

1) Syllogism

- 2 easy methods

Here in general,

2 statements are given

in more

2 or more conditions

Based on the statements we need to decide
the which of the conclusions are valid &
which are not.

- Tips & tricks

i) Syllogisms

↓
through

Venn diagram (method 1)

ii) Income expense method (IE) (method 2)

iii) Venn diagram

↓
pros sets

(method of representation)

- Syllogism types (Imp)

→ Normal → whenever see this type apply
sum use IE / Venn

→ Possibility →
sum use Venn

- How to determine a sum is normal / Possibility?

There will be 2 or more S (statements)

2 or more C (conclusions)

in conclusion
if wherever you'll see the words like -

- can be (together)
- being a possibility
- being a chance

possibility sum

if we can't see those words () in
conclusion

Then Normal Sum

• Steps

- i) take a look at conclusions
 - ii) determine whether it's a normal / Possibility sum
 - iii) if normal → IE
If Possibility → Venn
- solve & get the ans.

ii) Income-Expense (IE) method

• Every sentence has only 12 items. (Fig.)
Red, yellow, glass, bottle etc)

Eg. S → Income (Fig. S. is given to us. So that become inward)

1. Some Bottles are Glass

2. All the glasses are cables

C → Expense
1. No Glasses are cable
2. Some cables are Bottles

(We need to derive the C, that become expense as we spend them)

• In syll. there are [4 words] that are most imp.

- All
- No (None)
- Some
- Some ---- Not

Some words

All the sums of gl.
will have either these
words or rest of these
words Some

If (Ex. e.g.)

• There is an [imp table] that we need to know by heart, i.e. need to remember it very well.

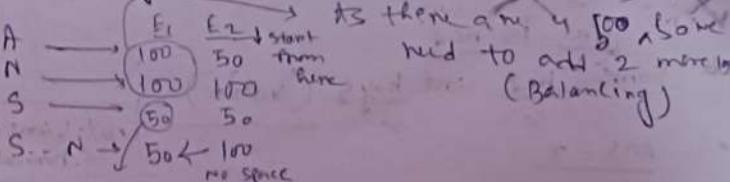
	E1	E2
All	100	50
No (None)	100	100
Some	50	50
Some ---- Not	50	100

Alphabetic (increasing) / In alphabetic orders

In table • Let assume when we have [Everything] we have [100/-]

• When we [don't have anything] we have [50/-].

(way of building the table)



As we changed the line we can to six fine

• Another most imp rule I → E

S → E
Expense

Here I also must have to sum up
so 50 + 50 = 100

- Eg
1. Some Bottles are Glass
2. All the Glasses are Cables
- C → E
1. No Glasses are cable
2. Some Cables are Bottles [$\frac{A \cap B \cap C}{A \cap C}$]
- Can be, being a possibility etc are not here
So, it's a normal sum.

	F1	F2
A	100	50
N	100	100
S	50	50
S - N	50	100

valid
Conclusion - 2. Some Cables are Bottles

IE Example

1. ND Jim is boy.
2. All boys are red.
3. ND Jim is red

ND Jim is red

∴ Some red are boys (valid)

Ans - 2

	F1	F2
A	100	50
N	100	100
S	50	50
S - N	50	100

boy - Sons will
be Normal

i) Venn diagram method (Here also we have 4 rows)

All cats are dogs



Cats Dogs

All dogs are cats as well
All dogs are not cats as well

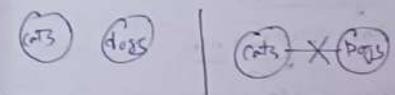
Some cats are dogs



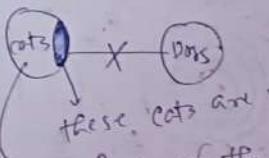
All dogs are cats as well

Some cats are dogs if some dogs are cats as well

No cats are dogs



Some cats are not dogs



These cats are not dogs (but this is sure)

Rest of the cats can be dogs, can not be
we don't know for sure

① S

1. Some Cats are white.

2. All white are dog. (V)

3. ND dog is Snow. (V)

(IE) 1. 100 100 100
A F1 F2

N 100 100 100

S 50 50 50

S - N 50 100 100

1. No Cats are dogs

2. Some Cats are dogs

3. ND White is Snow

100 100 100

Ans - 2 & 3

③ S

1. All the humans are instruments ^{so}

2. All the instruments are flutes ^{so}

X. All the flutes are instruments ^{so}

2. All the humans are flutes. (N)

Ans - 1 & 2 ¹⁰⁰

⁵⁰

③ S

1. Some laptops are very board. ^{so}

2. All the carries are very board.

X. Some keyboards are public ^{so} (N)

2. Some keyboards are laptops. (N)

Ans - 1 & 2 ⁵⁰

⁵⁰

④ S

1. All A are B. →

2. All B are C. →

All B can be A. (N) Alternative from 1 (i.e. we can't have separate diagram from 2 statements)

Some C not being B is a possibility. (N)

Some C can be B. →

Some A can be C. →

from the dig. 1 we can't say that, but if we draw the alternative from the 1 (i.e.

if the 1 is not true, the alternative 2 is true, so that 2 is not true), i.e. all A is B (dig 2)

then we can say 1 is correct. That means for -

B.C, there are two cases if 1 is incorrect
2nd case is 1 dig. for which the C1 is possible, if there is another dig for which the C1 is not possible, so we mark this as [correct]

• If all are possible → X

If all are not possible → X

If 1 possible, 2 not possible → X

A Hornative means relation b/w them (the statements from which we have drawn 1) [Another trick when its alternative think of the relationship of from the last clc, i.e., eg. Some c can be b (Prv dig) → All B are C (that's also relationship of statement)]

