can be meaningful or non-meaningful.  
Ex - WEB DAZ YAT PRT IMT
- vi. **Numeric Series** – Carries set of numbers of 3 or 4 digits.  
Ex - 594 265 189 341 786

## Important Concepts to understand :

You must understand the following concepts very clearly in order to solve questions efficiently

- i. The word "Precede" means towards left  
Ex - CHAMPION  
Here,  
Letter 'M' is preceded by 'A' in other words,  
'A' Precedes 'M'



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"The only impossible journey is the one you never begin"





## Prelims Exercise

### Questions Based On Letter Series:

**Direction (1-5): Study the following alphabetical series carefully and answer the questions given below:**

**PROFESSORSAURAVSINGHREASONING**

- How many vowels are there which are immediately preceded by a consonant in the given series?  
(a) 4 (b) 5 (c) 7  
(d) 9 (e) More than 9
- Which of the following is 5<sup>th</sup> to the left of 15<sup>th</sup> element from the left?  
(a) H (b) R (c) S  
(d) N (e) None of these
- If all the vowels are dropped in the given series, then which element will be at 13<sup>th</sup> position from right end?  
(a) M (b) H (c) N  
(d) R (e) None of these
- How many such consonant is there in the above sequence, each of which is immediately preceded by a vowel?  
(a) FOUR (b) FIVE (c) SEVEN  
(d) EIGHT (e) None of these
- What should come in place of question mark in the following on the basis of above sequence?  
SR AR SN ?  
(a) EA (b) RA (c) ES  
(d) AO (e) None of these

**Direction (6-10): Study the following alphabetical series carefully and answer the questions given below:**

**PRACTICEISTHEKEYTOSUCCESSREMEMBERIT**

- How many consonants are there in the given sequence which are immediately preceded by a consonant and followed by a vowel?  
(a) Four (b) Five (c) Six  
(d) seven (e) Eight
- How many consonants are there in the given sequence which are immediately preceded as well as followed by a consonant?  
(a) None (b) One (c) Two  
(d) Three (e) None of these
- Which of the following element is 9<sup>th</sup> to the right of 15<sup>th</sup> element from right end of the series?  
(a) B (b) M (c) A  
(d) P (e) E
- How many such E's are there which are immediately preceded and followed by a consonant?  
(a) 3 (b) 4 (c) 5  
(d) 6 (e) 7

- Which of the following element is 7<sup>th</sup> to the right of 10<sup>th</sup> element from left end of the series?  
(a) P (b) C (c) T  
(d) K (e) E

**Directions (11-15): Read the following character sequence carefully and then answer the question given below it.**

**WORKHARDANDCHANGEYOURLIFEITSUPTOYOU**

- How many such vowels are there in the above sequence, each of which is immediately preceded by a vowel and immediately followed by a consonant?  
(a) One (b) None (c) Two  
(d) Four (e) None of these
- If all the vowels are dropped in the given series, then which element will be at 12<sup>th</sup> position from left end?  
(a) W (b) N (c) G  
(d) S (e) None of the above
- Which of the following element is 6<sup>th</sup> to the right of 13<sup>th</sup> element from the left end of the series?  
(a) R (b) S (c) J  
(d) Y (e) O
- How many such consonants are there in the above sequence, each of which is immediately preceded by a vowel?  
(a) Four (b) Six (c) Eight  
(d) Ten (e) More than Ten
- What will come in place of the question mark of the series?  
RKH RDA DCH NGE ?  
(a) ONC (b) NCR (c) YOU  
(d) NGR (e) None of the given options

**Directions (16-20): Based on the series given below, answer the following questions:**

**MEHNATKARNEWALONKIKABHIHARNAHIHOTI**

- How many consonants in the given series are immediately preceded as well as followed by a vowel?  
(a) Three (b) Five (c) Seven  
(d) Eight (e) None of these
- If all the vowels which comes in the first half the alphabetical series are removed from the above series, then which element comes at 11<sup>th</sup> position from the left end of the series?  
(a) O (b) K (c) N  
(d) I (e) None of these
- How many such consonants are there in the given series, each of which is immediately preceded by a vowel and succeeded by a consonant?  
(a) Two (b) Four (c) Six  
(d) Seven (e) More than Seven



504. Which of the following is not true?  
 (a) There are five letters in series II.  
 (b) None of these  
 (c) There are total nine numbers in series I.  
 (d) Series III has more alphabets than Series I.  
 (e) All are false
505. Which of the following is true?  
 (a) None of these  
 (b) The total number of symbols immediately preceded by numbers in series II is equal to the total number of letters immediately preceded by numbers in series I.  
 (c) The total number of symbols immediately followed by numbers in series III is less than the total number of letters immediately preceded by numbers in series I.  
 (d) The total number of letters immediately following symbol in series I is more than the total number of symbols immediately preceded by numbers in series III.  
 (e) The total number of symbols immediately preceding letter in series III is less than the total number of symbols immediately followed by numbers in series II.

## Solutions

### Letter Series

1. (d): see the consonants which have vowels immediately before them i.e. VC
2. (c): 5<sup>th</sup> to left of 15<sup>th</sup> from left means (L-L)=(15-5)=10<sup>th</sup> from left end i.e. S
3. (d): R
4. (e): see consonants which have vowels immediately after them i.e. CV
5. (c): ES
6. (d): see vowels which have 2 consonants before them i.e. CCV
7. (c): pattern is CCC
8. (b): 9<sup>th</sup> to the right of 15<sup>th</sup> from right end means (R-R)=(15-9)=6<sup>th</sup> element from right end i.e. M.
9. (d): see E which have on both sides consonants i.e. CEC
10. (c): 7<sup>th</sup> to right of 10<sup>th</sup> from left end means (R+L)=(7+10)=17<sup>th</sup> from left end i.e. T
11. (c): see vowels which have immediately before and after vowel and consonant respectively i.e. VVC
12. (c): G
13. (e): 6<sup>th</sup> to right of 13<sup>th</sup> from left end means (R+L)=(6+13)=19<sup>th</sup> from left end i.e. O.
14. (d): see consonants which have vowels immediately before them i.e. VC
15. (e): None of the given options
16. (c): see consonants which have on both sides vowels i.e. VCV
17. (b): total elements in series is 34 half is 17 which is K. Then count 11<sup>th</sup> element from left end removing vowels from first half i.e. K.
18. (c): see consonants which have immediately before and after vowel and consonant respectively i.e. VCC
19. (d): 6<sup>th</sup> consonant to right of 17<sup>th</sup> consonant from right end means (R-R)=(17-6)=11<sup>th</sup> consonant from right end i.e. N
20. (a): INK
21. (e): 3<sup>rd</sup> to left from 10<sup>th</sup> from right end means (3+10)=13<sup>th</sup> from right end skipping vowels i.e. T
22. (e): here letters include both vowels and consonants which means 2 patterns followed i.e. CVV and CCV
23. (d): TIY
24. (e): 10<sup>th</sup> from right means E and 12<sup>th</sup> from left means T and vowel comes between in them is 8.
25. (d): 2<sup>nd</sup> vowel from left end is I and 10<sup>th</sup> consonant from right end is N so 2 meaningful words formed.
26. (c): 10
27. (d): 6<sup>th</sup> letter to left of 11<sup>th</sup> letter from left end means (L-L)=(11-6)=5<sup>th</sup> from left end i.e. D
28. (b): 4<sup>th</sup> to left of 11<sup>th</sup> from right end means (L+R)=15<sup>th</sup> from right end and now letters are reversed means check it from left end i.e. T.
29. (c): TWQ
30. (a): 7<sup>th</sup> to left of 17<sup>th</sup> from left end means (L-L)=(17-7)=10<sup>th</sup> from left end i.e. N
31. (b): 13<sup>th</sup> and 7<sup>th</sup> last letter is G and M respectively. So letters come in between them according to alphabetical order is 5.
32. (c): 6<sup>th</sup> letter to left of 11<sup>th</sup> letter from left end means (L-L)=(11-6)=5<sup>th</sup> from left end i.e. V
33. (b): D
34. (e): None of the above
35. (c): if 1<sup>st</sup> letter interchange with 13<sup>th</sup> and 2<sup>nd</sup> with 14<sup>th</sup> and so on then 5<sup>th</sup> letter from right end becomes the letter 8<sup>th</sup> from left end i.e. H
36. (e): here alphabets include both vowels and consonants which means 2 patterns followed i.e. CCV and CVV
37. (b): 7<sup>th</sup> to left of 15<sup>th</sup> alphabet from left means (L-L)=(15-7)=8<sup>th</sup> from left end i.e. M
38. (b): see vowels immediately preceded and followed by consonants i.e. CVC



318. Which of the following expressions is definitely true if the expressions  $G \leq H$  and  $C \geq D$  are definitely true?

- (a)  $G = D \leq E = C \geq H$  (b)  $H = C \geq E \leq G = D$   
 (c)  $G \leq D = E \leq C = H$  (d)  $H = C \geq E = D > G$   
 (e)  $G \leq C < E = H \leq D$

319. If  $M \geq T = A > G \leq C < E$ , which of the following is definitely false?

- (a)  $G > M$  (b)  $E > G$   
 (c)  $M > A$  (d)  $A = M$   
 (e)  $M > T$

320. If the expressions, ' $K > L$ ,  $S < K$  and  $S \geq P = U \geq M$ ' are true then, which of the following combinations will be definitely true?

- (a)  $S > M$  (b)  $U > L$   
 (c)  $M = S$  (d)  $M > K$   
 (e) None of these

### Reverse Inequality (Coded)

**Directions (321-325):** In the following questions, the symbols %, @, #, \$ and \* are used with the following meaning as illustrated below:

'P#Q' means 'P is neither smaller than nor equal to Q'.

'P\*Q' means 'P is neither greater than nor equal to Q'.

'P\$Q' means 'P is not greater than Q'.

'P%Q' means 'P is not smaller than Q'.

'P@Q' means 'P is neither smaller nor greater than Q'.

In each of the following questions, mark answer according to above symbols and their meaning.

321. Which of the following makes  $C \$ E$  or  $B \% E$  definitely true?

- (a)  $A * B \$ C @ D \% E \# F$  (b)  $A \# B * C \$ D @ E \# F$   
 (c)  $A \# B \# C \% D \% E * F$  (d)  $A @ B \% C @ D * E * F$   
 (e) None of these

322. Which of the following makes  $A * C$  and  $E \# B$  definitely true?

- (a)  $A * B \$ C @ D \% E \# F$  (b)  $A * D \$ B * C @ E \# F$   
 (c)  $A * B \# C \% D * E \$ F$  (d)  $A @ B * D @ C \% E @ F$   
 (e) None of these

323. Which of the following makes  $F \# D$  definitely true?

- (a)  $A @ B \$ C * D \# E * F$  (b)  $A * B @ C \% D \# E * F$   
 (c)  $A \% B * C \$ D @ E * F$  (d)  $A \# B \% C @ D \% E * F$   
 (e) None of these

324. Which of the following does not make  $A \# C$  and  $D \$ F$  definitely not true?

- (a)  $A \% B \# C @ D \$ E \$ F$  (b)  $A \# B @ C \$ D \$ E @ F$   
 (c)  $A \% B \# C @ D \$ E * F$  (d)  $A \% B \# C \# D @ E \$ F$   
 (e) None of these

325. Which of the following does not make  $A \% B$  and  $D * F$  definitely not true?

- (a)  $A \% B \% C * D \$ E \# F$  (b)  $A \% B \% C @ D * E * F$   
 (c)  $A * B \% C @ D \$ E \$ F$  (d)  $A \% B @ C \$ D @ E * F$   
 (e) None of these

**Directions (326-328):** Study the following information to answer the given questions:

$M\%N$  means "M is not smaller than N"

$M\$N$  means "M is neither smaller than or equal to N"

$M\#N$  means "M is neither greater than or equal to N"

$M@N$  means "M is neither greater than nor smaller than N"

$M\&N$  means "M is not greater than N"

326. In which of the following expressions does the expression ' $B \& H$ ' and ' $A \$ G$ ' definitely hold true?

- (a)  $A @ B \# F \% H @ K \$ G \$ D$   
 (b)  $D \$ A @ G \% B @ F \& G \# H$   
 (c)  $A \# O \$ G \# H \% S \% B$   
 (d)  $G @ U \& B @ E \& H @ O \# A$   
 (e) None of these

327. In which of these expression ' $L \$ P$ ' is definitely false?

- (a)  $W \# P \% S \% Q \# N \$ A \% L \$ V$   
 (b)  $N \$ L \$ M @ D \% B @ A \$ P @ R$   
 (c)  $M \& A \$ L \$ W \% V \& B @ P \# S$   
 (d)  $S \$ L @ C \% H @ H \% P \& Q @ T$   
 (e)  $B \$ L \& A @ M \# Q \& T @ P \# G$

328. In which of these expression ' $A \& P$ ' is definitely false?

- (a)  $W \# P \% S \% Q \# N \$ A \% R \$ V$   
 (b)  $N \$ A \$ M @ D \% B @ L \$ P @ R$   
 (c)  $M \& A \$ L \$ W \% V \& B @ P \# S$   
 (d)  $S \$ A \$ @ C \& H @ P \& Q @ T @ K$   
 (e)  $B \$ L \& A \$ M \% Q \# T \$ P \# G$

**Directions (329-330):** Study the following information and answer the question:

If "%" means subtraction, "\$" means division, "&" means addition, "@" means multiplication and "\*" means equal.

329. Find the resultant of the following term -

$$20 @ 4 \$ 8 \& 2 \% 3$$

- (a) 2 (b) 1  
 (c) 15 (d) 16  
 (e) None of the above

330. If "%" and "\$" are interchanged, then which of the following is false?

- (a)  $4 \$ 3 \% 2 * 5$  (b)  $48 \% 6 \$ 7 * 1$   
 (c)  $8 \$ 2 \% 3 * 2$  (d)  $4 \$ 1 \% 3 * 1$   
 (e) All are true

**Directions (331-335):** Study the following information to answer the given questions:

$M\%N$  means "M is not smaller than N"

$M\$N$  means "M is neither smaller than or equal to N"

$M\#N$  means "M is neither greater than or equal to N"

$M@N$  means "M is neither greater than nor smaller than N"

$M\&N$  means "M is not greater than N"

331. In which of these expressions ' $U \$ W$ ' be definitely false?

- (a)  $U \$ P \% Q @ G \% R \$ W$  (b)  $P \# A \wedge U \wedge T; W \% O \$ T$   
 (c)  $W \wedge A \$ L @ R \# U$  (d)  $U \$ C \% F \wedge H; W \# F$   
 (e)  $U \$ T @ O \% P; W \# J @ P$

332. In Which of the following expressions does the expression ' $D @ V$ ' to definitely hold true?

- (a)  $K \% D \wedge R @ P \# S \wedge V$  (b)  $U \% V \% M @ F \wedge A \% D$   
 (c)  $D \% C \$ Q \% B @ N \wedge V$  (d)  $G \% D @ A \# B \wedge S \wedge V$   
 (e) None of these

333. Which of the following expressions is true if the expression  $P \# T \wedge B \$ S \$ M \% A$  is definitely true?

- (a)  $A \wedge P$  (b)  $S \# P$   
 (c)  $M \$ P$  (d)  $A \# B$   
 (e)  $T \wedge M$



- (a) All not follow (b) Only I, II and III follow  
(c) Only I and III follow (d) Only III and IV follow  
(e) None of these

**115. Statements:** Some Girls are Men.

All Men are Boys.  
All Boys are Women.  
No Women is a Child.

- Conclusions:** I. Some Girls are Women.  
II. All Men are Women.  
III. Some Boys are Girls.  
IV. No Child is a Men.

- (a) Only I and II follow (b) Only I, II and III follow  
(c) Only II and III follow (d) Only II, III and IV follow  
(e) All follows

**116. Statements:** Some Triangle are Cubes.

Some Cubes are Square.  
Some Square are Box.  
No Cube is Circles.

- Conclusions:** I. Some Circles are Triangle is a possibility.  
II. No Circles are Boxes is a possibility.  
III. Some Boxes are Cubes.  
IV. Some Square are not Circle.

- (a) Only I follow (b) Only I, II and IV follow  
(c) Only II and IV follows (d) Only III follows  
(e) None of these

**117. Statements:** All Keyboard are Mouse.

Some Mouse are tablets.  
No tablets are Laptop.  
Some Laptop are Monitor.

- Conclusions:** I. No Keyboard is Laptop.  
II. All Mouse being laptop is a possibility.  
III. All Keyboard being laptop is a possibility.  
IV. All laptop being Mouse is a possibility.

- (a) All not follows (b) Only I and II follow  
(c) All follow (d) Only III and IV follow  
(e) Only I, II and III follow

**118. Statements:** All Winters are Summers.

All Summers are Autumn.  
No Autumn is Climate.  
All Climates are Good.

- Conclusions:** I. No Winters is Climate.  
II. No Summers are Climate.  
III. All Winters are Autumn is a possibility.  
IV. All Good are Autumn is a possibility.

- (a) Only I and II follow (b) Only I and IV follow  
(c) Only I, II and III follow (d) All not follows  
(e) None of these

**119. Statements:** All Science are Maths.

All Maths are Biology.  
Some Biology are Chemistry.  
No Chemistry are History.

- Conclusions:** I. Atleast Some Maths are not chemistry.  
II. Some Biology are definitely Science.  
III. No Chemistry is Science is a possibility.  
IV. All Science being History is a possibility.

- (a) All follows (b) Only I and II follow  
(c) Only II and IV follow (d) Only III and IV follow  
(e) Only II, III and IV follow

**120. Statements:** Some Bench are Chairs.

All Chairs are Tables.  
Some Tables are Desk.  
No Table is bands.

- Conclusions:** I. No Chair is Bench.  
II. All Bench are band is a possibility.  
III. Some Desk are Bench is a possibility.  
IV. Some Tables are Bench is a possibility.