Then there is no direct relationship, then it works like ^{dependency} functional dependency (In DBMS)
i.e. A → B, B → C → A → C (i.e. All A are c)

we can also see the same [↓] from diagram

Ans 1 & 2

(Preferred method)

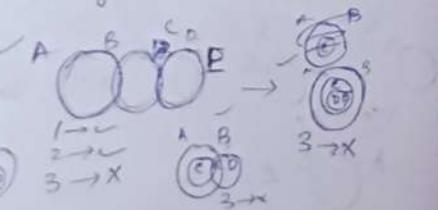
- ⑤ $\exists A \exists B \exists C$
 1. Some A are B
 2. Some B are C
 3. All A can be C. (v)
 4. Some C not being B
 is a possibility. (v)
 5. All B can be A-(v)
 6. No A can be B.
 7. Some B can be A.
 (very)
- Ans - 1, 2 & 3

Another method,
then I draw the diagram if there it's matching the S or not. & then we take the conclusion & take decision.

→ The S. is already given, one common must be there in b/w A & B. So that C. statement is not true; no need to check other possibilities, directly X it.

⑥ Statements

- All A are B.
- Some B are C.
- Some C are D.
- All D are E.



1. Some A can be B

2. Some D can be C.

3. All B being E is a possibility.

4. Some C are D

Ans - 3

Another method

- ⑦ S
 1. No A is B.
 2. No B is C.
 3. Some A can be B.
 4. All B can be C.
 5. Some C not being A is
 a possibility.
 Ans - 3

Tip

- ⑧ S
 1. Some A are not B.
 2. Some B are not C.
 3. Some A can be C. (v)
 4. Some B can be A. (v)
 5. Some A not being B is a possibility.
 From the S. can if we can derive something
 (v) for sure we know it for sure & if
 C. it is given as possibility, then directly
 mark it as wrong.
 Eg we are sure that some part of A
 are not be, but other they have given
 it as possibility. So direct → X

Ans 1 & 2

- Q. S
 1. All A are B.
 2. All B are C.
 3. No C is D.

C
 X1 - If B can be D, can't still state no C as possibility
 X2 - Some A being D is a posibility.

Ans - none of above

- Q. S
 1. Some A are B
 2. No B are C
 C

C
 X1 - Some A being C is a possibility. (v)
 ✗ All A being C is a possibility.

3. No C being A is (v) a possibility.

Ans 1 & 3

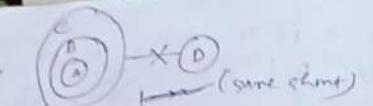
Q. S

1. All fruits are lions.
 2. All lions are foxes.
 3. Some foxes are beggars.

C
 ✗ All fruits are foxes. (v)

XII. Some fruits are beggars.

only I follows



(some chart)

- Q. S
 1. Some buttons are rivers.
 2. Some rivers are shirts.
 3. All shirts are people.

- C
 4. Some people are rivers (v)
 5. Some people are buttons.
 6. Some shirts are buttons.

only I follows

(3) choose the option where the 3rd segment can be logically deduced using both the preceding two, but not just from one of them

- S -
 A. All beggars are poor. All lions are poor.
 (So all lions are beggars.)

- B. All people are boxes. All foxes are people.
 (So all boxes are foxes.)

- C. All men can run. All women are men. So, all women can run. (v)

	F1	F2
A	100	50
N	100	100
S	50	50
S - N	50	100

Ans - Statement C

[An & All]

(4) choose the option, where the 3rd statement is conclusion drawn from preceding two statements

- S A - An eagle lays eggs.

- S B - All birds lay eggs.

- S C - Some birds can fly.

- S D - An eagle cannot fly.

- E - An eagle is a bird.

- S F - An eagle can't fly.

try ABE \rightarrow BEA or DEC \rightarrow ECB

Q Data interpretation (Ans - 2)

Coding - decoding (i - 2)
Ans

• very imp tip

reverse position [27 - position of letter]

26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

Some other tips

Coding - decoding types \rightarrow nth types (i.e. ∞ types)

But majority of types

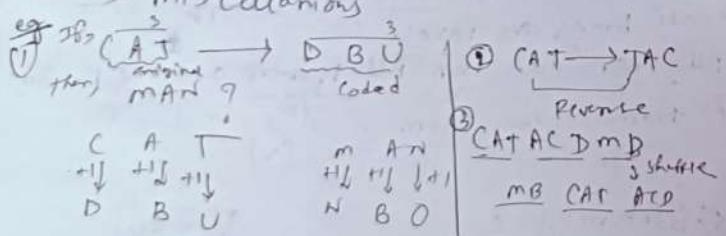
→ Letters / Alphabet

→ Numbers

→ Symbols

→ Group / Group of words / letters

→ Miscellaneous



Solving types \rightarrow

$+1 +1 +1$
 $+2 +2 +2$
 $+3 +2 +3 \dots \text{etc (anything)}$

• Ascending orders \approx Alphabetic order

Q In a certain language if SUNSHINE is coded as TVOTJOOF, then how will MOON be coded? \rightarrow NPPQ, v/s NPO, Q PRON, v/s NPQ

SUNSHINE \rightarrow TVOTJOOF

$\begin{matrix} \text{H} & \text{I} & \text{I} & \text{U} & \text{V} & \text{V} & \text{V} \\ \downarrow 1 & \downarrow 1 \\ \text{O} & \text{T} & \text{I} & \text{J} & \text{O} & \text{F} & \end{matrix}$

MOON

$\begin{matrix} \text{M} & \text{O} & \text{O} & \text{N} \\ \downarrow 1 & \downarrow 1 & \downarrow 1 & \downarrow 1 \\ \text{N} & \text{P} & \text{P} & \text{Q} \end{matrix}$

Type 1

Q In a certain language if WRONG is coded as GNORN, then how will RIGHT be coded?

WRONG \rightarrow RIGHT

But this isn't in option
In option there is $\begin{matrix} \text{RIGHT} \\ \downarrow \\ \text{HIRM} \end{matrix}$, but this is not wrong
I need some diff. logic

WRONG \rightarrow GNDRW

Ascending order (Alphabetically).

RIGHT \rightarrow GHIRT (In option 3 this is correct)

Q If SNOW is coded as 7100, then WALL will be coded as - \rightarrow 5050

$\begin{matrix} \text{S} & \text{N} & \text{O} & \text{W} \\ \downarrow 1 & \downarrow 2 & \downarrow 3 & \downarrow 4 \end{matrix}$

Type 2

7100 is given
to increase
the complexity
of the code
 $\frac{7}{1} = 19$
 $\frac{1}{2} = 14$
 $\frac{0}{3} = 13$
 $\frac{0}{4} = 13$

Here too
they did same
so they should
be ignored / of
no use.

WALL

$\begin{matrix} \text{W} & \text{A} & \text{L} & \text{L} \\ \downarrow 1 & \downarrow 2 & \downarrow 3 & \downarrow 4 \end{matrix}$

$\begin{matrix} \text{W} & \text{A} & \text{L} & \text{L} \\ \downarrow 1 & \downarrow 2 & \downarrow 3 & \downarrow 4 \end{matrix}$

$\begin{matrix} \text{W} & \text{A} & \text{L} & \text{L} \\ \downarrow 1 & \downarrow 2 & \downarrow 3 & \downarrow 4 \end{matrix}$

48

Q) In a certain lang, CAP is coded as 73 61, how PEN be coded? Type 4

$$\begin{array}{rcl} \text{CAP} & \rightarrow & 61 \\ C=29 & & \\ A=26 & & \\ P=16 & & \\ \hline & & 61 \end{array} \quad \begin{array}{rcl} \text{PEN} & & \\ E=22 & & \\ N=13 & & \\ \hline & & 46 \end{array}$$

$$\begin{array}{rcl} & & 3 \\ & & 14 \\ & & 23 \\ 3^2 - 11 & = & 12 \\ & & 24 \quad (\text{PEN}) \\ + 11 & & \hline & & 61 \end{array}$$

46

Q) If MOUSE is coded as PNUFT, then CLOCK will be coded as—

M O U S E
 n " J " w "
 P N U F T

C L O C K
 n D J L D
 o

M D O L D

Q) If KEYS = MDA, then LOCK = ?

K E Y S
 M D A R

L O C K
 N H E J

Q) If PADAP is coded as * # ? * ? # ? & DOOR is coded as ? * ? , then DAM will be coded as —

48 - 10

Type 5

Type 6

D	A	M
?	!	
?	!	H Cap forms op
?	#	

Type 7

Repeating alphabets/symbols.

Here only 1 alpha gets repeated & 1 symbol gets repeated, i.e. 0 is nothing but ?.

70 = ?.

Now, here, 2 alphas get repeated & 2 symbols get repeated,

So, R = ? A = ?

If R = ?, A = ? both in DOOR there is no A but has ? → not satisfying

then, R = ?, [A = ?]; but there is no * in DOOR & not a A as well → satisfying

So, [P = ?], now we can't say A is (as it's not

If, P = ?, [D = #] (from DOOR) inception

(1) A M → Here nothing gets related so — ??# X
 ↓ ↓ → DAM doesn't have 0 → ?#? X
 # * / → DAM doesn't have R → *#? X
 → NON THE * # Sets in contradiction (that can happen) → ms *#?

① shiny method

② option

From book, of existing method
No repetition from book & in
So $\# \# X$ Consec & SR
gets repeated & $\# \# \# X$
So A B R can't
 $\# \# \# \# X$
Now in same we only have
A So, we can't get both $\# \# \# X$
So, $\# \# \# X$
∴ option c = $\# \# \# X$

③ In a certain lang,

- a) 'tu ma sam' means 'water is life'
- b) 'sam na zo' means 'glass of water'
- c) 'chi zo ma' means 'life of PI'

Which of the following represents 'PI'
In that language?
a) tu, b) ma, c) chi, d) sam

tu ma sam → water is life.
sam na zo → glass of water

water = Sam

glass = Sam

life = PI

∴ PI = zo

④ Water is life = tu ma sam

∴ $\# \# \# \# \# X$ = chi zo ma

∴ life = ma

Now = chi zo ma

↓ ↓
Should be PI if life

∴ PI = chi

⑤ In a certain lang,

A) 321 means 'cup of coffee'

types

B) 426 means 'coffee is Brown'

C) 796 means 'Beans are Brown'

Which of the following rep. 'IS' in that lang?