- (a) Only I and II follow (b) Only II and III follow  
(c) Only I and III follow (d) Only II and IV follow  
(e) None of these

### Logically Follows (Secondary Key Words)

**Direction (121-145):** In each of the questions below, statements are given followed by two conclusions numbered I and II. You have to take the given statements to be true, even if they seem to be at a variance with commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

- (a) Only I follow (b) Only II follows  
(c) Either I or II follows (d) Neither I nor II follow  
(e) Both I and II follow

**121. Statements:** Each green is rose.

Every rose is pink.  
None pink is beautiful.

- Conclusions:** I. No beautiful is green.  
II. No green is pink.

**122. Statements:** No one bowlers are cricketer.

100% batsman is cricketer.  
Many bowlers are All-rounder.

- Conclusions:** I. No bowler is batsman.  
II. Some cricketers are not bowlers.

**123. Statements:** Any governments are PSUs.

Maximum finances are PSUs.  
All PSU is not bank.

- Conclusions:** I. At least some banks are finance.  
II. All bank being finance is a possibility.

**124. Statements:** Many CNG are Britannia.

Most of Britannia are parle-G.  
Any parle-G are tiger.

- Conclusions:** I. All parle-G being CNG is a possibility.  
II. Some tigers are not CNG.

**125. Statements:** 0.23% dairy-milks are munch.

Never Kit-kat is a dairy-milks.  
All Cadbury is munch.

- Conclusions:** I. Some munches are not kit-kat.  
II. All kit-kat being munch is a possibility.

**126. Statements:** Every silver is gold.

A few irons are gold.  
Any platinum is iron.

- Conclusions:** I. All irons are platinum.  
II. No silver is irons.





- 344. Statement:** I. Some Maths are Hindi.  
II. All Hindi are English.  
III. No Maths are English.  
IV. No Sanskrit is English.  
V. All Maths are Sanskrit.  
VI. Some Hindi are Sanskrit.

**Conclusion:** (a) (iii, iv, v) (b) (i, vi, v)  
(c) (ii, vi, iv) (d) (iv, v, iii)  
(e) None is correct

- 345. Statement:** Some Oppo are Vivo.  
All Nokia are Apple.  
A few Oppo are Nokia.  
All Apple are Vivo.

**Conclusion:** (a) (iv, v, ii) (b) (i, iii, v)  
(c) (ii, v, iv) (d) (iii, v, vi)  
(e) None is correct

## Out of The Box

**Directions (1-5):** Study the following statements and then decide which of the given conclusions logically follows from the given statements disregarding the commonly known facts.

1.

	Statements		Conclusions
A	Some Mango are Apple. Only a few Apple are Jeans. All Jeans are Coconut. No Coconut is Mango.	P	Some Coconuts are Orange. Some Apple are not Mango.
B	Only a few Mango are Apple. No pant is Coconut. Only Orange is Coconut. Some Orange are Pink.	Q	Some Apple are not Coconut. Some Orange are Mango.
C	No Orange is Mango. Some Orange are Apple. All Apple are Coconut. Only a few Coconuts are Orange.	R	Some Orange are not Apple. Some Coconut can be Mango.

- (a) Only AR follows (b) Only BQ follows  
(c) Only AP and CP follow (d) Both CP and BP follow  
(e) Only CP follows

2.

	Statements		Conclusions
A	Some Biscuit are Bread. Only a few Bread are Bun. Only Biscuit is Pasta. No Maggi is Bun.	P	Some Bun can be Maggi. All Pasta can never be Pizza.
B	Some Pasta are Bun. No Pizza is Bun. Only a few Maggi is Pizza. Only Pasta is Noodles.	Q	Some Biscuit are not Maggi. Some Pasta can be Bun.
C	Very few Bun are Bread. All Bread are Biscuit. Only a few Biscuit are Pasta. No Maggi is Pasta.	R	Some Pasta can never be Maggi. Some Bread are not Bun.

- (a) Only AR follows (b) Only BP and CQ follow  
(c) Only CQ follows (d) AR, BP and CQ follow  
(e) None follows

3.

	Statements		Conclusions
A	Only a few Pav is Roti. Very few Roti is Dhokla. No Chokha is Dhokla. All Paratha is Chokha.	D	Some Roti can be Chokha. No Paratha is Dhokla.

4.

B	No Paratha is Dhokla. Very few Roti is Dhokla. All Roti is Chokha. Only few Pav is Chokha.	E	All Chokha can never be Dhokla. No Roti is Chokha.
C	Some Dhokla is Paratha. No Paratha is Roti. Only a few Chokha is Paratha. Some Dhokla are Chokha.	F	Some Chokha can never be Paratha. Some Pav is Roti.

- (a) Only AD and BF follow (b) Only BF follows  
(c) Only CE follows (d) Only AD follows  
(e) None of these

	Statements		Conclusions
A	Only a few May is December. No July is December. All June is July. All June is August.	D	Some October can never be December. Some July is not May.
B	No June is May. All December is May. Some July is December. Only a few August is July.	E	All July can never be May. Some June can be December.
C	Only July is October. Very few May is December. Only a few August is July. No December is August.	F	Some August can be July. Some May is not June.

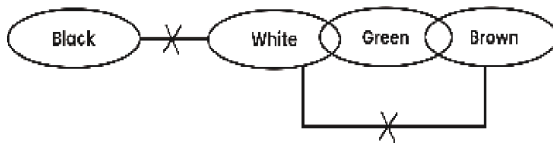
- (a) Only BE and AF follow (b) Only CD follows  
(c) Only BF follows (d) Only AF and CD follow  
(e) None follows

5.

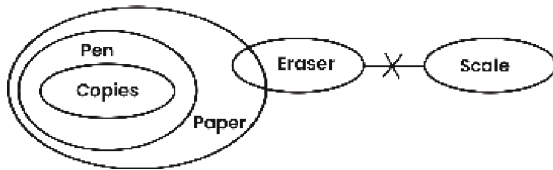
	Statements		Conclusions
A	Only Nano is Hyundai. Some Bajaj is Nano. All Bajaj is Tata.	D	Some Bajaj is Hyundai. Some Tata is not Mahindra.
B	All Mahindra is Nano. All Nano is Hyundai. Only a few Tata is Hyundai. Some Bajaj is Nano.	E	All Creta can never be Hyundai. Some Nano can be Bajaj.



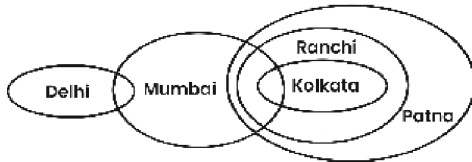
105. (d)



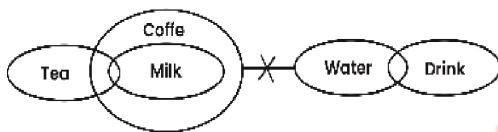
106. (e)



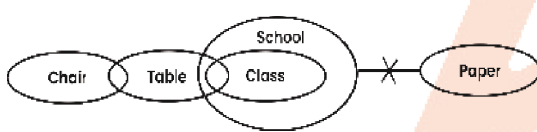
107. (b)



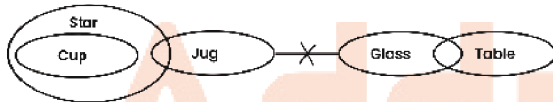
108. (d)



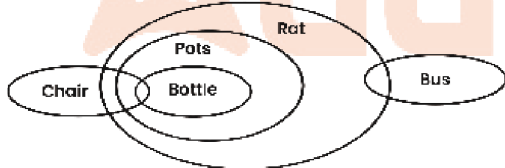
109. (e)



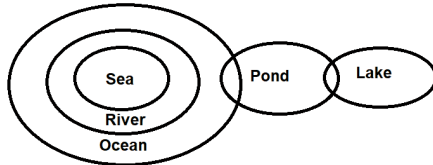
110. (c)



111. (c)



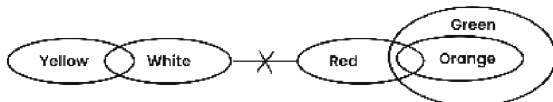
112. (b)



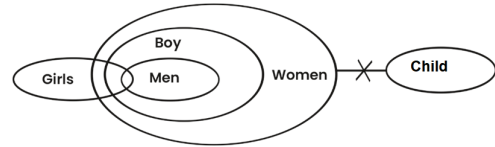
113. (e)



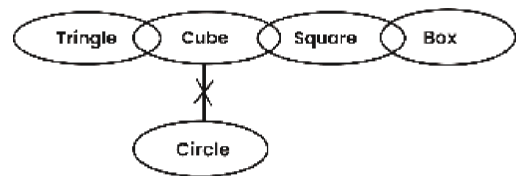
114. (c)



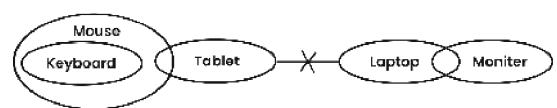
115. (e)



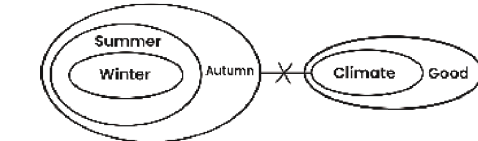
116. (b)



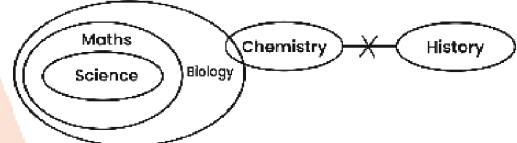
117. (d)



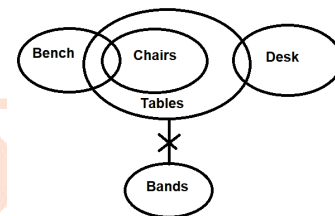
118. (a)



119. (e)

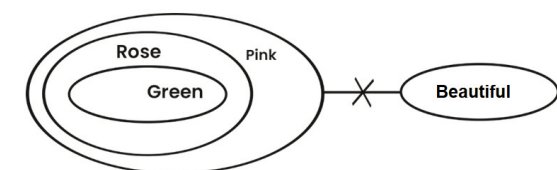


120. (e)

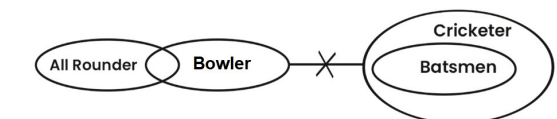


## Logically Follows (Secondary Key Words)

121. (a)



122. (e)



123. (b)



- (c) As many persons sit between D and E  
(d) Both A and C  
(e) None of these
457. How many persons are sitting to the right of V?  
(a) One  
(b) As many persons sit between T and U  
(c) Three  
(d) As many persons sit to the left of Q  
(e) None of these
458. If all the persons from row WX are sitting in the same order at a consecutive multiple of 9m and the remaining persons are sitting at a consecutive multiple of 5m from point M in row MN, then what is the distance between B and point N?  
(a) 81m (b) 76m
- (c) 96m (d) 91m  
(e) None of these
459. If all the persons from row YZ are seated in row LO at a consecutive multiple of 2m starting 12m from point L, then what is the distance of U from the point O?  
(a) 91m (b) 73m  
(c) 96m (d) 82m  
(e) None of these
460. Which of the following statement is not true?  
(a) U sits 54m away from V  
(b) Two persons are sitting between A and the one who sits immediate left of B  
(c) F sits at the left end  
(d) R is sitting third from the left end  
(e) All the above statements are true

## Out of the Box

**Directions (1-5):** Study the information carefully and answer the questions given below.

The distance between persons is consecutive multiple of 4. The distance between Jiya and Tanya is 60m. Jyoti was seated second to the right of Jiya who does not sit at any of the ends. The distance between Riya and Jiya was in multiple of three. The number of persons seated between Apurva and Jiya was the same as between Riya and Priti. Jyoti and Tanya were not immediate neighbours. The distance between Apurva and Meena was greater than 50. More than two persons were seated between Tanya and Priti. After some time, some of these persons started moving in certain directions. Jiya moved 80m south and turned left and moved 60m. Then she turned right and moved 40m to reach point A. Riya moved 30m north and turned right and moved 84m. Then she turned left and moved 20m and again, she turned left and moved 60m. Finally, she turned right and moved 10m to reach point B. Tanya moved 15m towards the west and turned left and moved 80m. Again, she turned left and moved 31m and turned left and moved 130m. Finally, she turned left and moved 15m and turned right and moved 10m to reach point C.

- What is the distance between Riya and Priti?  
(a) More than 60 (b) 58 (c) 56  
(d) 54 (e) 52
- What is the position of Jiya with respect to point B?  
(a) South (b) North (c) Northeast  
(d) Southwest (e) Southeast
- What is the shortest distance between Jiya and point C? (approx.)  
(a) 81 (b) 82 (c) 83  
(d) 84 (e) 85
- Who sits third to the left of Priti?  
(a) Meena (b) Tanya (c) Apurva  
(d) Jyoti (e) Riya
- What is the distance between Jiya and Meera?  
(a) 90 (b) 92 (c) 95  
(d) 96 (e) 98

**Directions (6-10):** Study the information carefully and answer the questions given below.

Nine persons namely –Abhi, Manju, Reena, Juhi, Anchal, Disha, Sneha, Suman and Bharti are sitting in a linear row facing north and wore different jersey number i.e., 17, 18, 19, 21, 24, 27, 28, 39, and 56. The distance between each person is a consecutive integral multiple of three from the left end. Distance between any adjacent pair is not more than 36m. The person adjacent to Manju sits third to the left of Anchal, whose jersey number is 19. The one who wore jersey number 27 sits 54m left Manju. At most two persons are sitting between jersey numbers 27 and Manju. The person sitting second to the right of Abhi sits third to the left of Sneha. Jersey number of Sneha is twice the jersey number of Reena. The number of persons sitting between Manju and jersey number 56 is one less than Disha and jersey number 39. Jersey number of Bharti is  $\frac{3}{4}$ th of jersey number of Juhi. Two persons are sitting to the left of Abhi, whose jersey number is odd but neither 39 nor 27. Jersey number 39 sits left of Disha but none of them sits at the end. Bharti sits 21m away from jersey number 17. Reena sits at any position right of Suman, who doesn't sit at the end of the row. Jersey number of Disha and Manju are not 56 and 39 respectively.

- What is the position of jersey 21 with respect to Juhi?  
(a) Third to the right (b) Immediate left  
(c) Second to the right  
(d) Second to the left (e) None of these
- What is the distance between Reena and jersey number 17?  
(a) 27m (b) 39m (c) 36m  
(d) 45m (e) None of these
- Which of the following statement is/are true?  
I. Jersey number 56 sits immediate left of Anchal.  
II. Two persons are sitting between Suman and jersey number 28.  
III. Bharti sit third to the right of jersey number 19.  
(a) Both I and II (b) Only III (c) Both I and III  
(d) Only II (e) None of these



9. How many persons are sitting between jersey number 17 and Abhi?  
 (a) As many persons right of Manju  
 (b) One  
 (c) As many as between Juhi and jersey number 27  
 (d) Two  
 (e) None of these

10. Four of the five are alike in a certain way and thus form a group, find the odd among them?  
 (a) Juhi – 21 (b) Disha – 17 (c) Suman – 27  
 (d) Sneha – 18 (e) Reena – 21

**Direction (11-15):** Study the information carefully and answer the questions given below.

Eight friends A, B, C, D, E, F, G and H were seated around a circular table facing the centre. All the persons were seated along the circumference of the circle at an equal distance between them. The radius (r) of the circle is 42m and the circumference of the circle is  $2\pi r$ . Each of them like different T10 league teams – Mumbai Indians, CSK, RCB, KKR, Rajasthan Royals, Delhi Capital, Punjab Kings and Pune Warriors. The one who likes Pune Warriors was seated 99m away from A. B was seated opposite to the one who likes Pune Warriors. The one who likes Rajasthan Royals was seated second to the right of B. C neither likes RCB nor Delhi Capital. D was seated 132m away from the one who likes Rajasthan Royals. Two persons were seated between D and the one who likes RCB. E was seated to the immediate left of the one who likes Punjab Kings. A either likes CSK or KKR. E either like Team Mumbai Indian or Delhi Capital. The number of persons seated between C and the one who likes Team Mumbai Indian (when counted from the left of C) was the same as between F and the one who likes CSK (when counted from right of B). Not more than two persons seated between G and the one who likes Delhi Capitals when counted from the right of G who neither likes Team Mumbai Indians nor Pune Warriors. H and the one who likes CSK were immediate neighbours. The one who likes CSK was seated 66m away from the one who likes Punjab Kings. Neither F nor B likes Punjab Kings.