D) Cup of coffee = 3 2 1

E) Coffee is Brown = 4 2 6

Coffee = 2

F) Coffee is Brown = 4 2 6

G) Beans are Brown = 7 9 6

Brown = 6

H) Cup of coffee = 3 2 1

I) Coffee is Brown = 7 9 6 } No common

J) Beans are Brown = 7 9 6 } No common

K) Coffee is Brown

L) Beans are Brown

M) Beans are Brown

N) Beans are Brown

O) Beans are Brown

P) Beans are Brown

Q) Beans are Brown

R) Beans are Brown

S) Beans are Brown

T) Beans are Brown

U) Beans are Brown

V) Beans are Brown

W) Beans are Brown

X) Beans are Brown

Y) Beans are Brown

Z) Beans are Brown

A) Beans are Brown

B) Beans are Brown

C) Beans are Brown

D) Beans are Brown

E) Beans are Brown

F) Beans are Brown

G) Beans are Brown

H) Beans are Brown

I) Beans are Brown

J) Beans are Brown

K) Beans are Brown

L) Beans are Brown

M) Beans are Brown

N) Beans are Brown

O) Beans are Brown

P) Beans are Brown

Q) Beans are Brown

R) Beans are Brown

S) Beans are Brown

T) Beans are Brown

U) Beans are Brown

V) Beans are Brown

W) Beans are Brown

X) Beans are Brown

Y) Beans are Brown

Z) Beans are Brown

A) Beans are Brown

B) Beans are Brown

C) Beans are Brown

D) Beans are Brown

E) Beans are Brown

F) Beans are Brown

G) Beans are Brown

H) Beans are Brown

I) Beans are Brown

J) Beans are Brown

K) Beans are Brown

L) Beans are Brown

M) Beans are Brown

N) Beans are Brown

O) Beans are Brown

P) Beans are Brown

Q) Beans are Brown

R) Beans are Brown

S) Beans are Brown

T) Beans are Brown

U) Beans are Brown

V) Beans are Brown

W) Beans are Brown

X) Beans are Brown

Y) Beans are Brown

Z) Beans are Brown

A) Beans are Brown

B) Beans are Brown

C) Beans are Brown

D) Beans are Brown

E) Beans are Brown

F) Beans are Brown

G) Beans are Brown

H) Beans are Brown

I) Beans are Brown

J) Beans are Brown

K) Beans are Brown

L) Beans are Brown

M) Beans are Brown

N) Beans are Brown

O) Beans are Brown

P) Beans are Brown

Q) Beans are Brown

R) Beans are Brown

S) Beans are Brown

T) Beans are Brown

U) Beans are Brown

V) Beans are Brown

W) Beans are Brown

X) Beans are Brown

Y) Beans are Brown

Z) Beans are Brown

A) Beans are Brown

B) Beans are Brown

C) Beans are Brown

D) Beans are Brown

E) Beans are Brown

F) Beans are Brown

G) Beans are Brown

H) Beans are Brown

I) Beans are Brown

J) Beans are Brown

K) Beans are Brown

L) Beans are Brown

M) Beans are Brown

N) Beans are Brown

O) Beans are Brown

P) Beans are Brown

Q) Beans are Brown

R) Beans are Brown

S) Beans are Brown

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U) Beans are Brown

V) Beans are Brown

W) Beans are Brown

X) Beans are Brown

Y) Beans are Brown

Z) Beans are Brown

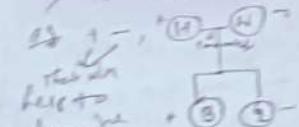
③ Blood relations (C 3-4 yrs)

• Some tips

i) Draw diagram

ii) Every generation should come to a new row/level. $\frac{O}{O} \rightarrow \frac{P}{P}$ etc

iii) Symbols (simple)



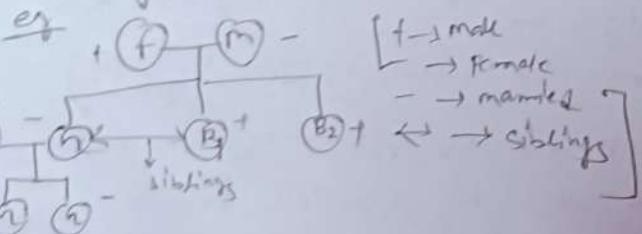
How many males
female are
there in the
family & son

iv) No general relations (like brother, family
name, friends etc.)

Husband
having 2 wives X

v) Don't judge the genders based on
names.

vi) Draw your own family tree 1st,
using symbols.



Q Rakesh introduces Purnam as the daughter

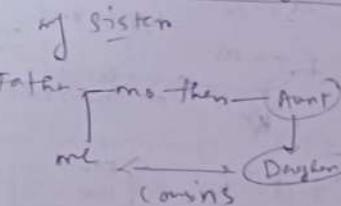
of the only son of my father's wife. How is
Purnam related to Rakesh? introduction

tract from last - Red approach

Daughter

Q Introducing a girl, aby said, "she
is the daughter of the mother of the
daughter of my aunt." How is the girl
related to the boy?

position
(She is the daughter of the mother
of the daughter of my aunt)



Cousin

Q UTV means V is the brother of U, W-X
means W is the father of S, X-Y means X is
the sister of Y, Y-Z means Z is the mother
of Y. Which of the following means that 'N' is
the mother of O?

2nd type

from first

i) $L + M \div N = 0$, ii) $L - M \times O \div P$, iii) $N \cdot m \times L = 0$

iv) $M + L \div O \times N$

(How it's from option, but
in all cases we can't definitely say)

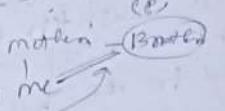
(i) If $A \# B$ means A is mother of B .

$A - B$ means A is brother of B :

$A \cdot B$ means A is father of B :

$A \times B$ means A is sister of B ,
which of the following shows that P is
the maternal uncle of Q ?

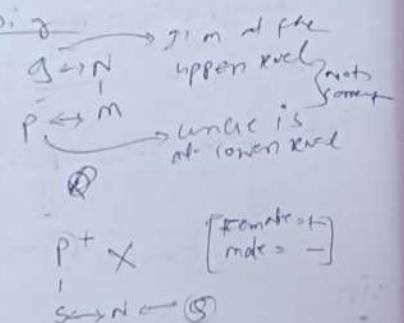
Best approach
= Draw a diagram
for each option.



i) $Q - N \# M \times P$, ii) $P \# S \times N - Q$, iii) $P - M \# N \times Q$

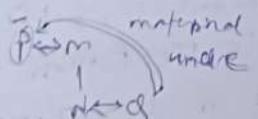
iv) $Q - S \cdot P$

v) $Q - D \# M \times P$



vi) $P \# S \times N - Q$

vii) $P - M \# N \times Q$



(ii) Read the info carefully & answer
the qns.

1. A family consists of 6 members

P, Q, R, X, Y, Z .

2. Q is the son of R but R is not
mother of Q .

3. $P \& R$ are married couple

4. Y is the brother of R , X is the daughter of R .

5. Z is the brother of P .

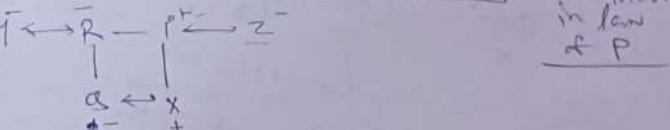
Q1. Who is the brothers in law of R ? Z

Q2. How many female members are
there in the family? 2

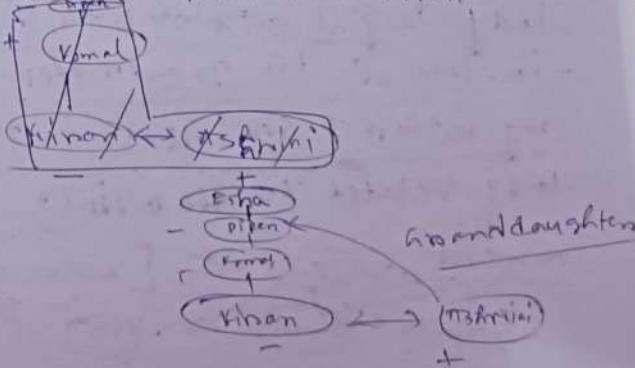
Q3. How is Q related to X ? sister/sis

Q4. How is Y related to P ? brother
of X

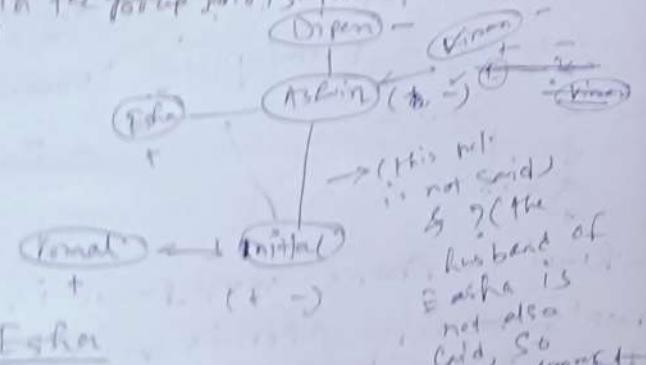
We need to draw 1 family tree.



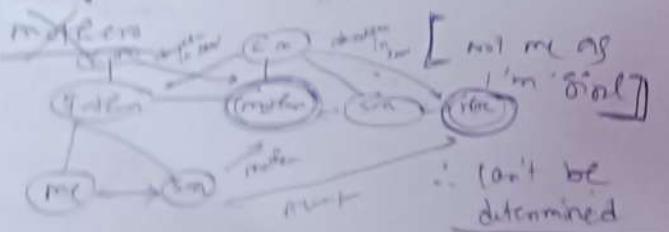
6. Ashwini is Kiran's sister, Komal is
Kiran's mother. Dipen is Komal's
father. Esha is Dipen's mother. Then
how is Ashwini related to Dipen?



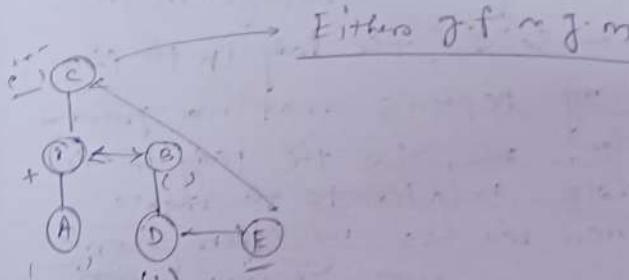
① There are 6 persons Ashwin, Krishan, Vimal, Diven, Ishia & Mittal.
Vimal is the sister of Mittal.
Diven is the brother of Ishia's husband.
Diven is the father of Ashwin &
Diven is the grandfather of mittal. There are
2 fathers, 3 brothers & a mother
in the group who is the mother?



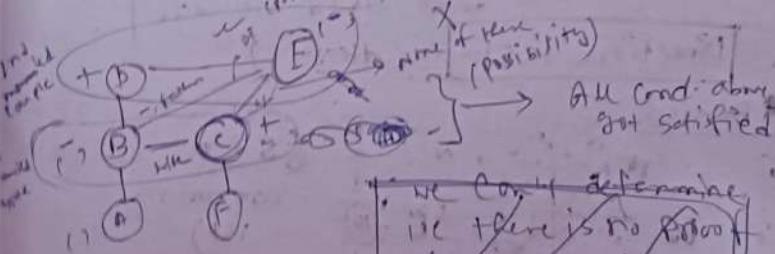
⑥ Pointing out to a lady, a girl said "she is the daughter-in-law of the grandmother of my father's son". How is the lady related to the girl?



Q A's mother is sister of B & daughter of C. B is daughter of D & sister of E.
How is C related to D?