11. F likes \_\_\_\_\_  
 (a) Delhi Capitals (b) RCB (c) Pune Warriors  
 (d) Rajasthan Royals (e) Mumbai Indians
12. Distance between G and the one who likes KKR is \_\_\_\_\_ (when counted from the left of G)  
 (a) 66m (b) 99m (c) 132m  
 (d) 165m (e) More than 165m
13. How many persons were seated between B and the one who likes Delhi Capitals when counted from the right of B?  
 (a) One (b) Two (c) Three  
 (d) Four (e) Five
14. Who sits second to the right of C?  
 (a) The one who likes Delhi Capitals  
 (b) The one who likes RCB  
 (c) The one who likes Punjab Kings  
 (d) The one who likes Rajasthan Royals  
 (e) The one who likes Team Mumbai Indians

15. Which of the following statement(s) is/are true?  
 (a) C sits opposite to the one who likes KKR  
 (b) Distance between F and the one who likes Delhi Capitals is 66m  
 (c) Two persons sit between D and the one who likes RCB  
 (d) Both (a) and (b)  
 (e) Both (b) and (c)

**Direction (16-20):** Study the information carefully and answer the questions given below.

Eight persons A, B, C, D, E, F, G and H were seated around a circular table facing centre. Each of them bought different fruits and vegetables – Beans, Oranges, Grapes, Tomato, Ginger, Mushrooms, Capsicums and Watermelon for different rupees which ranged between Rs.30 to Rs.50 (both prices are inclusive). All the persons are sitting along the circumference of the circle at an equal distance between them. The radius (r) of the circle is 70m and the circumference of the circle is  $2\pi r$ . All the above information is not necessarily in the same order. The one who bought Grapes was seated 110m away from the one who bought for rupees which was in a square number. A was seated to the immediate right of the one who bought Grapes. C and the one who bought Watermelon were immediate neighbours. The one bought Oranges was seated 110m to the right of B. Two persons were seated between A and the one who bought for 40 rupees. One person was seated between the one who bought Beans and the one who bought for 40 rupees. The one who bought Mushrooms was seated 220m away from G. Either B or F bought Mushrooms. The prices of G and the one who bought Grapes was in a prime number. F was seated second to the left of the one who bought Ginger. The price difference between the immediate neighbours of F is two. The price of the Ginger is 30 rupees and was seated 165m away from the one who bought Tomato. B's price was in a multiple of five but not the highest. Two persons were seated between D and the one who bought Capsicums. Neither G nor E bought Capsicums. G's price is two more than the one who bought Mushrooms. The price of the Watermelon is 37. H's price was equal to the average of the sum of D and the one who bought Mushrooms. The one who bought for 50 rupees was seated to the immediate left of G.

16. Who among the following was seated second to the right of E?  
 (a) The one who bought Oranges  
 (b) The one who bought Watermelon  
 (c) The one who bought Mushrooms  
 (d) The one who bought Grapes  
 (e) The one who bought Beans
17. The sum of the price of H and the one who bought Beans is \_\_\_\_\_  
 (a) 90 (b) 81 (c) 87  
 (d) 97 (e) 91
18. The difference between the prices of E and the one who bought Grapes is \_\_\_\_\_  
 (a) 5 (b) 2 (c) 3  
 (d) 4 (e) 7
19. Four of the following were in a certain group, which of the following that does not belong to that group?  
 (a) E (b) B (c) H  
 (d) F (e) A



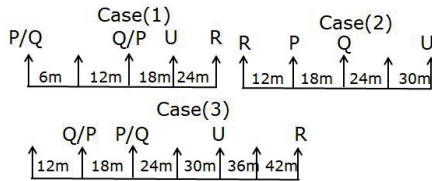


Case (1a) is not valid as B and C doesn't sit together, and Case (3) is not valid as the distance between B and G is neither less than 28m nor more than 90m.

For Row YZ:

- The one who sits three places away from R sits 30m to the left of U.  
Since, only such possible combination is (12, 18), and 30m. That means, in case (1) R sits immediate right of U, in case (2) R sits fourth to the left of U, and in case (3) R sits second to the right of U.
- P sits 18m away from Q, who doesn't sit adjacent to R.  
Only such possible combination is (6, 12), and 18m.

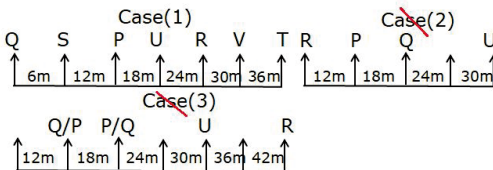
Based on the above given information we have:



Again, we have:

- S is the only neighbor of Q.  
That means, in case (1) S sits immediate right of Q, case (2) & case (3) are not valid.
- The number of persons sitting between S and U is the same as the number of persons sitting to the right of V.  
That means, V sits second from the right end.

Based on the above given information we have:

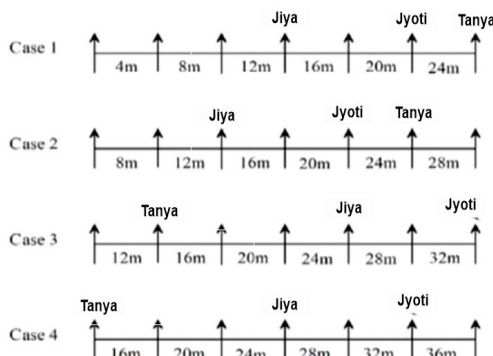


Case (2) & case (3) are not valid as S is the only neighbor of Q.

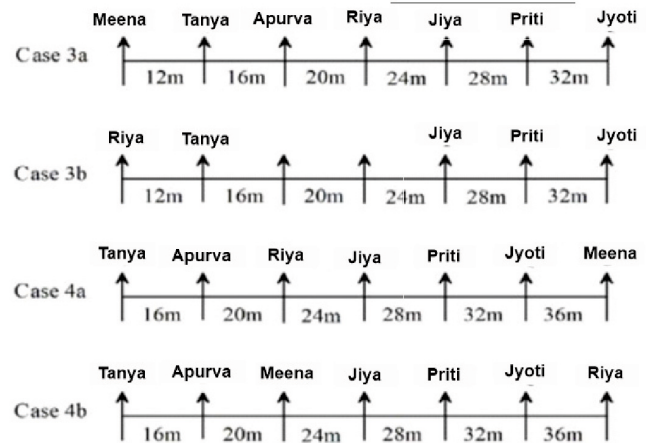
456. (d)                      457. (a)                      458. (c)  
459. (b)                      460. (d)

### Out of the box

**Solution (1-5):** The distance between Jiya and Tanya is 60m. Jyoti was seated second to the right of Jiya who does not sit at any of the ends. Jyoti and Tanya were not immediate neighbours. Maximum distance between any two adjacent persons is not more than 36m.



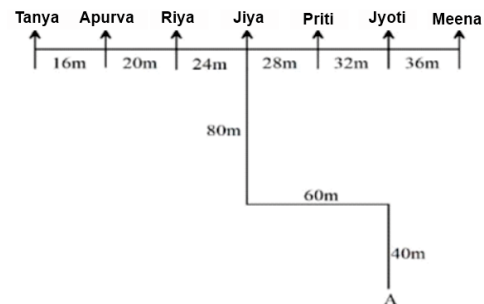
Case 1 and case 2 are invalid because Jyoti and Tanya are not immediate neighbours. The distance between Riya and Jiya was in multiple of three. The number of persons seated between Apurva and Jiya was the same as between Riya and Priti. The distance between Apurva and Meena was greater than 50. More than two persons were seated between Tanya and Priti.



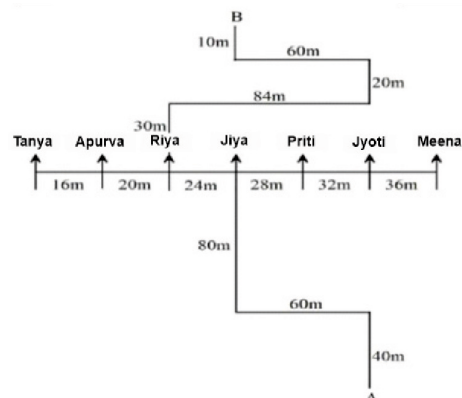
Case 3a and case 4b are invalid because Distance between Apurva and Meena is greater than 30. Case 3b is invalid because the number of persons sit between Apurva and Jiya is same as between Riya and Priti. So, the final arrangement is



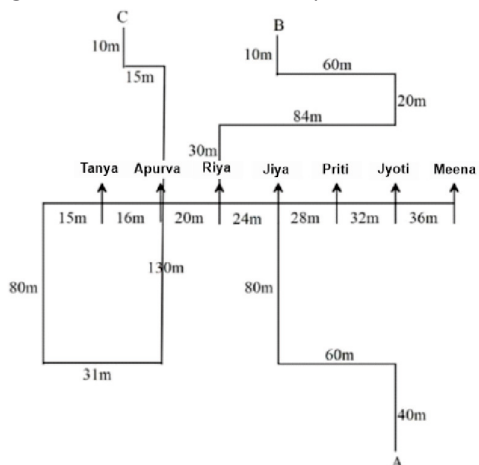
Now, they move according to their positions such that: Jiya moved 80m south and turned left and moved 60m. Then she turned right and moved 40m to reach point A.



Riya moved 30m north and turned right and moved 84m. Then she turned left and moved 20m and again, she turned left and moved 60m. Finally, she turned right and moved 10m to reach point B.

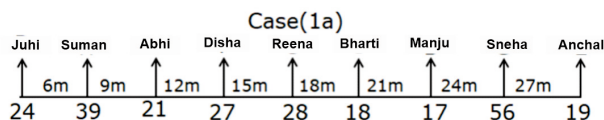


Tanya moved 15m towards the west and turned left and moved 80m. Again, she turned left and moved 31m and turned left and moved 130m. Finally, she turned left and moved 15m and turned right and moved 10m to reach point C.



1. (e)
2. (a)
3. (d)
4. (c)
5. (d)

**Solution (6-10):**



We have:

- The one who wore jersey number 27 sits 54m left Manju.
- At most two persons are sitting between jersey numbers 27 and Manju.

Since, the distance between any adjacent pair is not more than 36m, thus at least one person sits between them.

**Case I:** One person sits between Manju and jersey number 27.

$$\text{Then, } X + (X + 3) = 54$$

$X = 25.5$ , which is not an integral multiple.

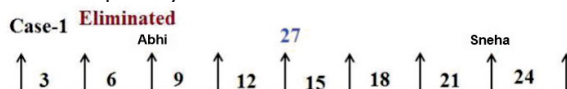
**Case II:** Two persons sits between Manju and jersey number 27.

$$\text{Then, } X + (X + 3) + (X + 6) = 54$$

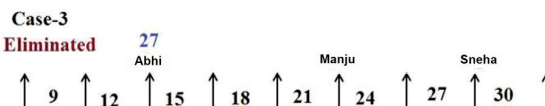
$X = 15$ , thus consecutive multiples are 15m, 18m & 21m.

- The person adjacent to Manju sits third to the left of Anchal, whose jersey number is 19. That means, in case (1) jersey number 27 sits third to the left of Manju, and Anchal sits second to the right of Manju, in case (2) jersey number 27 sits third to the left of Manju, and Anchal sits fourth to the right of Manju.
- The person sitting second to the right of Abhi sits third to the left of Sneha.
- Jersey number of Sneha is twice the jersey number of Reena.  
Thus, only possible combination = (28, 56).
- Two persons are sitting to the left of Abhi, whose jersey number is odd but neither 39 nor 27.  
That means, in case (1a) Abhi sits immediate left of jersey number 27, in case (1b) & case (2) Abhi sits immediate right of jersey number 27, in case (1c) Abhi sits second to the right of jersey number 27.

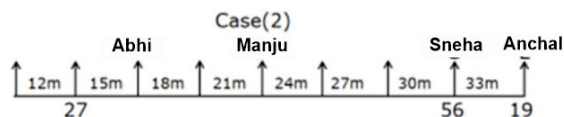
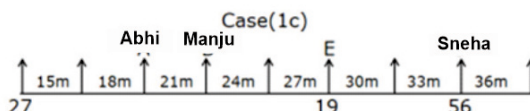
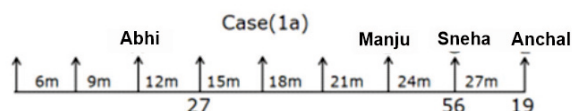
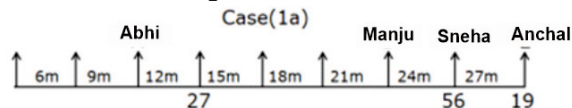
**Note:** if the distance between the 1st and 2nd person from left end is three, then there is no place left for Manju since it was occupied by Sneha as shown



**Note:** if the distance between the 1st and 2nd person from left end is nine, then Abhi's jersey number is 27, which is not possible as per given condition.



Based on the above given information we have:

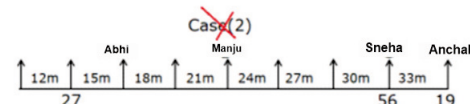
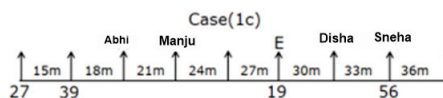
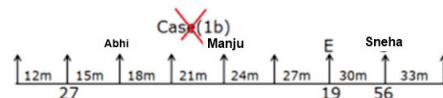
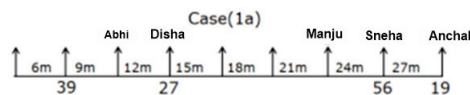


**Again, we have:**

- The number of persons sitting between Manju and jersey number 56 is one less than Disha and jersey number 39.
- Jersey number 39 sits left of Disha but none of them sits at the end.

That means, in case (1a) jersey number of Disha is 27, in case (1c) Disha sits immediate left of Sneha, case (1b) & case (2) are not valid.

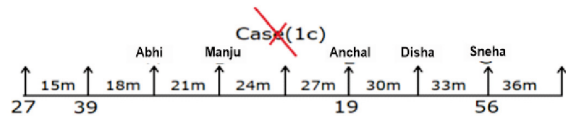
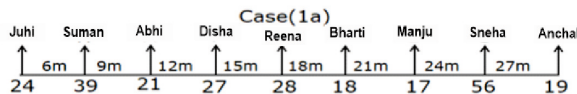
Based on the above given information we have:



Case (1b) & case (2) are not valid as the number of persons sitting between Manju and jersey number 56 is one less than Disha and jersey number 39.

Again, we have:

- Jersey number of Bharti is  $\frac{3}{4}$ th of jersey number of Juhi. Only such possible combination are (24, 18) & (28, 21). Since, jersey number of Reena must be 28, thus only valid combination is (24, 18).
- Bharti sits 21m away from jersey number 17. That means, in case (1a) Bharti sits immediate left of Manju, whose jersey number is 17, case (1c) is not valid.
- Reena sits at any position right of Suman, who doesn't sit at the end of the row. That means, Jersey number of Suman must be 39, and Juhi sits at the left end of the row. Based on the above given information we have the final arrangement as follows:



Case (1c) is not valid as Bharti sits 21m away from jersey number 17.

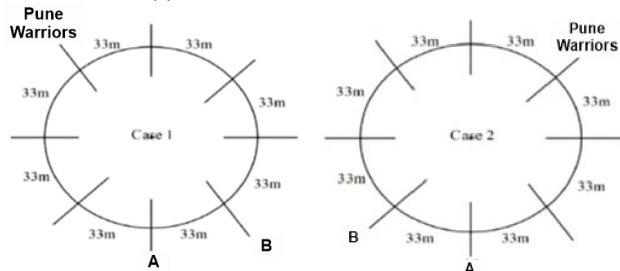
6. (c)                      7. (b)                      8. (a)  
9. (e)                      10. (b)

**Solution (11-15):** Circumference of the circle =  $2\pi r$

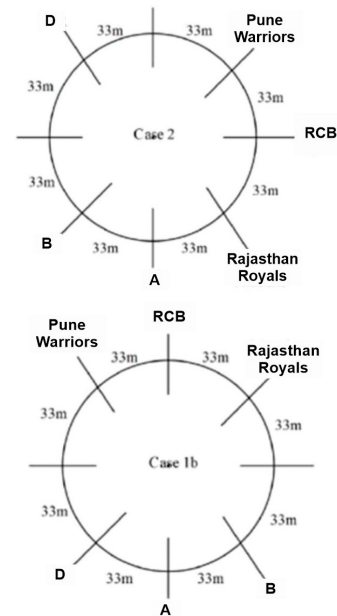
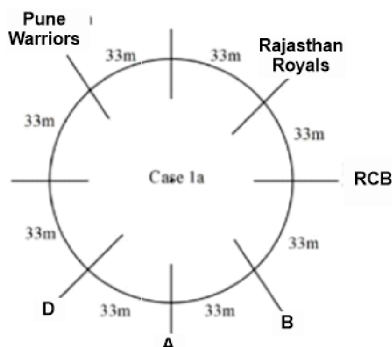
Radius (r) = 42 = 264

Eight persons were seated at an equal distance =  $264/8 = 33m$

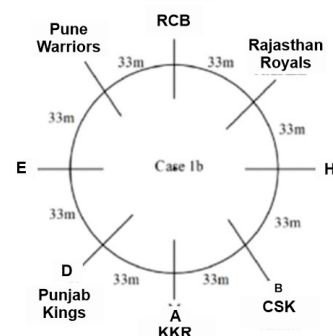
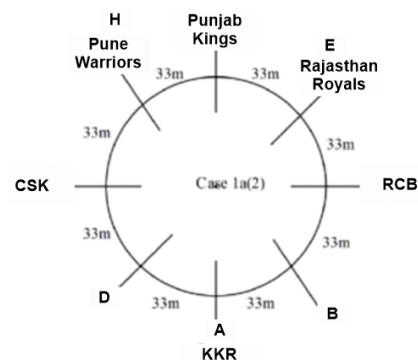
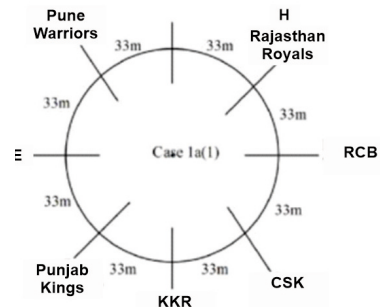
The one who likes Pune warriors was seated 99m away from A. B was seated opposite to the one who likes Pune Warriors.



The one who likes Rajasthan Royals was seated second to the right of B. D was seated 132m away from the one who likes Rajasthan Royals. Two persons seated between D and the one who likes RCB. A either likes CSK or KKR.



H and the one who likes CSK were immediate neighbours. The one who likes CSK was seated 66m away from the one who likes Punjab Kings. E was seated to the immediate left of the one who likes Punjab Kings. Neither F nor B likes Punjab Kings. E either like Mumbai Indians or Delhi Capitals.



# CHAPTER 08

## Puzzles



### Introduction

Have you ever solved a SUDOKU or at-least you have seen your schools "Time table" that was nothing but a form of Puzzle. In this topic you will be provided with a couple of information/clues about a group of people, object or any other element which will be raw (i.e. unarranged and unorganized) you need to arrange them in a systematic pattern. This topic tries to check your mental and analytical ability to interpret the given information and arrange it in a systematic pattern. In order to be efficient in this topic you must follow this thumb rule - first is interlinking of clues and second is take projections wherever needed. Since there is no fix rule or formulae to solve the problems of puzzles we need to have good practice to make command over this topic.

### Types of Question

- |                        |                              |
|------------------------|------------------------------|
| I. Day/Month Based     | VI. Box Based                |
| II. Month + Date Based | VII. Post/ Profession Based. |
| III. Year Based        | VIII. Classification Based   |
| IV. Floor Based        | IX. Selection Based          |
| V. Floor+ Flat Based   | X. Comparison Based          |

### Some important Concepts you need to know:

Questions of puzzle can be solved in table/chart form and by fixing one of the variables in most of the types.

It is always important to go through the passage first, to identify its category and to identify some potential clues with which you are going to start solving the problem.

### Let's have a look on some important steps to follow:

- A. Basic Information:** Generally, initial sentences can give us basic information about the situation or we can get the general idea about the category by reading the initial sentences.  
**Ex:-** Eight person A,B,C,D,E,F,G and H were born in eight different months.  
By reading this basic information we get the idea that this puzzle falls in month based category.
- B. Fixing Variable:** Almost in all the type of puzzles we need to fix one variable and taking that variable as reference, we use it to solve the question, which makes it easier to solve.  
**Ex:-** In month base puzzle we can fix the month.
- C. Finding Potential Clue:** It is always the most important task to find out the starting clue, which will play a vital role in solving the problem. To find a potential/starting clue, just check some definite idea is given or not and if it is having connection with one or two more clues in passage, go for it.
- D. Role of Projection:** Projection plays a vital role in solving the problem as the clues given carries possible aspects, so it is advisable to take projection if required.
- E. Importance of Negative Clue:** Most of the time, students don't give importance to the negative clues but it helps us in a great manner. It gives us an idea to cut down some possibilities or eliminate the projections.

### Vacant Place Concept:

In case of vacant place in Puzzles (any type), we need to take care of the possibilities as it creates demand of **extra possibilities**. Students often mess up in the questions based on vacant place in any type of arrangement. It is suggested to all the students kindly take care of this concept very carefully.



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419

"In this life we cannot do great things. We can only do small things with great love."



**Let's understand this concept more closely with example:**

Let suppose we have 7 person A, B, C, D, E, F, G living on eight different floors. It means one seat is vacant.

If there is a clue – There are 2 persons between A and B that means it will be having two possibilities.

**1st Possibility** - We will have to keep two places/floors between A & B and both the places will be occupied by two persons.

**2nd Possibility** - We will have to keep three places/floors between A & B in which two places/floors will be occupied by two person and one of the floors between them will be vacant. (Because here the given clue is talking about persons)

**Note:** In the same vacant condition, if we have a clue like – A is 3rd floor above B, here vacant condition will not be implemented. Hence, we are supposed to maintain a gap of 2 floors between A & B as we do in simple conditions. Because here the given clue is talking about floors.

## Solved Examples

### Box Based Puzzle

**Question:**

Eight boxes H, O, P, R, S, T, U and V are placed one above another but not necessarily in the same order. One box is placed between O and R. Box V is not placed at the bottommost position. Only Box S is placed below box U. Two boxes are placed between U and R. Box R is placed just below H. More than three boxes are placed above O. Box T is placed above P and V. Box V is placed below H.

- How many boxes are placed between box H and T?  
(a) One (b) Three (c) Two  
(d) Five (e) None of these
- Which of the following box is placed between U and R?  
(a) P and T (b) V and O (c) P and S  
(d) S and U (e) None of these
- Which box is placed immediately below P?  
(a) T (b) S (c) V  
(d) H (e) None of these

**Solution:**

One box is placed between O and R.

**Case 1:**

O
R

**Case 2:**

R
O

Only Box S is placed below box U. Two boxes are placed between U and R. Box R is placed just below H.

**Case 1:**

O
H
R
U
S

**Case 2:**

H
R
O
U
S

More than three boxes are placed above O. So, Case 1 is eliminated. Box T is placed above P and V. Box V is placed below H. Box V is not placed at the bottommost position.

**Final Arrangement:****Case 2:**

T
P
H
R
V
O
U
S

### Floor Based Puzzle

**Question:**

Eight persons live in an eight-storey building. The ground floor is numbered as 1, the floor just above it is numbered as 2 and so on till the topmost floor which is numbered as 8. Only four persons live above P. Only one person lives between P and T. Only two persons live between T and S. W lives just above U. R lives just below Q. R lives above V.

- How many persons live above S?  
(a) Three (b) Four (c) Five  
(d) Six (e) None
- Who among the following lives just above T?  
(a) Q (b) W (c) V  
(d) R (e) P
- Which of the following is true regarding T?  
I. T lives above W  
II. T lives between P and W  
III. V lives just below T  
(a) Only I (b) Only III (c) Both I and III  
(d) Both I and II (e) All I, II, III





**Solution:**

From the given statement, only four persons live above P. Only one person lives between P and T. Only two persons live between T and S. So, we have two possible cases:

Floor	Case-1	Case-2
8		
7		
6		T
5	S	
4	P	P
3		S
2	T	
1		

W lives just above U. R lives just below Q. R lives above V. So case-1 is eliminated. Hence the final arrangement is:

Floor	Persons
8	Q
7	R
6	T
5	V
4	P
3	S
2	W
1	U

**Day Based Puzzle****QUESTION:**

Seven lectures were held by seven different professors starting from Monday to Sunday of the same week. At least four professors take lectures before B. Two professors take lectures between A and B. The number of professors who take lectures after A is same as the number of professors who take lecture before P. C takes the lecture just before the day of Q's lecture. D does not take the lecture on Monday. R takes the lecture after one of the days of D's lecture.

- How many persons take lecture after Q?  
(a) Four (b) Six (c) Three  
(d) Five (e) Two
- Who among the following takes the lecture on Wednesday?  
(a) A (b) C (c) D  
(d) P (e) R
- Who among the following takes lecture in the last?  
(a) P (b) B (c) A  
(d) R (e) None of these

**Solution:**

From the given statements, At-least four professors take lectures before B. From this condition we get 3 possibilities i.e. Case 1, Case 2 and Case 3. Two professors take lectures between A and B.

Days	Case 1	Case 2	Case 3
	Persons	Persons	Persons
Monday			
Tuesday	A		
Wednesday		A	
Thursday			A
Friday	B		
Saturday		B	
Sunday			B

From the given statements, the number of professors who takes lectures after A is same as the number of professors who takes lecture before P. from this condition Case 3 is ruled out now. C takes the lecture just before the day of Q's lecture.

Days	Case 1	Case 2
	Persons	Persons
Monday		C
Tuesday	A	Q
Wednesday	C	A
Thursday	Q	
Friday	B	P
Saturday	P	B
Sunday		

From the given statements, D does not take the lecture on Monday. R takes the lecture after one of the days of D's lecture. From this condition Case 1 is ruled out now. So, the final arrangement is –

Days	Persons
Monday	C
Tuesday	Q
Wednesday	A
Thursday	D
Friday	P
Saturday	B
Sunday	R

**Classification Based Puzzle:****QUESTION:**

Seven persons P, Q, R, S, T, U and V work in different companies among Amazon, TCS, Mynta, HP, Adobe, Dell and HCL in different positions as Tester, Developer, Analyst, Team Lead, DBA, Project Head, Vice President. All the above information is not necessarily in the same order. R does not work in Mynta



but works as a Project Head. The one, who works in HP, works as a DBA and who works in HCL works as an Analyst. S works in Adobe work as a Developer. P works in Dell but not as Tester. The one, who works in Myntra works as a Team lead and who works in TCS work as Tester. V doesn't work in Amazon and Myntra. Q works as Tester but not in Myntra. U does not work as Team lead but works at HP.

1. V works as?  
(a) Analyst (b) Team Lead (c) DBA  
(d) Project Head (e) Vice President
2. Who works in HCL?  
(a) R (b) S (c) T  
(d) U (e) V
3. Who among the following working as the Vice President?  
(a) P (b) S (c) T  
(d) U (e) V

**Solutions:**

1. R does not work in Myntra but work as a Project Head.
2. Q works as Tester but not in Myntra.
3. U does not work as Team lead but works in HP.

Person	Company	Profession
P		
Q	Myntra	Tester
R	Myntra	Project Head
S		
T		
U	HP	Team lead
V		

4. S works in Adobe work as Developer.
5. P works in Dell but not as Tester.
6. The one, who works in Myntra works as Team lead and who works in TCS work as Tester.
7. V doesn't work in Amazon and Myntra. Hence, T works in Myntra.

Person	Company	Profession
P	Dell	Vice president
Q	TCS	Tester
R	Amazon	Project Head
S	Adobe	Developer
T	Myntra	Team lead
U	HP	DBA
V	HCL	Analyst

8. The one, who works in HP, works as DBA and who works in HCL work as a Analyst.

Person	Company	Profession
P	Dell	Vice President
Q	TCS	Tester
R	Amazon	Project Head
S	Adobe	Developer
T	Myntra	Team lead
U	HP	DBA
V	HCL	Analyst



### Points to Remember



### Important tips and tricks to remember

- You are advised to fix one variable to form the table and that variable would be same on which question is based. (i.e. if question is based on days then fix days, if a question is based on floor then fix floor, and if a question is based on classification then fix name and same as for other. But this approach is not applicable in box-based puzzle since they are independent in nature).
- Finding out the initial clue is very much important, be attentive in that case.
- Try to interlink the clues.
- Be extra conscious while dealing with projections.
- A is three places above/below B means you have to maintain a gap of two (i.e. one less).
- In case of a Vacant Floor or vacant situation in any type of puzzle, you will have to be extra careful in thinking of projection.
- For Prelims Level questions set a TARGET TIME in a range of 3 minutes for 5Q (1 set) as per current question trend.
- In case of mains level question or a high-level question don't be impatient everyone takes time in that variety.
- In most of the Mains Level Questions we use to find a lot of variables and some data-based clues, please go through it very carefully.



## Prelims Exercise

### Day Based Puzzle

**Direction (1-5):** Study the given information and answer the following questions.

Seven persons go to classes on seven different days of the week from Monday to Sunday. The persons who go on adjacent days are not in alphabetical order. Two persons go to class between S and P. Not less than three persons go after P. T goes just before R who goes after S. One person go between U and V. One of the persons is Q.

1. How many persons go between Q and the one who goes on Thursday?  
(a) One (b) Two (c) Three  
(d) None (e) More than three
2. On which of the following day does P go for a class?  
(a) Monday (b) Tuesday (c) Wednesday  
(d) Thursday (e) None of these
3. Which among the following statement(s) is/ are true?  
(a) Only two persons go between P and R  
(b) T goes after V  
(c) S goes just before Q  
(d) U goes for a class on Wednesday  
(e) All are true
4. If Q is related to V, in a similar way S is related to P, then who among the following is related to R?  
(a) P (b) S (c) T  
(d) U (e) None of these
5. Four of the following five are alike in a certain way and hence form a group. Find the one who doesn't belong to the group?  
(a) S-Q (b) U-V (c) P-V  
(d) T-R (e) U-P

**Direction (6-10):** Study the given information and answer the following questions.

Six persons go to work on seven different days of the week from Monday to Sunday. One day is off and that day is neither Saturday nor Monday. A works just after the off day. Two persons work between A and F who work after A. B works after C and before E who is not last to work. Not more than two persons work after E. D neither works on Saturday nor on Sunday. B neither works on Saturday nor Friday.

6. Who among the following person go to work adjacent to the off day?  
(a) B (b) C (c) D  
(d) E (e) None of these
7. How many persons go after off day?  
(a) Three (b) Four (c) One  
(d) Two (e) None of these
8. Which among the following statement(s) is/ are not true?

- (a) Only two persons go between C and D
- (b) D goes after A
- (c) F goes just before E
- (d) A goes on Thursday
- (e) None of these

9. Four of the following five are alike in a certain way and hence form a group. Find the one who doesn't belong to the group?

- (a) C-B (b) B-A (c) A-D  
(d) D-E (e) E-F

10. Who among the following goes exactly between off day and F?

- (a) D (b) A (c) E  
(d) C (e) None of these

**Direction (11-15):** Study the given information and answer the following questions.

Seven persons go to class on seven different days of the week from Monday to Sunday. More than two persons go before Q. One person goes between Q and T and go just before R. Three persons go between R and U. Two persons go between V and the one who goes just after S. V goes on a day adjacent to T. One of them is P.

11. Who among the following person go to class on Wednesday?

- (a) P (b) Q (c) R  
(d) S (e) None of these

12. How many persons go before the one who goes just before U?

- (a) Three (b) Four (c) One  
(d) Two (e) None of these

13. Which among the following is correctly matched?

- (a) P-Tuesday (b) S-Monday (c) Q-Thursday  
(d) T-Saturday (e) All are correct

14. Four of the following five are alike in a certain way and hence form a group. Find the one who doesn't belong to the group?

- (a) S-U (b) Q-R (c) P-V  
(d) U-T (e) S-Q

15. Who among the following goes on Sunday?

- (a) R (b) P (c) S  
(d) U (e) T

**Direction (16-20):** Study the given information and answer the following questions.

Six persons go to class on seven different days of the week starting from Tuesday. One of the day is a holiday. Not more than two persons go before the holiday. One person goes between holidays and K who goes before R. R does not go on Monday. One person goes between N and A. Not more than one person goes between K and A. Three days gap is there between A and M who do not go after Wednesday. L does not go on Monday and Tuesday.





U joins two persons after Q who joins immediately after the one who joins on 27th April. T has twice the experience of U. U joins on the 17th of the month which has an even number of days. V has two years less experience than T. The one who joins on 11th January has half of the experience of V.

The difference between the experience of U and W is three years. Q has twice the experience of V. The difference between the experience of W and Q is equal to the experience of S. Based on their working Experience a foreign company gives the project with certain conditions

- The project is given to those people having total experience is (Calculate their experience on the following date 1st July 2021) at least 13 years.
- The project is given to a person who has at least 5 years of experience after joining the IHT organization.

51. What is the total experience of the persons who join on the even number date?

- (a) 32 (b) 33  
(c) 31 (d) 30  
(e) 34

52. How many persons join before the one who already has the highest years of experience?

- (a) Two (b) Three  
(c) Four (d) Five  
(e) One

53. In which of the following month does the one who has the least experienced person join (consider experience before joining this organization)?

- (a) April (b) March  
(c) January (d) August  
(e) September

54. Who among the following pairs of the persons get the project?

- (a) W and Q (b) Q and T  
(c) U and T (d) Q and U  
(e) W and V

55. Find the odd one out?

- (a) U (b) T  
(c) Q (d) V  
(e) R

**Directions (56-60):** Study the following information carefully and answer the below questions.

Twelve containers namely – S1 to S12 at a shipyard are kept in two horizontal lanes with three containers on each side of the lane from west to east. Thus six containers are kept in each lane facing towards each other. Lane I is to the north of lane II. Each lane is of 85m long. The front wall of the container has only the entrance and is not of the same length for any container. There is no space remaining on either side of the lane.

**NOTE:** If X faces Y, then both of them are on the same lane and X will have the same number of containers on its either side as Y. If container X in the lane I which faces north and container Y in the lane II which faces south have a common back wall, i.e., they are exactly behind each other, then they are on different

lanes. In between two adjacent containers on the lane I, there is a gap of 4m while the same on lane II is 6m.

Container S1 has the common front wall with the one kept in the immediate west of container S6. Container S1 has the common back wall with the one which is kept in the immediate east of container S7. Container S7 is kept in lane II and has the common front wall with the one whose front wall is a prime number. The front wall of container S3 is 39m and is sharing a common back wall with the one whose front wall is 12m. Both the containers S3 and the one whose front wall is 21m are kept in lane II. The container whose front wall is 23m is to the north of container S2, both are facing in the same direction. The front wall of container S12 is twice the front wall of container S2 which is kept second to the west of container S8. The container whose front wall is 27m is in the immediate south of container S11, where both are kept in the same lane. Container S11 sharing the common back wall with the one which is kept either in the immediate west or in the immediate east of container S9. Container S5 sharing the front wall with the one whose front wall is 13m. Container S5 is in the west of the one whose front wall is 29m. Container S12 and the one whose front wall is 42m are facing towards each other. The container whose front wall is 21m neither sharing a common back wall with container S9 nor container S4, whose front wall is 19m.

56. What is the length of the front wall of the container S10?

- (a) 19m (b) 24m  
(c) 23m (d) 27m  
(e) None of these

57. Which of the following containers are sharing the common back wall?

- (a) S2 – 21 (b) S11 – 19  
(c) S9 – 24 (d) S7 – 23  
(e) None of these.

58. What is the position of container S11 with respect to the one whose front wall is 34m?

- (a) Immediate east (b) Immediate west  
(c) South (d) Immediate north  
(e) None of these

59. Which of the following containers are sharing the front wall (exactly facing each other)?

- (a) S5 – S3 (b) S10 – S12  
(c) S9 – S11 (d) S12 – S8  
(e) S7 – S2

60. Which of the following statement is/are not true with respect to the final arrangement?

- I. The container whose front wall is 19m is kept second to the west of container S6.  
II. The container whose front wall is 17m is sharing the front wall with the one which is kept in the immediate west of container S3.  
III. Container S5 is sharing the common back wall with container S1.  
(a) Both II and III (b) Only III  
(c) Only I (d) Both I and II  
(e) None of these



**Directions (61-65):** Study the following information carefully and answer the questions given below.

Eight different games viz. Athletics, Badminton, Billiards, Boxing, Cricket, Football, Hockey and Shooting were held at different timings viz. 9.00am, 10.00am, 11.00am, 12.00pm, 1.00pm, 2.00pm, 3.00pm and 4.00pm on the same day.