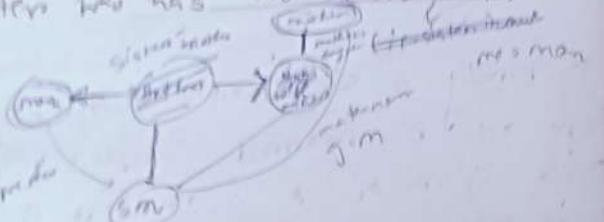
⑩ In a family of six persons A, B, C, D, E & F
 - There are 2 married couples.
 - D is g/m of A & mother of C.
 - C is wife of B & mother of F.
 - F is the grand daughter of B.
 Who among the following is one of the
 couples? (Ans: C & B)



None of these (we don't know actual meaning) These, so we'll go with

- (10) They already said - there are 2 married couples, so both of this couple must have to be (as husband & wife).
 So, the another couple is BB.
 (10) Painting → a photograph. The man said "the lady in the photo.

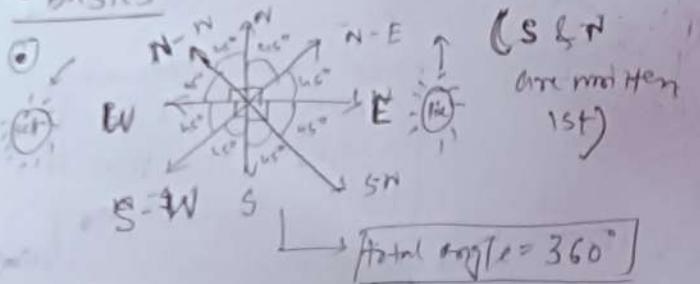
is my nephew's maternal grandmothen. How is the lady in the photo related to the man's sister who has no other sister?



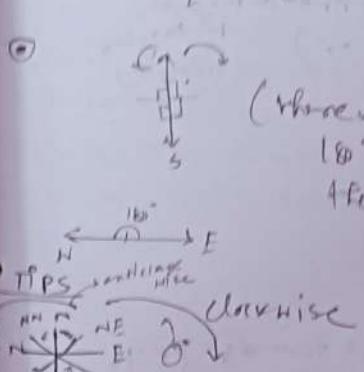
mother (The man has no sister. So the ans is 'mother'. If the man has another sister then the ans. would be diff.)

⑨ Direction test (at least 2)

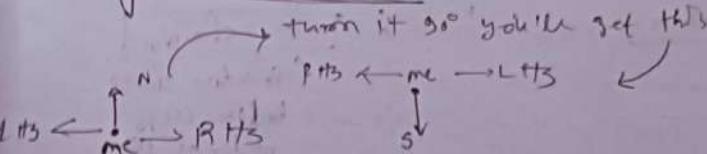
• Basics



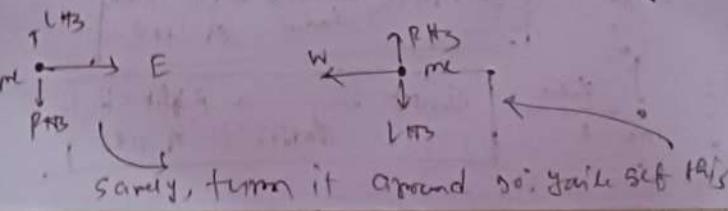
- Left pattern whenever I form L or R
 if the angles are not mentioned, the angles
 are 90° L or R respectively.
 (Same for each direction)



• Turning left & right

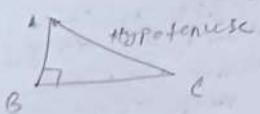


While facing the opposite direction the dir. will not be opposite based on that facing.



• surely, turn it around 90° you'll get RHS

① Pythagorean theorem



$$AC^2 = AB^2 + BC^2$$

Right angle triangle (AKA orthogonal / rectangular triangle)

Right angle



Sunrise in the morning

Sunrise in the morning

Shadow towards West

opposite

Sunset in the evening

→ East

11:2 pm

No shadow

(shadow falls below our feet as 1pm. Sun is after the need)

②

North

Sunrise shadow → Left side of me

③

South

Sunset shadow → Right side of me

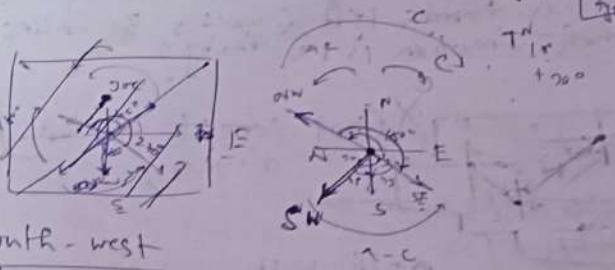
North
South
East
West

South
Sunrise → Right side of me

North
South
East
West

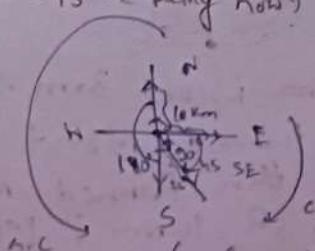
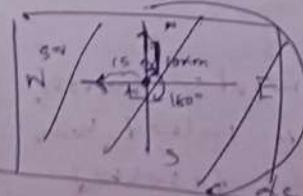
Sunset → Left side of me

- ① Joe is facing towards South & turns 45° anticlockwise. He turns again 180° in anticlockwise direction. Now, he turns 270° clockwise. Which direction is he facing?



∴ South-west

- ② Morris is facing North & walks 10 km. He turns 270° anti-clockwise & walks 15 km. Now, he again turns 45° clockwise & walks for 25 km. Which direction is he facing now?