Each game is won by different persons viz. D, G, K, M, N, P, S and Y. All the information is not necessarily in the same order. Only three games were held between Cricket and Shooting, which is neither held before Cricket nor at the last. Y won the game which is held immediately before Shooting and he won two persons before K. The number of games held before the game which is won by K is the same as after the game which is won by S. Football was held immediately after the game which is won by S. More than two games were held between Shooting and the game which is won by N, who is not won Football. The time duration between the games won by N and S is the same as between Billiards and the game which is won by K. Hockey was held immediately after Badminton after 12.00 pm but is not won by K. M won the game two persons before P and three persons after G. Neither D won Badminton nor G won Athletics.

61. Which of the following game was won by P?  
(a) Shooting (b) Billiards  
(c) Hockey (d) Athletics  
(e) None of these
62. Boxing was held in which of the following time slot?  
(a) 3.00pm (b) 9.00am  
(c) 4.00pm (d) 10.00am  
(e) Cannot be determined
63. Which of the following statement is/are true with respect to the final arrangement?  
(a) S has won the game which is held two games after Cricket  
(b) G has won Football at 11.00am  
(c) Only two games were held between Shooting and Athletics  
(d) Neither P nor D won Billiards at 4.00pm  
(e) None is true
64. K won which of the following game and in which of the following time slot respectively?  
(a) Badminton – 3.00pm (b) Athletics – 4.00pm  
(c) Badminton – 2.00pm (d) Boxing – 3.00pm  
(e) None of these
65. Which of the following game was held in the adjacent slot of the game which is won by M?  
(a) Hockey (b) Boxing  
(c) Billiards (d) Athletics  
(e) None of these

**Directions (66-70):** Study the following information carefully and answer the below questions.

Seven persons – A, B, C, D, E, F, and G attend the seminar one by one starting from 9.00 AM to 1.45 PM. Each slot of the seminar was scheduled for either 30 min or 45 min. There were two breaks of 15min each. None of the same persons attended the seminar immediately before or after the break. Each person likes different colors viz. – Red, Blue, Green, Pink, Yellow, Black, and Orange. All the information is not necessary in the same order.

Only three persons attend the seminar before the one who likes Orange. C attends the seminar immediately after the one who likes Orange and C's seminar ended at 12.15 PM. G attends the seminar 90 minutes after the starting time of C's seminar. The one who likes Blue attends the seminar two persons after E. The one who likes as the number of persons attend the seminar after the one who likes Yellow. B attends the seminar for 30 minutes. The one who likes Yellow attends the seminar 90 minutes after the starting time of F's seminar, who attend a seminar of 45 minutes. The one who likes Black attends the seminar 75 minutes before the starting time of B's seminar. D doesn't like Red, whose seminar doesn't start immediately after the break.

66. Who among the following person attends the seminar two persons after the one who likes black?  
(a) The one who likes Yellow  
(b) D  
(c) The one who likes blue  
(d) A  
(e) None of these
67. How many persons attend the seminar before the one who likes Green?  
(a) As many persons attend the seminar after F  
(b) Four  
(c) As many persons attend the seminar between A and the one who likes Blue  
(d) As many persons attend the seminar between B and the one who likes black  
(e) Either C or D
68. Who among the following person attends at 10.45AM?  
(a) The one who likes Pink (b) None  
(c) D (d) The one who likes Black  
(e) F
69. Who among the following person likes Pink?  
(a) The one who attends immediately after F  
(b) G  
(c) The one who attends immediately after B  
(d) D  
(e) None of these
70. Which of the following statement is/are true?  
(a) B likes Black  
(b) F attends the seminar immediately before the one who likes pink



# CHAPTER 10

## Data Sufficiency



### Introduction

This chapter is very important for almost all competitive examination including bank & insurance examination as this is being asked in mains exams particularly as per the recent experiences. So, you can't take risk of skipping this topic.

Problem based on data sufficiency consist of a question followed by two or three statements which use to carry certain information/clue on the basis of which you need to check whether the given statement(s) is/are sufficient to answer the question asked or not.

You are not bound to find the exact answer of the given question, all you have to do is to analyse/check whether the given data is sufficient to answer the question.

This chapter is not at all new to you because question used to be framed from almost all the topic of reasoning you have studied. Let me give you an idea by making a list of topics that is being included or used in this chapter of data sufficiency.

### List of topics being used in Data Sufficiency:

- |                         |                    |
|-------------------------|--------------------|
| i. Coding-Decoding      | ii. Blood Relation |
| iii. Direction-Distance | iv. Inequality     |
| v. Seating Arrangement  | vi. Puzzle         |
| vii. Comparison based.  |                    |

### HOW TO APPROACH DATA SUFFICIENCY QUESTIONS:

- First of all, you need to read the directions of the question very carefully although we find same sequence of option presentation in almost all questions but as examiner can change the directions and even after solving all the questions correctly you mark the wrong answers.
- Find the real demand of the question asked and don't run to get the exact answer, just find if the given data is sufficient or not.
- Options play a vital role in this chapter as most of the time students solve questions correctly but mark it wrong.
- Be extra conscious in using the data given to get the answer and in marking it as correct answer.
- You need to remember the steps involved in solving a particular question and follow them in this particular order:

Check A (i.e. the first statement), then Check B (i.e. the second statement) and lastly, if required, combine the two statements to get the answer.

### LET'S UNDERSTAND THE GENERAL PRESENTATION OF OPTIONS AND ELABORATE IT MORE CLOSELY:

- (a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
- (b) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
- (c) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
- (d) If the data in both statements I and II together are not sufficient to answer the question.
- (e) If the data in both statements I and II together are necessary to answer the question.

**NOTE:** while going through the options we need to be extra careful

## Exercise

### Two Statements Based Questions

**Direction (1-10):** In the following question, a given questions is followed by information in three statements. You have to decide the data in which statement (s) is sufficient to answer the question and mark your answer accordingly.

- (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 are sufficient to answer the question.
- (d) If the data in both statement I and II together are not

sufficient to answer the question.

- (e) If the data in both statement I and II together are necessary to answer the question.

1. Who is the tallest among P, Q, R, S, T and U?  
I. U is taller than both T and P. Q is not the shortest.  
II. T is taller than R who is taller than Q.
2. Among P, Q, R, S and T sitting around a circular table facing the centre, who sits second to the right of R?  
I. Both S and R are immediate neighbours of Q. T sits second to the right of Q.  
II. R sits to the immediate right of P. Only two persons were sitting between Q and P.



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625

"The secret of success is to do the common thing uncommonly well"



3. What is the position of A from right of row?  
I. C is sitting at 13th position from the right end and also at 12th position from the left end of row in which B is sitting.  
II. B is sitting at 6th position from the left end of row. There is one person sitting between B and A.
4. What is the distance between points M and N?  
I. Point M is 8 km to the west of point P. Point O which is midway between points N and P is 3 km away from point N.  
II. Point Q which is in east of point P is also in east of point N.
5. How is Tina related to Riya?  
I. Riya is the son of mother of Priti's daughter.  
II. Tina is the only daughter of Priti's wife.
6. What is the position of A from the right end in a row of 40 students?  
I. B is 16th from the left end of row and is sitting exactly between A and C.  
II. D who is sitting 10th from the right end is sitting exactly mid-way between A and E, who is fourth from the right end.
7. Is Shivam the heaviest among his friends?  
I. Shivam eats more than anyone else among his five friends.  
II. Among his 5 friends, only Shivam and Mohan were rejected because of his over-weight.
8. In what date does Rohan attend the seminar in Gurgaon?  
I. Rohan's mother correctly remembers that; Rohan leaves for Gurgaon one of the odd numbered dates after 6th but before 12th of the August.  
II. Rohan's wife remembers that; Rohan attends the seminar on one of the dates after 8th of August.
9. Ten persons are sitting in a straight row and facing north. How many persons sitting to the right of Shivani?  
I. Shalu sits third to the right of Ruchi and none of them sits at end of the row. Only two persons are sitting between Shivani and Shalu.  
II. Shivani sits second to the left of Ayush, who sits from either ends of the row.
10. Seven persons M, N, O, P, Q, R and S attends the exams on seven different days of the week starting from Monday to Sunday. Who among them attend the exam on Saturday?  
I. M attends the exam on Wednesday. Only one person attends the exam between M and R. Only two persons attend the exam between S and O.  
II. O attends the exam on Thursday. Only two persons attend the exams between O and S. P attends the exam immediately before S.
11. Seven persons live on seven storey building, ground floor is 1 and top floor is 7. Who among the following sits at 5th floor?  
I. P lives just above Q, who live above R. P lives on odd number floor.  
II. T lives just above R. Three persons live between R and U. V lives above S.
12. Seven student - Neha, Shanu, Priya, Aman, Rahul, Shreya and Monas are sitting around a circular table some of them facing towards the center and some face outside. Who among the following sits second to the left of Mona?  
I. Neha sits third to the right of Priya. Shanu sits second to the left of Neha and is not the neighbour of Priya. Only one person sits between Aman and Rahul.  
II. Mona sits third to the right of Shanu. Neha and Shanu faces opposite direction. Rahul is not the immediate neighbour of Neha. Aman sits third to the right of Mona.
13. Among Ashish, Vishal, Jatin, Rohan, Harsh and Shivam each one of them has different heights, who is the tallest person?  
I. Vishal is taller than Rohan. Harsh is shorter than Vishal, who is not tallest.  
II. Shivam is taller than Ashish. Ashish is shorter than Vishal. Jatin is not shortest.
14. Six friends i.e. H1, H2, H3, H4, H5 and H6 were born in different months viz. January, March, April, July, August and September but not necessarily in the same order. Who among the following born in the month immediately after H5?  
I. H3 born in the month immediately before H6. Only three persons born between H3 and H1. H4 born before H5. H2 born after H4.  
II. Only two persons born between H1 and H2, who born in the month having 30 days. H6 born immediately before H2. Not more than one person born between H4 and H5.
15. Who among Shivam, Harsh, Rohan, Jatin, Vishal and Ashish reached college second?  
I. Only two persons reached before Vishal. Harsh reached after Rohan and before Vishal.  
II. Rohan reached before Shivam and after Vishal. Jatin reached after Ashish.
16. Five students i.e. Mamta, Sushil, Sapna, Renu and Divya who all are of different heights who among the following is the shortest?  
I. Sushil is shorter than only one person. Sapna is taller than both Renu and Divya. Mamta is taller than Renu.  
II. Divya is taller than only two persons. Renu is taller than Sushil but shorter than Sapna. Sushil is not the shortest among all.
17. Six persons namely - A, B, C, D, E and F who sits in a row such that all are facing towards north. Who among the following sits at the right end at the row?  
I. A sits second to the right of B. Both A and B does not sit at the end of the row. Only one person sits between E and D.

**Directions (11-29):** Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data given in the statements are sufficient to answer the question. Read both statements and choose the most appropriate option.

- (a) Only Statement I is sufficient to answer  
(b) Only Statement II is sufficient to answer  
(c) Either Statement I or Statement II is sufficient to answer.  
(d) Neither Statement I nor Statement II is sufficient to answer.  
(e) Both Statement I and Statement II are sufficient to answer.





- II. C and F are the immediate neighbour of each other. More than two persons sits between C and A. E is not the immediate neighbour of B.
18. How is P related to Q?
- R who has only two kids P and Q, is the mother-in-law of S who is sister-in-law of Q.
  - T the sister-in-law of P and the daughter-in-law of U who has only two kids P and Q.
19. Who among Manoj, Mukesh, Mayur, Mahesh and Manish is exactly in the middle when they are arranged in ascending order of their heights?
- Mahesh is taller than Mukesh but shorter than Manish.
  - Mayur is taller than Mukesh and Manish but shorter than Manoj.
20. Who sits third to the left of A7, if all persons sit in a row are facing south?
- Seven persons sitting in a row. A4 sits exactly in the middle of the row. Two people sits between A4 and A6.
  - A5 sits to the immediate left of A4. Only one person sits between A5 and A1. A2 sits third to the left of A1. A3 sits fourth to the left of A1.
21. Seven persons Anuj, Ram, Jeet, Veena, Riya, Mohit and Neetu attend the lecture in a week starting from Monday and ending on Sunday. How many persons attend the lecture between Anuj and Riya?
- Neetu attends the lecture after Ram. More than three persons attend the lecture between Ram and Neetu. Three persons attend the lecture between Jeet and Riya. Veena attends the lecture immediately before Mohit.
  - Two persons attend the lecture between Mohit and Jeet. Ram attends the lecture on Monday. Only two persons attend the lecture after Mohit. Veena attends the lecture immediately after Anuj and does not attend the lecture on last day. Neetu attends the seminar after Riya.
22. Eight persons P, Q, R, S, T, U, V and W are sitting in a row facing north. Person's name starts with consecutive alphabet does not sit next to each other. How many persons sit between T and V?
- Two persons sit between P and R. R sits second from one of the ends. Only one person sits between Q and V. Q and S are not immediate neighbours. U sits to the right of R. W does not sit at any of the extreme ends.
  - More than three persons sit between R and T. Q sits to the right of S. W sits left of P.
23. Six persons Nidhi, Maya, Ritu, Komal, Mahima and Neha are sitting around a circular table, are they all facing the centre?
- Nidhi sits second to the left of Neha. Komal sits second to the right of Neha. Mahima does not sit opposite to Komal who sit second to the left of Nidhi. Both Mahima and Ritu are immediate neighbour of Nidhi. Neha is facing the center. Ritu sits second to the right of Mahima. Maya sits second to the right of Ritu. Both Maya and Komal are facing same direction as Nidhi.
  - Maya is second to the left of Mahima. Only Komal is between Maya and Mahima. Ritu is to immediate left of Neha. Maya sits opposite to Nidhi. Nidhi is second to the right of Komal. Mahima is second to the right of Maya and second to the left of Ritu. Both Maya and Nidhi faces each other.
24. Five boxes P, Q, R, S and T are placed in a row from west to east direction according to their weight in an increasing order. And also, each of the box contains of different fruits. The box which is second lightest is contain which fruit?
- R placed at one of the extreme ends. Apple box is heavier than Mango box. Neither box T nor Q is the heaviest. Box P is not of Banana and Mango. Orange box is not heavier than Mango box.
  - Only one box is placed in between box T and Q. Box P is heavier than orange box. Box Q is not placed adjacent to R. Box S is contains Litchi. Banana box is lighter than S. Neither R nor T is containing Banana. Banana box is heavier than Apple box.
25. Six friends namely – D, E, F, G, H and I lives in six floored building marked 1 to 6 in such a way that lowermost floor is marked as 1 and topmost floor is marked as 6, each person likes different subjects viz. Maths, English, Hindi, History, Physics and Chemistry not necessary in same order. F, who lives on odd numbered floor but not on floor marked 3, lives just above one who likes Chemistry. Only two person lives between G and one who likes Chemistry. H, who likes Physics, neither lives adjacent floor of G nor on adjacent floor of F. One who likes Hindi lives on topmost floor. How many persons lives on floor above one who likes History?
- I, who neither likes Hindi nor likes Chemistry, lives at a gap of two floor from one who likes English. Only two persons lives between E and one who likes Maths.
  - E, who lives on adjacent floor of one who likes Physics, lives at a gap of two floor from one who likes Maths. I, who doesn't lives of top floor, lives just above floor of one who likes Maths.
26. Seven persons Rohit, Tanmay, Saurav, Akash, Amrit, Ashwin and Manish are sitting in a row facing north but not necessarily in the same order. Which of the following persons sit fourth to the left of Saurav?
- Saurav sits second to the right of Rohit. Two persons sit between Rohit and Ashwin. Amrit sits second to the left of Ashwin. Only one person sits between Manish and Tanmay. Akash sits left of Amrit.
  - Three persons sit between Manish and Amrit. Either Manish or Amrit sits at one of the extreme ends. Rohit sits left of Ashwin. Tanmay and Rohit are immediate neighbours. Saurav sits right of Amrit.
27. Six friends A, B, C, D, E and F attends the class in two different months March and April in three different dates 6, 11 and 15, but not necessarily in the same order. Which of the following person attends the class immediately before D?
- Two persons attend the class between A and F. F attends the class before A. F does not attend the class on even numbered date. As many persons attend the class before B and after C are same.
  - E attends the class on even numbered date. Two persons attend the class between E and B. C attends the class immediately after A. F attends the class before A. D attends the class after F, but does not attend the class immediately before E.
28. Seven persons A, B, C, D, E, F and G are sitting in a row facing north. Each person has some money viz, 10k, 20k, 30k, 40k, 50k, 60k and 70k but not necessary in same order. One who have 10k sits third from right end. T, who doesn't sit neighbour of one who have 10k, sits second to left of one who have 30k. Only three person sits between



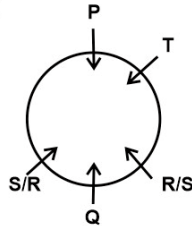
## Solutions

## Two Statements Based

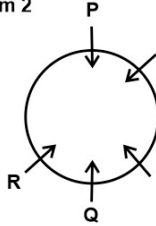
1. (e): From I. We get  $U > T$  and  $U > P$   
From II.. We get  $T > R > Q$   
Hence we get  $U > T > R > Q > P$   
So U is the tallest person.

2. (e): S sits 2<sup>nd</sup> right of R.

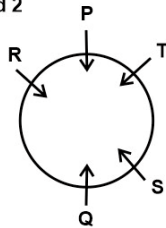
2 From 1



From 2

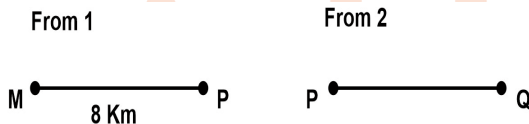


Combination 1 and 2

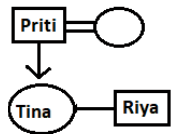


3. (d): From I. We get the total number of students in a row  $[13+12=24]$   
From II. B is at 6<sup>th</sup> position from left end of row. There is one person between A & B so A can be on 4<sup>th</sup> or 8<sup>th</sup> position from left end. So we cannot find out the exact position of A from both the statements.

4. (d):



5. (e): Tina is sister of Riya.



6. (b): From I. We cannot get the exact position of A.  
From II. E is 4<sup>th</sup> from right end and D is 10<sup>th</sup> from right end so number of persons between D & E is 5 and D is midway between A & E so A is 16<sup>th</sup> from right end.
7. (d): From I & II we do not get Shivam is heaviest.
8. (d): From I & II we do not get the exact date of Rohan attending the seminar in Gurgaon.
9. (e): From I. \_\_\_ Ruchi \_\_\_ Shalu \_\_\_ Shivani  
From II. Shivani \_\_\_ Ayush  
By combining both I & II we get,  
\_\_\_ Ruchi \_\_\_ Shalu \_\_\_ Shivani \_\_\_ Ayush

10. (b): From I. We cannot place S & O.

Days	Case-1	Case-2
Monday	R	
Tuesday		
Wednesday	M	M
Thursday		
Friday		R
Saturday		
Sunday		

From II.

Days	Persons
Monday	
Tuesday	
Wednesday	
Thursday	O
Friday	
Saturday	P
Sunday	S

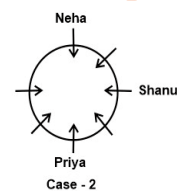
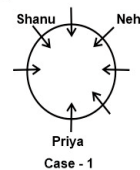
11. (e): By combining both I & II we get

Floors	Persons
7	V
6	U
5	P
4	Q
3	T
2	R
1	S

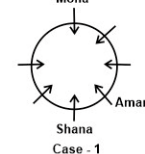
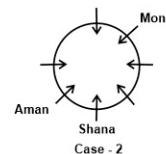
On 5<sup>th</sup> floor, P lives.

12. (e): Rahul sits 2<sup>nd</sup> left of Mona.

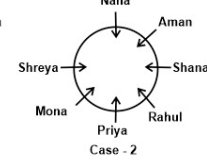
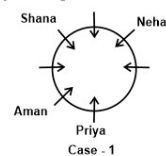
12 From 1



From 2



By Combining 1 & 2



Case-1 will cancel out



13. (d): From I. Vishal > Rohan and Vishal > Harsh  
From II. Shivam > Ashish and Vishal > Ashish  
And we do not know about Jatin whether he is tallest or not.  
Hence we don't get who is the tallest person.

14. (d): From I. X

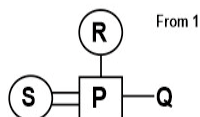
Months	Case-1	Case-2
January	H3	H4
March	H6	H3
April	H4	H6
July	H5/H2	H5/H2
August	H1	H5/H2
September	H5/H2	H1

From II. X

Months	Case-1	Case-2
January	H4/H5/H3	H3
March	H4/H5/H3	H6
April	H1	H2
July	H4/H5/H3	H4/H5
August	H6	H4/H5
September	H2	H1

We don't get the exact position of H5. So answer is D.

15. (a): From I. Rohan Harsh Vishal \_\_\_\_\_  
From II. Vishal Rohan Shivam  
Here, from II we cannot get the position of Jatin and Ashish.  
So answer is A.
16. (b): From I. We does not get the exact positions of persons.  
From II. Sapna Renu Divya Sushil Mamta  
So Mamta is the shortest person.
17. (e): E sits at right end of row.  
From I. B A  
From II. C F A Case-1  
C F A Case-2  
By combining both I&II we get,  
C F B D A E
18. (a): P is brother of Q.



19. (e): Manish is in middle.  
From I. Manish > Mahesh > Mukesh  
From II. Manoj > Mayur > Mukesh/Manish > Mukesh/Manish  
By combining both we get,  
Manoj > Mayur > Manish > Mahesh > Mukesh

20. (e): A5 is 3<sup>rd</sup> left of A7.

From I. A6 A4 Case-1

A4 A6 Case-2

From II. A3 A2 A5 A4 A1

By combining I&II we get

A3 A2 A5 A4 A1 A7 A6

21. (b): 2 persons attend lectures between Anuj & Riya.

From I. X

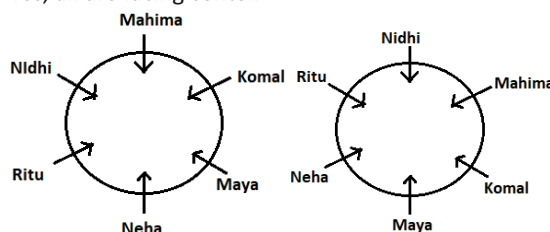
Days	Case-1	Case-2	Case-3
Monday	Ram	Ram	Jeet/Riya
Tuesday	Anuj	Jeet/Riya	Ram
Wednesday	Jeet/Riya	Veena/Mohit/ Anuj	Veena
Thursday	Veena/Mohit	Veena/Mohit/ Anuj	Mohit
Friday	Veena/Mohit	Veena/Mohit/ Anuj	Jeet/Riya
Saturday	Neetu	Jeet/Riya	Anuj
Sunday	Jeet/Riya	Neetu	Neetu

From II.

Days	Persons
Monday	Ram
Tuesday	Jeet
Wednesday	Anuj
Thursday	Veena
Friday	Mohit
Saturday	Riya
Sunday	Neetu

22. (a): No person sits between T & V.  
From I. Q T V P S W R U  
From II. we cannot get exact positions of persons  
So answer is (a).

23. (c): Yes, all are facing center.



24. (e): Second lightest fruit is P(Mango).  
From I. Apple > Mango > Orange  
Case-1 R \_\_\_\_\_  
Case-2 \_\_\_\_\_ R  
From II. S(Litchi) > Banana > Apple  
Case-1 T \_ Q  
Case-2 Q \_ T  
Combining both I&II we get  
Q(Banana) > S(Litchi) > I(Apple) > P(Mango) > R(Orange)



25. (a): 4 persons live above the floor of the one who likes History.

From I.

Floors	Persons	Subjects
6	D	Hindi
5	F	English
4	E	Chemistry
3	H	Physics
2	I	History
1	G	Maths

From II. X

Floors	Persons	Subjects
6	D	Hindi
5	F	English/History
4	E	Chemistry
3	H	Physics
2	I	English/History
1	G	Maths

26. (a): Akash sits 4<sup>th</sup> left of Saurav.

From I. Manish/Tanmay Akash Manish/Tanmay Rohit Amrit Saurav Ashwin

From II. We cant get exact positions of persons.

27. (b): F attends class immediately before D.

From I. X

Dates/ Months	Case-1	Case-2	Case-3
6 March			B/C
11 March	F	B/C	F
15 March	B/C	F	
6 April	C/B		
11 April	A	B/C	A
15 April		A	B/C

From II.

Dates/Months	Case-1
6 March	B
11 March	F
15 March	D
6 April	E
11 April	A
15 April	C

28. (e): No one sits to the right of one who have 60k.

From I. C(50k) T E(20k) (30k) A(10k) B D

From II. D \_ \_ G 20k

D \_ 20k G

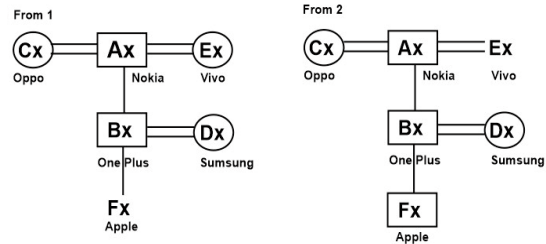
G 20k \_ D

20k G \_ \_ D

By combining both I&II we get

C(50k) T(70k) E(20k) G(30k) A(10k) B(40k) D(60k)

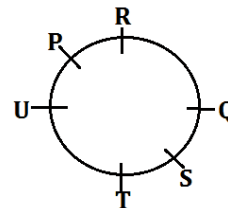
29. (c): Fx's father has one plus mobile.



30. (e): By combining both the statement we can find B goes on Thursday.

Days	Person
Monday	A
Tuesday	E
Wednesday	D
Thursday	B
Friday	C

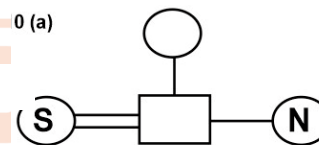
31. (b): By statement II we can find R sits immediate right of Q.



32. (d): Both statements are insufficient to give answer.

33. (a): By using first statement we can find code of 'Prime' is 'Me'.

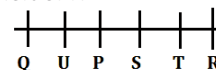
34. (a): By using first statement we can find S is sister-in-law of N.



35. (e): To get the code of No we have to use both the given statements together. From Statement I we can find that No either coded as 21 or 42 but from Statement I and II we can clearly find the code of No i.e. 42.

ements-  $A > E > D > C > B > C > B$

36. (e): By combining both the statement we can find U sits immediate left of P.



37. (d): Using, I and II together,

Month	Person	Date	Date
January	Q	10	18
January	S	18/21/26	21/26
January	R	29	29
September	V	10/18/26	10/18/26
September	T	Any date after V	Any date after V





**IV. Inference:**

I hope you would be familiar to this word since your school time. Let me remind you that in reading comprehension question part, you have seen this word so many times, wherein you are asked to infer something from the given passage. Inference is a type of conclusion we draw depending on our observations. It used to draw conclusion about the unknown information/facts on the basis of the known. Thus, all the inferences are like the moral of the passage, not directly written anywhere in the passage but it is the deduced meaning.

**Points to Remember**

- You are supposed to ensure your maturity while solving the problems of critical Reasoning.
- Knowing all the terms properly is the basic requirement of this topic.
- Think like an authority not a student.
- Words like best, only, each, any, every, all which shows rigidity should not be given much importance.
- All most all of the Mains exam use to ask this topic and it carries good number of questions.

**Questions Based on Course of Action**

1. **Statement:** A heavy unseasonal downpour during the last two weeks has paralyzed the normal life in the city in which five persons were killed but this has provided a huge relief to the problem of the acute water crisis in the state.

**Courses of action:**

- The city should set up a committee to review the alarming situation.
  - The city should immediately remove all the restrictions on the use of potable water in all the major cities in the state.
  - The state government should send relief supplies to all the affected areas in the state.
- (a) None (b) Only (I)  
(c) Only (II) and (III) (d) Only (III)  
(e) All (I), (II), (III)

2. **Statement:** A large number of public sector banks have decided to retrench one-third of their employees in view of the huge losses incurred by it during the past three quarters.

**Courses of action:**

- The state Govt should issue a notification to the general public to immediately stop all transactions with the bank.
  - The state Govt should direct the bank to refrain from retrenching its employees.
  - The state Govt should ask the central bank of the country to initiate an inquiry into the bank's activities and submit its report.
- (a) None (b) Only (I)  
(c) Only (II) (d) Only (III)  
(e) Only (I) and (III)

3. **Statement:** Many political activists have decided to stage demonstrations and block traffic movements in the state during peak hours to protest against the steep rise in prices of essential commodities.

**Courses of action:**

- The center Govt should immediately ban all forms of agitation in the country.

**V. Cause & Effect**

Here, Cause means the 'reason' for something to happen and 'Effect' means a change that is caused by something or we can say result of something being done. Question of this topic used to be given in the manner explained here. Two statements (I) and (II) and these statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. So, we are required to read both the statements very carefully to understand and find its category.

sometimes we find the questions in a manner where five statements are given below a passage and we are supposed to find the possible cause or possible effect out of it.

- The police authority of the state should deploy additional forces all over the state to help traffic movement in the state.
  - The state administration should carry out preventive arrests of the known criminals staying in the state.
- (a) Only (I) (b) Only (II)  
(c) Only (III) (d) Only (I) and (II)  
(e) None of these

4. **Statement:** The college dropout rate in many states in the city has increased sharply during the last few years as the parents of these children make them work in the fields owned by others to earn enough for them to get at least food in a day.

**Courses of action:**

- The Govt college put up a mechanism to provide food grains to the poor people in these districts through the public distribution system to encourage the parents to send their wards to college.
  - The Govt should close down some of these schools in the district and deploy the teachers of these schools to nearby colleges and also ask the remaining students to join these colleges.
  - Govt should issue arrest warrants for all the parents who force their children to work in fields instead of attending lectures.
- (a) Only (I) (b) Only (II)  
(c) Only (III) (d) Only (I) and (II)  
(e) None of these

5. **Statement:** One student was killed due to a stampede while participating in a recruitment drive of peon.

**Courses of action:**

- The officials in charge of the recruitment process should immediately be suspended.
  - A team of officials should be asked to find out the circumstances which led to the death of the student and submit its report within a week.
  - The Govt should ask the home department to stagger the number of students over more days to avoid such incidents in the future.
- (a) Only (I) (b) Only (II)  
(c) Only (III) (d) Only (II) and (III)  
(e) None of these



- 6. Statement:** The son of an eminent home minister of country china has been found indulging in illegal drug supplies and running an illegal drug factory.-A report in a newspaper
- Courses of action:**
- The home minister should be pressurized to resign from his post.
  - A case should be registered against the son and the home minister.
  - The suppliers should be fined a lot of costs.
- (a) Only II and III follow (b) Only I and II follow  
(c) All follow (d) Only I and III follow  
(e) None of these
- 7. Statement:** The recent landmark order to the high court has put a ban on the plying of thousands of diesel buses that have not converted to CNG, which has created a great problem for commuters in the state of Japan.
- Courses of action:**
- The state government should make it mandatory for private vehicles to ferry passengers at a charge in-state Japan.
  - The state government should draw up a contingency plan to tackle the transport problem in the state of Japan.
  - The state government should appeal to the high court to allow it to phase out diesel buses gradually.
- (a) Only I follow (b) Only I follow  
(c) Only I and II follow (d) All follow  
(e) None of these
- 8. Statement:** Cases of beating up of rag pickers by the police personnel have become a common feature in city Russia.
- Courses of action:**
- No note should be taken of this because on many occasions rag pickers are found indulging in theft.
  - A peace march should be organized to bring to notice the ill-treatment meted out by the police personnel
  - Rag pickers should register a complaint to the District Commissioner of Police against that police personnel.
- (a) Only I fellow (b) Only II and III follow  
(c) Only III follows (d) Only III follows  
(e) None of these
- 9. Statement:** As a result of communal tensions in the state, everyday activity has come to a halt and there is fear on the face of every individual.
- Courses of action:**
- The center government should employ additional security in highly-sensitive areas.
  - Strivings should be made to stop rumors from spreading.
  - Extremist religious leaders of both communities should be jailed.
- (a) All follow (b) Only I and III follow  
(c) Only I and II follow (d) None follows  
(e) None of these
- 10. Statement:** Because of the large number of people who want to enjoy summer vacation, Roadways has failed to satisfy the demands for tickets to various destinations for the enjoyers.
- Courses of action:**
- The Roadways should make additional arrangements for trains so that the demands can be fulfilled.
  - A helpline for interested people should be set up.
- III. The bus fare should be increased to such a limit that the number of aspirants reduces to the existing capacity of trains**
- (a) Only I and II follow (b) Only II and III follow  
(c) None follows (d) All follow  
(e) None of these
- 11. Statement:** The members belonging to two local coffee shops occasionally fight with each other on the main road and block traffic movement.
- Courses of action:**
- The local area police station should immediately deploy police personnel round the clock on the main road.
  - Those that intricate in fighting should be identified and put behind bars.
  - The local area administration should disband the management of the two coffee shops with immediate effect.
- (a) Only I and II follow (b) Only II and III follow  
(c) Only I and III follow (d) All 1, II, and III follow  
(e) None of these
- 12. Statement:** Many students of the college sicken for the fourth time in a row in the last four months after consuming food prepared by the college canteen.
- Courses of action:**
- The college management should immediately terminate the contract of the canteen and ask for compensation.
  - The college management should advise all the students not to eat food articles from the canteen.
  - The owner of the college should immediately be arrested for carelessness.
- (a) Only II and III follow (b) Only I follow  
(c) Only III follows (d) Only I and II follow  
(e) Only II and III follow
- 13. Statement:** Many college autos have fitted CNG kits without observing the safety guidelines properly. This results in some instances of these autos catching fire due to a short circuit and endangering the lives of college students.
- Courses of action:**
- The regional trSansport authority should immediately carry out checks of all the college buses fitted with CNO kit.
  - The management of all the colleges should stop hiring autos fitted with CNG kits.
  - The govt should issue a notification banning college autos from the use of CNG kits.
- (a) Only I follow (b) Only II follows  
(c) Only III follow (d) Only I and III follow  
(e) None of these
- 14. Statement:** A sudden cloud burst over the island states resulted in unpredicted heavy rainfall causing a flood-like situation in the entire area. A large number of people were caught unaware and were stranded on the road.
- Courses of action:**
- The local area administration should immediately put in place an action plan for avoiding such a
  - The local area administration should immediately the situation in the future. Deploy personnel to help the stranded people move to safer places.



III. The local area administration should advise all the citizens not to venture out on the road till the situation improves.

- (a) Only I follow (b) Only II follows  
(c) Only III follows (d) Only II and III follow  
(e) All I, II, and III follow

15. **Statement:** It is reported that during the last fortnight there have been three cases of near-miss situations involving two real craft over the busy city railway stations. In all these cases, both the rial craft came perilously close to each other and could avoid collision as the drivers acted just in time.

**Courses of action:**

- I. The drivers of all the six rial craft involved in these incidents should be de-roistered immediately.  
II. Some trains should be diverted to other railway stations for the next few months to decongest the sky over the state railway stations.  
III. Railway traffic controllers of the state railway stations should be sent for refresher courses in batches to prepare themselves to handle such a pressure situation.

- (a) Only I follow (b) Only II follows  
(c) Only III follow (d) Only II and III follow  
(e) None of these

16. **Statement:** Many foreign day-trippers visiting India from Madagascar have been caught at various airports in India while smuggling banned narcotic substances.