South-East

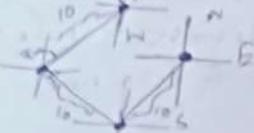
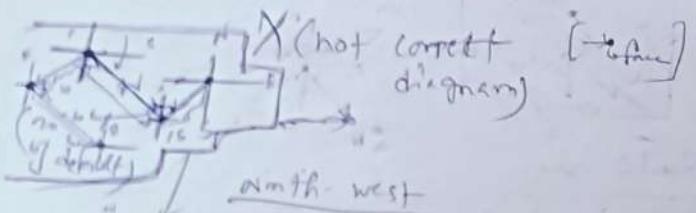
PTO

(the dig is
not totally
correct)

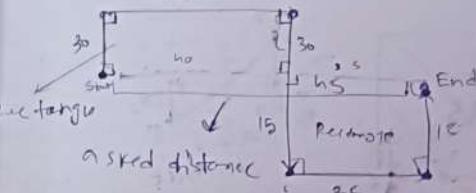
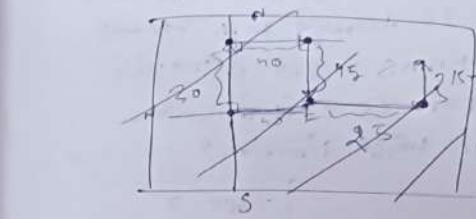
Actual diagram



- (2) Man is walking towards South-West from 15 miles, turns right & walks another 10 miles. She then turns 70° clockwise & walks 10 miles. Now she again turns left & walks 30 miles. Which direction is she facing?

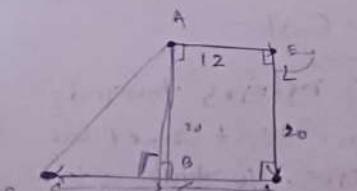


- (3) Man walked 3m towards S, North. He turned right & walked 4m. She then turned right & walked 5m. She turned left & walked finally 2m. How far is she from the Starting Point?



$$= 50 + 25 \\ = 65 \text{ m}$$

- (4) A boy walks 12 kms towards east. He turns 90° clockwise & walks 20 kms. He turned right & walked for 33 kms. How far is he from starting point?



$$AC = \sqrt{20^2 + 33^2} \\ = 39$$

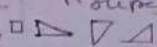
$$\begin{array}{r} 21 \\ \times 29 \\ \hline 189 \\ 42 \\ \hline 627 \end{array}$$

$$\begin{array}{r} 491 \\ \times 491 \\ \hline 2451 \\ 1964 \\ \hline 2451 \end{array}$$

$$\begin{array}{r} 51 \\ \times 51 \\ \hline 2601 \end{array}$$

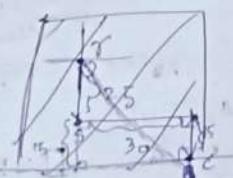
2nd type

Whenever they will ask about how far is the distance, then there will always be familiar geometrical figures



⑥ A car travels 25 km towards South from garage. It turns left 60° and travels 30 km, then turns right 60° and travels 15 km. How far is the car from the garage & in which direction?

Type 3



$25 + 15 = 40 \text{ km towards South}$

$$AC^2 = AB^2 + BC^2$$

$$\therefore AC = \sqrt{(40)^2 + (30)^2}$$

$$\therefore \sqrt{1600 + 900}$$

$$= 50$$

50 km South-East

⑦ Martin walked 13 meters towards South from his gym. He turned left & walked 10 meters. He took a left turn & walked 5 meters & then he turned right & walked for 5 meters. How far is he from his gym & in which direction?

$$AC^2 = \sqrt{AB^2 + BC^2}$$

$$= \sqrt{8^2 + 15^2}$$

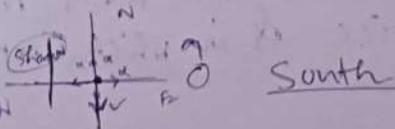
$$= \sqrt{64 + 225}$$

$$= \sqrt{289}$$

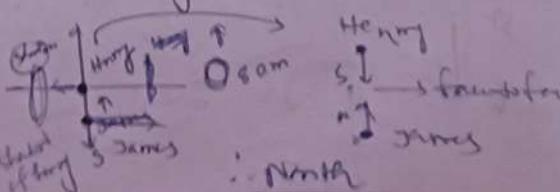
$$= 17 \text{ Km South-East}$$

⑧ One morning after sunrise Joe was standing facing a pole. The shadow of the pole fell exactly to his right. To which direction was he facing?

Type 4



⑨ James & Henry were standing facing each other at 8 am. Shadow of the Henry fell exactly to his right. To which direction was James facing?

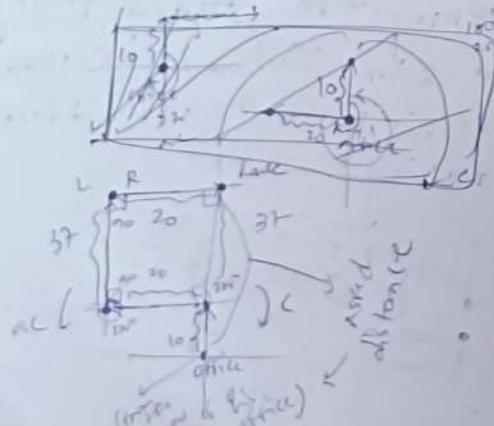


North

⑩ Prince was standing facing to the pole at 1:48 pm. shadow of the pole fell towards his right. To which direction was Prince facing?