**Courses of action:**

- I. India should stop giving tourist visas to Madagascar nationals with immediate effect.  
II. The airport authority and the enforcing agencies should be put on high alert to detect all such cases of smuggling  
III. Those day-trippers who are caught smuggling banned narcotic substances should be given a life-term jail sentence to send a hefty message to the lawbreaker.

- (a) Only I follow (b) Only I and III follow  
(c) Only III follows (d) Only II and III follow  
(e) All follow

17. **Statement:** There is an alarming decrease in the number of females per thousand males in many states in the city as reported in the recently held demographics.

**Courses of action:**

- I. The center Govt should conduct another census to ascertain the seriousness of the situation.  
II. The center Govt should make an all-out effort to nab all such people who are responsible for female feticide.  
III. The center Govt should start a campaign in the most affected states to highlight the importance of having a girl child in the family.

- (a) Only I follow (b) Only II follows  
(c) Only III follows (d) Only II and III follow  
(e) None of these

18. **Statement:** While so many couples who do not have a child are waiting to have a baby for adoption, children are sold by private agencies to other country people for huge amounts of cash. The agencies source children from underprivileged sections of society illegally.

**Courses of action:**

- I. A authority should be made to look into this matter.  
II. A law should be enacted to make it necessary for all nursing homes and hospitals to record births and deaths and to admit abandoned children in specified homes.

III. International adoption should be completely prohibited.

- (a) Only I and II (b) Only II and II  
(c) Only I and III (d) I, II, and III  
(e) None of these

19. **Statement:** The demand for computer software engineers has gone down showing a possibility of a recession in the software sector.

**Courses of action:**

- I. The Authorities should give tax relief to the software sector.  
II. The industrialists should see for better business Opportunities than the software sector.  
III. The government should provide loans for the software sector to remove the recession.

- (a) Only III (b) Only I and III  
(c) I and II (d) I, II, and III  
(e) None of these

20. **Statement:** Although strict cautions by the state police have taken down the rate of night crimes, daylight theft and chain-snatching, etc have only enhanced.

**Courses of action:**

- I. The state police should be asked to stop its Cautions program during the night.  
II. The state police should be given powers to encounter criminals involved in daylight theft and chain-snatching.

III. The state police should be said to reorient its plans so that daylight crimes are not avoided.

- (a) I and II follow (b) Only III follows  
(c) Only I follow (d) II and III follow  
(e) I and III follow

21. **Statement:** The oil price sector is depicting a quick shortfall mainly because of an increase in international prices and no corresponding increase in local prices.

**Courses of action:**

- I. Government should increase local prices immediately.  
II. Increasing local prices will fuel inflation; hence the government should avoid the shortfall.  
III. The government should decide on a course of action after consulting various members.

- (a) Only I follow (b) Only II follows  
(c) Either I or II follows (d) II and III follow  
(e) Only III follows

22. **Statement:** Six boys harassed and gang-raped a minor girl of 15 years last night.

**Courses of action:**

- I. Boys should be immediately killed for they are not fit for society.  
II. As forgiving is the greatest virtue; the boys should be forgiven and given a chance to rebuild themselves.



- III. The girl should be given mercy-death as she won't be able to survive in society.  
 (a) I and II follow (b) II and III follow  
 (c) Only I follow (d) Only II follows  
 (e) None of these
23. **Statement:** The Company's workers have said that they will go on strike once again.  
**Courses of action:**  
 I. Worker's demands should be accepted.  
 II. The employees who decided to go on strike should be sacked.  
 III. The demands made by the employees should be sympathetically considered.  
 (a) Either I or II follows (b) Either I or III follows  
 (c) Either II or III follows (d) Only III follows  
 (e) None of these
24. **Statement:** The High Court has given a verdict that the right to take primary education is a fundamental right.  
**Courses of action:**  
 I. The High Court should be asked to stop its activism and advise the authorities only when its advice is sought.  
 II. The Government should amend the Constitution to incorporate the right to take primary education into the list of fundamental rights.  
 III. The schools should be told to give primary education free to any student coming to them.  
 (a) I and II follow (b) II and III follow  
 (c) Only II follows (d) Only III follows  
 (e) None follows
25. **Statement:** The chairman of the Tesla Company made an announcement in the meeting that all the work on its first product the new car X model is complete and Tesla Company plans to launch its car in the market in two months.  
**Courses of action:**  
 I. Network of dealers is to be finalized and all legal, financial and other matters in this connection will have to be finalized shortly.  
 II. The Tesla Company will have to make plans for their product other than cars.  
 III. Material, employees, and other resources will have to be in good to maintain production timetable.  
 (a) I and III only (b) Only I  
 (c) All the three (d) Only II  
 (e) None of these.
26. **Statement:** It has been shown by one of the TV news channels that the answer sheet of the 12th board examination of UP State is being assessed by students studying in the 12th standard with the help of the book's answers as told by the instructor.  
**Courses of action:**  
 I. Such instructors are immediately suspended from their official duties.  
 II. All such papers assessed by the students are immediately confiscated and got disclosed by qualified teachers.  
 III. The Board should find possibilities, even though they are remote, of getting the answer papers of this examination assessment by computerized machines.  
 (a) Only I follow (b) Only II follows  
 (c) Only III follows (d) Both I and II follow  
 (e) All follow
27. **Statement:** The majority of the students who have passed 12th Papers in the country could not get admission to the university as the of seats available is grossly not sufficient.  
**Courses of action:**  
 I. The assessment of the system of 12th papers should be made harder so that fewer students pass the examination.  
 II. The government should promote the private examination and open new colleges by providing them with land at a cheaper rate.  
 III. The privileged people should be asked to send their wards to other countries for higher studies enabling the needy students to get admission to colleges within the country.  
 (a) Only I follow (b) Only II follows  
 (c) Only I and II follow (d) Only II and III follow  
 (e) None of these
28. **Statement:** The price of Petrol in the foreign market has increased considerably due to the majority decision of IOC members to affect a cut in petrol production.  
**Courses of action:**  
 I. of India should immediately raise the price of petroleum products.  
 II. The government should uplift the petrol production of the local oil wells.  
 III. The government should absorb the hike in petrol price by using resources in its oil pool.  
 (a) Only I follow (b) Only I and II follow  
 (c) Only II and III follow (d) Only II follows  
 (e) None of these
29. **Statement:** The ways of transportation like airplane and train services have been severely impacted due to floods in the northern part of the country.  
**Courses of action:**  
 I. The ways of transport like rail and air services should temporarily be canceled in the region.  
 II. People should be requested to make their travel plan taking in mind probable disruption resulting in delay or cancellation of services.  
 III. The government should immediately introduce modern machines which will enable it to guide the rail and air services even if the flood grows.  
 (a) All follow (b) Only III follows  
 (c) Only II follows (d) Only II and III follow  
 (e) None of these
30. **Statement:** Major part of the wheat crop in the area has been destroyed by the unseasonal heavy rains during the last few months.  
**Courses of action:**  
 I. Government should give relief to the impacted farmers to recover their loss.  
 II. The government should provide free seed and fertilizer to the impacted farmers for the Kharif season.  
 III. The government should dismiss all the loans taken for the wheat crop by the impacted farmers.  
 (a) Only I and II follow (b) Only II follows  
 (c) Only III follows (d) Only II and III follow  
 (e) All follow.





- company, industry, or position and thus are bored.
- III. Some factors behind the wish for second careers are the effects that aging and growth have on people.
- IV. An intense period of skills training, job rotation, long hours of overtime and much traveling may have satisfied some people when they were younger and just beginning their careers but the same people may find it exhausting once they become older.
- V. Bevy switched her career out of exhaustion while Tom ventured into a new career out of adoration for the chosen field.
- VI. Before embarking on choosing a second career, a person must have an honest picture of himself and understand the changes he probably will go through.
- (a) I is a conclusion, IV is an assumption and VI is an inference
- (b) V is a conclusion and VI is a course of action to be taken by people who might want to switch careers
- (c) III is an inference, V is a conclusion and VI is an assumption
- (d) I strengthens the argument given in the passage, II is a possible reason for switching careers and V is an inference
- (e) IV and V are inferences
30. Even if you exercise everyday - whether that's at home, at the gym, or taking your dog for walks - you might not be getting as much physical activity as you think you are. The World Health Organization (WHO) recommends adults get at least 150 to 300 minutes of moderate to vigorous aerobic activity per week. But, even with these clear guidelines, research shows that many of us overestimate the amount of exercise we do.
- I. We can easily assess exercise intensity by measuring our heart rate during exercise.
- II. Moderate intensity exercise is considered to be any physical activity that requires a person to work at 40-59% of their heart rate reserve (the difference between resting heart rate and maximum heart rate).
- III. People don't understand what is meant by moderate and vigorous intensity exercise.
- IV. Those who do regularly exercise aren't getting as much benefit as they might think they are.
- V. Around 36% of people overestimate their physical activity levels - and an even higher proportion (61%) of individuals that are not reaching adequate activity levels are overestimating their physical activity levels.
- (a) I is the cause, II and V are the effect, IV is neutral
- (b) II and III weaken the argument, I is inference, IV is neutral
- (c) I and II are inferences, III is neutral, V is the cause
- (d) III is the cause, IV is neutral, V supports the argument.
- (e) IV is neutral, I, II are assumptions, III and V are inferences

## Solutions

### Course of Action

1. (a): the situation is pretty obvious. So a review committee is not required. Hence I does not follow. Water crisis is not the concern of the statement. Hence II does not follow. Merely two days of downpour does not merit "relief supplies"; one assumes there is not a flood-like situation as yet. Hence III does not follow.
2. (d): (a) would be an extreme step. (b) Is not within the govt's purview. (c) is advisable when there is retrenchment on such a large scale.
3. (b): (a) is not feasible in a democracy. (c) does not follow because the problem is not concerned with (b)-is the only course the authorities.' criminals". Can resort to.
4. (a): (a) would be a step in the right direction: it would ensure that hunger does not deprive children of education. (b) Is escapism. (c) is absurd. (a) Does not make sense unless it is known that these officials are the culprits. (b) is necessary
5. (d): (a) does not make sense unless it be known that these officials are the culprits. (b) is necessary to prevent such incidents in the future. So is (c).
6. (e): I does not follow because the cases are against the son of the minister. II does not follow on the same ground.
7. (e): I does not follow because of the word 'mandatory'. II and III are advisable because they will reduce problem.
8. (b): Rag pickers are also a part of our society. They should not be ignored. Hence, I does not follow II will attract the attention of authorities concerned as well as mobilize support from the various sections of the society. Hence II follows. III is obvious.
9. (c): I and II will certainly reduce the problem. Hence both follow. But III will create another problem. Hence III does not follow.
10. (a): III does not follow because it will create problems for the aspirants as well as for the railway authorities.
11. (e): A proper course of action would be serving notices to these clubs to behave themselves. Even police personnel may be deployed, but only during the Sensitive hours.
12. (b): I and III would be too harsh; II is absurd. Efforts should be made to supervise the quality of the food prepared by the canteen.
13. (a): I is the right course. II and III would create a bigger problem, via pollution.
14. (d): II is for the immediate future; III is for some time ahead. I do not follow because of the word "immediately".
15. (c): I would be punishing the brave. II is absurd; how can city flights be diverted? Only III makes sense.
16. (d): I is not advisable because it will create problem for genuine visitors. II is the right approach to handle the



situation. Hence, II is advisable. Now look at the given options. (a), (b) and (e) are rejected because I is not advisable. (c) is rejected because it does not comprise the second course of action. Hence, (d) is the correct choice. This implies that III is also advisable although it seems a harsh

17. (d): I is ridiculous, hence not advisable. II is advisable. Because it will reduce the intensity of the problem to a great extent. III is advisable because people's participation is essential to attain the objective.
18. (a): Both actions I and II follow. The committee will probe the proper reason and give suggestion to reduce the problem. Action II will help to take the record of children and hence help to find the missing ones. III is not a practical solution.
19. (e): I follows because tax reduction will tide the industry over during the recession. II does not follow. We don't know whether the recession is permanent. III does not follow because recession occurs because of problem in demand. So it is the buying power that needs to be increased.
20. (b): I does not follow because stopping caution would be a foolish thing to do. A better solution could be to reduce cautions during nights a little and reinforce daylight cautions as III suggests. Killing criminals is equivalent to giving punishment and this is an area for the judiciary, not for the police. So II does not follow.
21. (e): Raising local prices immediately may solve the problem of shortfall but may create new problems such as inflation, effect on underprivileged people (who) depend on kerosene, etc. Hence I is not tenable. But, on the other hand, a burgeoning shortfall is not something to turn a blind eye to, as II suggests. The best course would be to choose an optimal solution after intensive deliberations, as III suggests.
22. (e): none of them follows. Killing immediately implies passing a judgment and it is only the judiciary that is empowered to pass judgments in a civil society. II is too utopian. If all and sundry were forgiven whatever they did, it would lead to real chaos; there must be a disincentive against crime. III is a manic suggestion. The girl can't be killed under the pseudonym of mercy-killing. If society can't accept her, it is the fault of the society and not of the female. We must not forget one thing: the female is guilty of nothing.
23. (d): accepting all demands or rejecting all of them and sacking the erring employees are two extreme actions. There can be some middle path. For example, a compromise can be reached where only a few of the demands are accepted and no employee is sacked. Therefore choice (a) is not correct. For similar reasons choices (b) and (c) are not correct because they make a rigid rule that if you don't listen to the demands then you must accept the demands (or sack the employees in case of (c)). The best course is III. Only after deciding the merit of the demands should any further action be taken. Thus I or II must not be

taken independently, they must follow III.

24. (e): I does not follow because of the simple reason that there is no advisory body-higher than the Supreme Court which can advise the latter about where to interfere and where not to. III is impracticable because private schools can't be forced to give free education. It would be against their own right to do business. II may follow but in reality it is unnecessary. The right to primary education can be made a derivative of the right to life or the right to equal opportunities, both of which are fundamental rights. Amending the Constitution would not be really necessary.
25. (a): once the trials are over, the best availability of material, managerial and other resources is necessary to maintain production schedule. Hence III follows. As mentioned in the statement, 'model M is its first product', so it is necessary to finalize the network of dealers and all matters regarding the sale of the product. Hence I follow. II has no connection with the statement.
26. (b): I does not follow because it is too harsh an action. The examiners should rather be warned. II follows because this is the only thing that will be of real help to the wronged examinees. III does not follow because computerization works properly only.
27. (b): I is ridiculous. Hence, I is not advisable. II is advisable because this will be helpful in accommodating more students in pursuing their education. III is impractical, hence not advisable.
28. (c): I is not advisable because it will result in increase of price of other products. II is advisable because it will be helpful in meeting the demand. III is also advisable because it will work as a cushion.
29. (e): I is advisable because it will reduce any untoward incidents. II is also advisable because it will aware people in advance to face inconvenience caused by the fog. III is not advisable because it is impractical to install modern machine immediately.
30. (e): I is obvious. Hence, either (a) or (e) is our answer. Now, look at the choices (a) and (e). According to both the choices II is advisable. And if II is advisable it implies that intensity of damage is very high. Hence, III is also advisable.
31. Solution: (a): is incorrect as it is an extreme measure while better alternatives can be utilised.  
 (b): is incorrect because this does not bode well for the outgoing students.  
 (c): is incorrect because the passage clearly states that the university does not have resources for online exams and one cannot say for certain if the arrangement can be done in time.  
 (d): is incorrect because that is a health risk no one should take.  
 (e): is correct because that is a viable and only available option keeping in mind the limitations of other options.  
 Therefore, the correct answer is option e).



**Direction (1-4):** Read the given information carefully and answer the questions below:

Seven persons P, Q, R, S, T, U and V sits in a row and face to the north direction but not necessarily in the same order.

Two persons sit between R and V. S sits second to the right of V. Two persons sit between Q and S. Not more than one person sits between R and Q. One person sits between P and T who sits second to the left of V.

1. Who among the following sits immediate right of U?  
(a) P (b) S (c) R  
(d) T (e) None of these
2. How many persons sit between R and S?  
(a) Three (b) Two (c) One  
(d) Four (e) None of these
3. Who among the following sits third to the right of R?  
(a) V (b) T (c) U  
(d) S (e) None of these
4. If T and V interchange their position, then who sits immediate left of T?  
(a) R (b) U (c) S  
(d) V (e) None of these
5. In the given word "ENCYCLOPEDIA" if we removed all the vowels and replace all the consonants with just next letter then find how many vowels are there in the new arrangement?  
(a) Three (b) More than four (c) One  
(d) None (e) Two
6. In the number '837592475', how many pairs of the digits have the same number between them (both forward and backward direction) in the number series?  
(a) Four (b) Two (c) One  
(d) Three (e) More than four

**Directions (7-11):** Study the following number series carefully and answer the questions.

**628 935 275 562 471**

7. If all the digits are arranged in descending order within the number, then which of the following will be the lowest number thus formed?  
(a) 471 (b) 562 (c) 275  
(d) 628 (e) None of these
8. If first digit of 2<sup>nd</sup> highest number is divided by the second digit of the highest number, then which of the following will be the result?  
(a) 6 (b) 4 (c) 8  
(d) 2 (e) None of these
9. If in each number first and third digits are interchanged then how many odd numbers formed in the new arrangement?  
(a) One (b) Two (c) Three  
(d) Four (e) None of these
10. If all the digits are arranged in ascending order within the number, then which of the following will be the highest number thus formed?  
(a) 628 (b) 935 (c) 562  
(d) 275 (e) None of these

11. If all the numbers are arranged in ascending order from left to right, then which number will be come in the middle of the series?  
(a) 628 (b) 935 (c) 562  
(d) 275 (e) None of these

**Directions (12-14):** Study the following information carefully and answer the questions given below-

There are seven members in a family of three generations. There are two married couples in a family. A has two children and only one child is married. H is the mother of D. G is the niece of B. F is the only son of C. B is the sister-in-law of H. D is the daughter of F. C is not a male member of the family.

12. How is A related to G?  
(a) Father (b) Uncle (c) Grandfather  
(d) Aunt (e) None of these
13. How many females are in the family?  
(a) Two (b) Four (c) Three  
(d) Five (e) None of these
14. Who among the following is the wife of F?  
(a) B (b) H (c) G  
(d) Either B or G (e) None of these

**Directions (15-19):** Study the following information carefully and answer the questions given below-

Eight persons P, Q, R, S, T, U, V and W attend a function one after other but not necessarily in the same order. Three persons attend function between V and T who attend function after V. More than one person attend function after T. Q attend function just after R and both are not attended function just before/after T. No one attend function before P. S attend function just before U.

15. How many persons attend function after R?  
(a) Four (b) Three (c) More than five  
(d) Five (e) Two
16. The number of persons attend function between W and S is same as the number of persons attend function between P and \_\_\_\_?  
(a) S (b) R (c) V  
(d) U (e) None of these
17. How many persons attend function between Q and U?  
(a) Three (b) Five (c) One  
(d) Two (e) None of these
18. If R interchanged his position with T, then how many persons attend function before R?  
(a) One (b) Five (c) Two  
(d) Four (e) None of these
19. Four of the following five pairs are alike in a certain way and so form a group. Find the one which does not belong to that group?  
(a) P-R (b) Q-T (c) W-S  
(d) R-S (e) V-Q
20. If we form a meaningful word by the second, fourth, fifth and seventh letter of the word 'INTERNATIONAL', then which of the following will be the first letter of the meaningful word thus formed? If more than one meaningful word is formed mark Y as your answer. If no meaningful word is formed, mark X as your answer.  
(a) X (b) N (c) Y  
(d) A (e) R

**Directions (21-25):** Study the following arrangement carefully and answer the questions given below:

**C 9 E T % J 4 O B @ U 8 © N # W F 1 V 7 \* 2 A H 3 Y 5 \$ 6 K**

21. Which of the following is the third to the right of the tenth from the right end of the above series?  
(a) 1 (b) H (c) Y  
(d) N (e) None of these
22. How many elements are between Y and @?  
(a) Twelve (b) Thirteen (c) Ten  
(d) Fifteen (e) None of these
23. How many such vowels are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a consonant?  
(a) None (b) One (c) Three  
(d) Two (e) Four
24. If symbols have been removed from the given series, then how many elements are there in the new series?  
(a) Sixteen (b) Twenty (c) Nineteen  
(d) Twenty-four (e) None of these
25. How many such numbers are there in the above arrangement, each of which is immediately followed by a symbol and immediately preceded by a consonant?  
(a) One (b) Three (c) Two  
(d) Four (e) None of these

**Directions (26-28):** Study the following information carefully and answer the questions given below-

Point A is in 27m east of point B. Point E is in 18m south of point B. Point A is in 36m north of point H. Point G is in 30m east of point C. Point D is in 54m south of point G. Point H is in 27m west of point D.

26. In which direction is point C with respect to point H?  
(a) North-west (b) South-east (c) North  
(d) North-east (e) South
27. If point M is in 18m south of point G then, find the shortest distance between point A and point M?  
(a) 36m (b) 27m (c) 18m  
(d) 54m (e) None of these
28. Four of the following five are alike in a certain way and so form a group. Find the one which does not belong to that group?

- (a) G-D (b) H-E (c) D-B  
(d) A-C (e) H-B

**Directions (29-33):** Study the following information carefully and answer the questions given below.

Eight persons P, Q, R, S, T, U, V and W sits around a circular table and faces the centre but not necessarily in the same order.

V sits second to the right of W who sits opposite to Q. T sits adjacent to V. P sits opposite to T and sits second to the right of R. Two persons sit between U and S who sits immediate right of W.

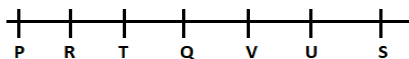
29. Who among the following sits second to the left of R?  
(a) T (b) Q (c) P  
(d) V (e) None of these
30. How many persons sit between U and V?  
(a) One (b) Four (c) Three  
(d) Two (e) None of these
31. How many persons sit between W and R, if counted from the left of R?  
(a) One (b) Two (c) Five  
(d) Three (e) None of these
32. Who among the following sits 2<sup>nd</sup> to the left of the one who sits immediate right of R?  
(a) P (b) V (c) U  
(d) Q (e) None of these
33. Who sits fourth to the left of P?  
(a) U (b) S (c) T  
(d) R (e) None of these

**Direction (34-35):** In these questions, relationship between different elements is show in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer:

- (a) If only conclusion I follows.  
(b) If only conclusion II follows.  
(c) If either conclusion I or II follows.  
(d) If neither conclusion I nor II follows.  
(e) If both conclusions I and II follow.
34. **Statements**  $G < U \leq R = T \leq W < Q \geq S = F$   
**Conclusions** I.  $R < Q$  II.  $F > T$
35. **Statements:**  $O \geq T = Y > R = D \geq S \geq U$   
**Conclusions:** I.  $R > U$  II.  $D = U$

## Solutions

**Solutions (1-4):**

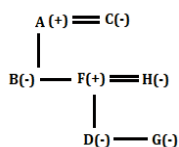


1. (b) 2. (d) 3. (a)  
4. (e) 5. (e) 6. (e)

**Solutions (7-11):**

7. (b) 8. (d) 9. (b)  
10. (b) 11. (c):

**Solutions (12-14):**



12. (c): 13. (d): 14. (b):

**Solutions (15-19):**

Persons
P
V
R
Q
W
T
S
U

15. (d): 16. (b): 17. (a):  
18. (b): 19. (d):

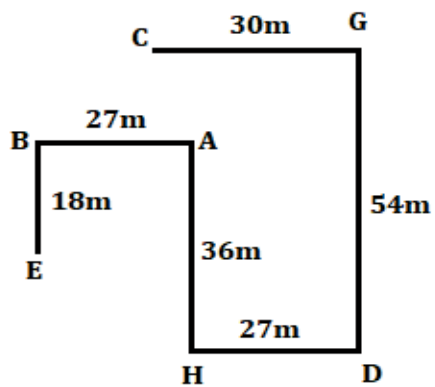
20. (c)

**Solutions (21-25):**

21. (b) 22. (d) 23. (c)  
24. (d) 25. (c)



Solutions (26-28):

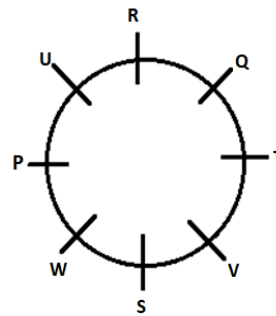


26. (a):

27. (b):

28. (a):

Solutions (29-33):



29. (a):

32. (d):

Solutions (34-35):

34. (a):

30. (c):

33. (c):

35. (c):

31. (e):

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1. Find the odd one out?  
(a) DGJE (b) KNQL (c) UXZU  
(d) CFID (e) MPSN

**Direction (2-5):** Study the following information carefully and answer the questions given below:

A certain number of persons sit in a row and all of them face towards the north. Q sits second to the right of M. Two persons sit between J and Q. W sits second to the right of J and sits third from the extreme right end. Five persons sit between W and S. The number of persons sits to the left of S is same as the number of persons sits to the right of W. K is the only neighbour of P. K sits to the right of J.

2. How many persons sit in the row?  
(a) 13 (b) 11 (c) 10  
(d) 15 (e) 17
3. What is the position of Q with respect to W?  
(a) Fourth to the left  
(b) Fifth to the right  
(c) Second to the right  
(d) Fifth to the left  
(e) Third to the left
4. Which among the following statement(s) is/are true?  
I. P sits at the extreme right end  
II. More than three persons sit to the left of Q  
III. M sits adjacent to S  
(a) Both I and II (b) Both II and III (c) Only I  
(d) Both I and III (e) Only III
5. Four of the following five are alike in a certain way and thus form a group. Who among the following does not belong to the group?  
(a) M (b) W (c) P  
(d) Q (e) K

**Directions (6-8):** In these questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions. Give answer.

- (a) If only conclusion I is true  
(b) If only conclusion II is true  
(c) If either conclusion I or II is true  
(d) If neither conclusion I nor II is true  
(e) If both conclusions I and II are true
6. **Statements:**  $Q \geq W > Y = E \leq U < P > S \leq T$   
**Conclusions I:**  $Y < P$  **II:**  $W > S$
7. **Statements:**  $M \leq B > H = A \geq D < L = C$   
**Conclusions I:**  $H > L$  **II:**  $A \leq C$
8. **Statements:**  $K > M \leq Z < E \geq V = X < C$   
**Conclusions I:**  $E \geq C$  **II:**  $V < M$

**Directions (9-13):** Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E, F, G and H sit around a square table such that four persons sit at corner and the remaining four sit at the middle of the sides of the table but not necessarily in the same order. The persons sit at the corner face towards the center of the table and the persons sit at the middle of the side face away from the center of the table.

E sits second to the right of B. Two persons sit between B and H. F sits to the immediate right of H. The number of persons sits between H and D is same as the number of persons sits between D and G. D sits at the corner of the table. A sits adjacent to D.

9. Who among the following sits third to the left of C?  
(a) A (b) B (c) D  
(d) E (e) H
10. How many persons sit between E and H when counts to the left of H?  
(a) Two (b) Three (c) One  
(d) None (e) More than three
11. What is the position of C with respect to G?  
(a) Second to the right  
(b) Second to the left  
(c) Immediate left  
(d) Third to the right  
(e) None of these
12. Which among the following statement(s) is/are not true?  
(a) A sits to the immediate left of H  
(b) Three persons sit between D and C  
(c) E sits opposite to A  
(d) B sits at the corner of the table (e) All are true
13. Four of the following five are alike in a certain way and thus form a group. Who among the following does not belong to the group?  
(a) E (b) F (c) D  
(d) A (e) B

**Directions (14-18):** Study the following number series carefully and answer the questions given below:

**9 8 4 6 3 7 2 9 4 1 5 2 5 9 1 4 3 6 9 1 8 2 9 4 5 7 6 1**

14. How many prime numbers are in the above series each of which is immediately preceded by an even number and immediately followed by odd number?  
(a) Three (b) Five (c) Four  
(d) Six (e) More than six
15. What is the sum of the odd numbers which are immediately followed by the number which is multiple of 3?  
(a) 11 (b) 15 (c) 17  
(d) 13 (e) 19
16. Which among the following number is 9<sup>th</sup> to the left of the number which is 7<sup>th</sup> from the right end?  
(a) 2 (b) 1 (c) 9  
(d) 5 (e) 8
17. How many even numbers are between the numbers which are 9<sup>th</sup> from the right end and 3<sup>rd</sup> from the left end?  
(a) Six (b) Five (c) Four  
(d) Three (e) Two
18. If we form a four-letter meaningful word with 1<sup>st</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 8<sup>th</sup> letter from the left end of the word "CRITERIA" (Using each letter once), then what would be the third letter of that meaningful word? If no meaningful word is formed, then mark the answer as X. If more than one meaningful

word is formed then mark the answer as Z.

- (a) C (b) R (c) A  
(d) Z (e) X

**Directions (19-23):** Study the following information carefully and answer the questions given below:

Seven persons have different designations i.e. Vice Chancellor (VC), Director (DR), Director of nursing (DN), Head of Department (HOD), Principal, Professor and Assistant professor in a company. The order of seniority is the same as given above i.e. Vice Chancellor (VC) is the senior-most designation and Assistant professor is the junior-most designation.

At most two persons are senior to R. Two designations gap between R and V who is not a professor. One designation gap between P and T and both of them are senior to V. There are as many persons junior to P as senior to U. S is junior to Q.

**19.** How many persons are senior to Q?

- (a) Three (b) One (c) Four  
(d) Two (e) None

**20.** Who among the following is designated as Principal?

- (a) P (b) Q (c) T  
(d) V (e) S

**21.** The number of persons designated between R and U is same as the number of persons designated before \_\_\_\_.

- (a) S (b) V (c) Q  
(d) T (e) None of these

**22.** Who among the following is three post junior to the one who is just senior to R?

- (a) Q  
(b) Director (DR)  
(c) S  
(d) Director of nursing (DN)  
(e) Both Q and Director of nursing (DN)

**23.** If all the persons are arranged according to the alphabetical order from top to bottom then how many persons remain unchanged except (P)?

- (a) One (b) Two (c) None  
(d) Three (e) None of these

**Directions (24-26):** In each of the questions below, some statements are given followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow from the given statements, disregarding commonly known facts. Give answer

- (a) If only conclusion I follows  
(b) If only conclusion II follows.  
(c) If either conclusion I or II follows.  
(d) If neither conclusion I nor II follows.  
(e) If both conclusions I and II follow.

**24. Statements:** Some juice are mango.

Only a few mango are orange.

**Conclusions:** I. Some Juice are not mango

II. All Orange being mango is a possibility

**25. Statements:** No Bell is Clock.

All Bell is Ring.

**Conclusions:** I. Some Clock is Ring

II. No Ring is Clock

**26. Statements:** Only Car is Train.

Some Ship are Car

**Conclusions:** I. Some Ship are not Train

II. All Car being Ship is a possibility

**Direction (27-31):** Study the following information carefully and answer the questions given below:

Seven persons H, J, K, L, M, N and O buy a product on different day one after another but not necessarily in the same order.

One person buys product between H and O. Two persons buy product between O and N. N buys product neither just before nor just after H. K buys product just before J and after O. L buys product two days before M.

**27.** How many persons buy product between L and K?

- (a) More than four  
(b) Three (cs) None  
(d) Two (e) One

**28.** The number of persons buy product between J and N is same as the number of persons buy product before \_\_\_\_.

- (a) L (b) M (c) O  
(d) H (e) None of these

**29.** Which of the following statement is true?

I. More than two persons buy product after K

II. O buys product just after M

III. Only one person buys product before H

- (a) Both I and III are true  
(b) Both II and III are true  
(c) Only I is true  
(d) Only II is true  
(e) None is true

**30.** How many persons buy product after N?

- (a) One (b) Two (c) More than four  
(d) Four (e) None of these

**31.** Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?

- (a) M-L (b) L-H (c) O-M  
(d) J-N (e) K-O

**Direction (32-34):** Study the following information carefully and answer the questions given below:

L has two daughters. C is the unmarried sister-in-law of H. K is the father of G. K is the only sibling of C. P is the spouse of L. W is the maternal uncle of H. L is the maternal grandmother of M who is sibling of G. S is the sister-in-law of K. G is the only grandson of J who is not female.

**32.** How many married couple are live in the family?

- (a) Four (b) One (c) Three  
(d) Two (e) None of these

**33.** How is L related to K?

- (a) Sister (b) Niece (c) Mother-in-law  
(d) Sister-in-law (e) Mother

**34.** Who is the sister-in-law of H?

- (a) C (b) M (c) L  
(d) Either C or M (e) None of these

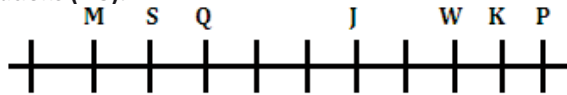
**35.** In the word 'PAGINATE', how many pairs of the letters have the same number of letters between them (both forward and backward direction) in the word as in the alphabetical series?

- (a) Four (b) Two (c) One  
(d) Three (e) More than four

## Solutions

1. (c)

Solutions (2-5):



2. (b)

3. (d)

4. (d)

5. (c)

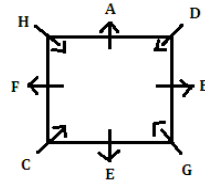
Solutions (6-8):

6. (a)

7. (c)

8. (d)

Solutions (9-13):



9. (a)

10. (e)

11. (b)

12. (d)

13. (c)

Solutions (14-17):

14. (c)

15. (b)

16. (d)

17. (a)

18. (d)

Solutions (19-23):

Designations	Person
Vice Chancellor (VC)	P
Director (DR)	R
Director of nursing (DN)	T
Head of Department (HOD)	Q
Principal	V
Professor	S
Assistant professor	U

19. (a)

20. (d)

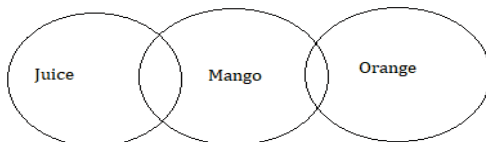
21. (b)

22. (a)

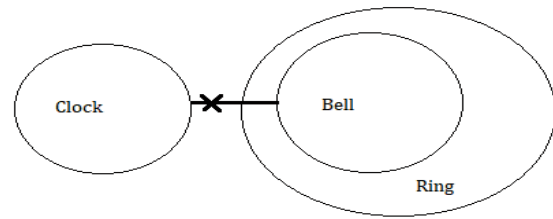
23. (c)

Solutions (24-26):

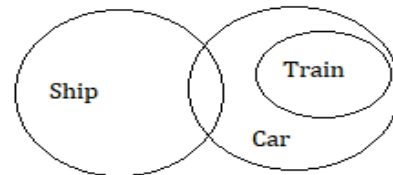
24. (b):



25. (c):



26. (a):



Solutions (27-31):

Persons
L
H
M
O
K
J
N

27. (b)

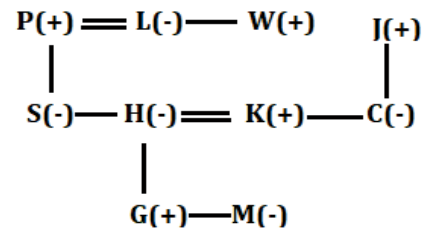
28. (a)

29. (b)

30. (e)

31. (a)

Solutions (32-43):



32. (d)

33. (c)

34. (a)

35. (c):

PAGINATE