⑪ Ted drives a car 10 miles towards North from his office. He turns 270° clockwise & drives for 20 miles. Now he turns 270° anti-clockwise & drives a car for 37 miles. Finally, he reaches his house after driving for 28 miles to his right. How far Ted's house from his office & in which directions



$$\begin{aligned} 37 + 10 \\ = 47 \text{ m} \\ \underline{\text{South}} \\ \underline{\text{North}} \end{aligned}$$

⑤ Analogy (non verbal) / pattern recognition
(figure & factual analysis) (n=39ms)

• Important tips

Observation \rightarrow analyze \rightarrow find a pattern b/w figs

• Steps

{iterate b/w in series}

i) Find the elements those who are similar.

ii) how to find pattern? \rightarrow there are little little changes in diff. figs that changes will give me the pattern.

iii) Try to find group of elements & see how they change.

iv) Single elem & see how the single element changes.

v) They are the combinations of few types of analogy sums {

• Types

i) Rotation (Move the fig/rotation of the fig)

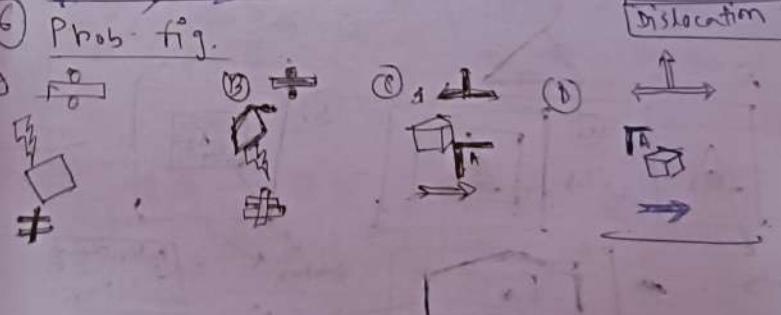
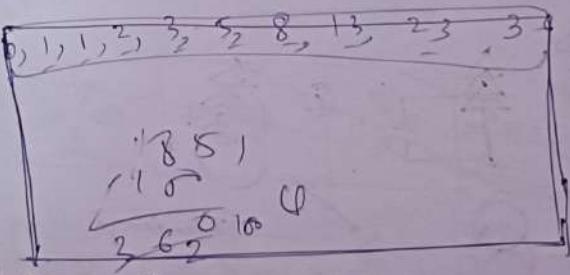
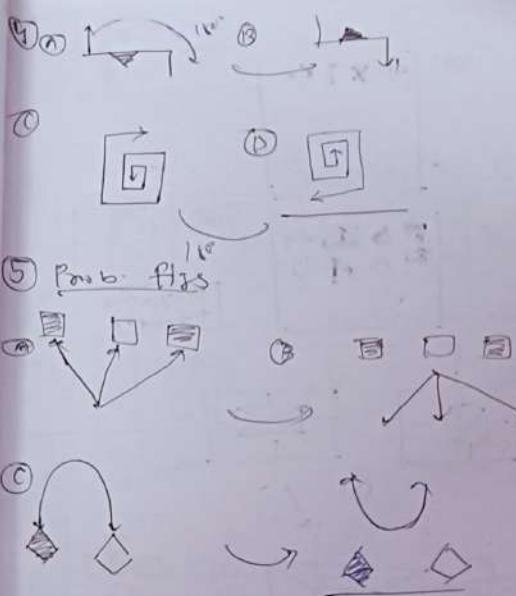
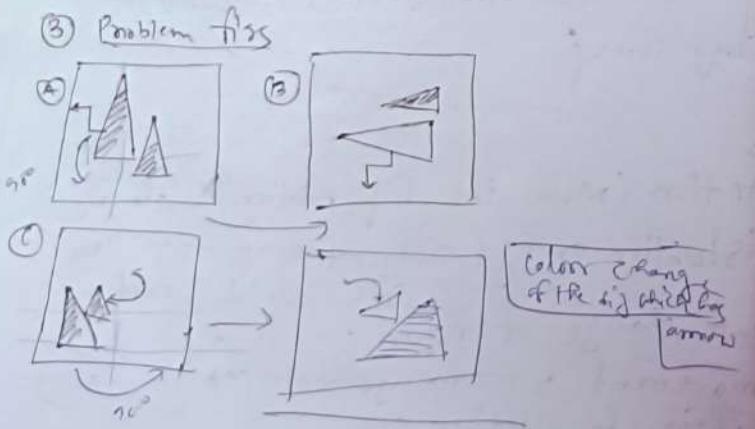
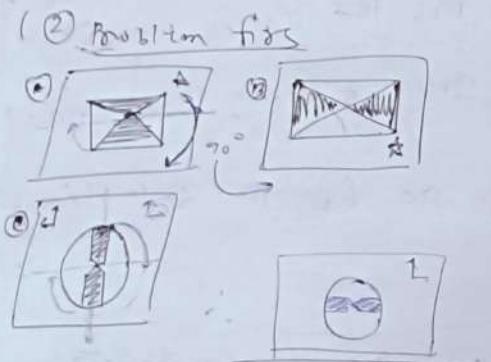
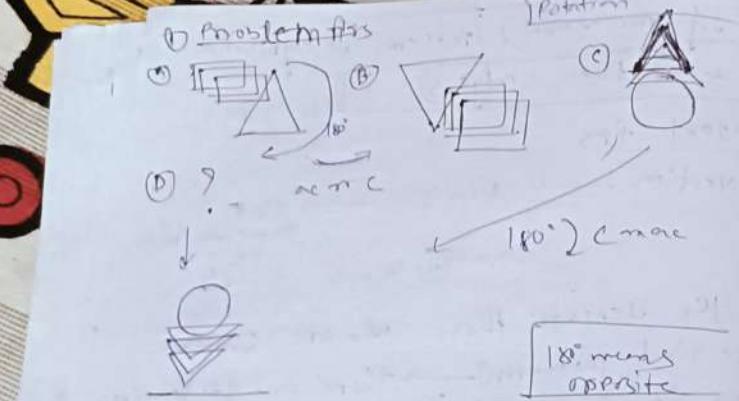
ii) Distortion of fig (Dislocation of fig - can give you a pattern)

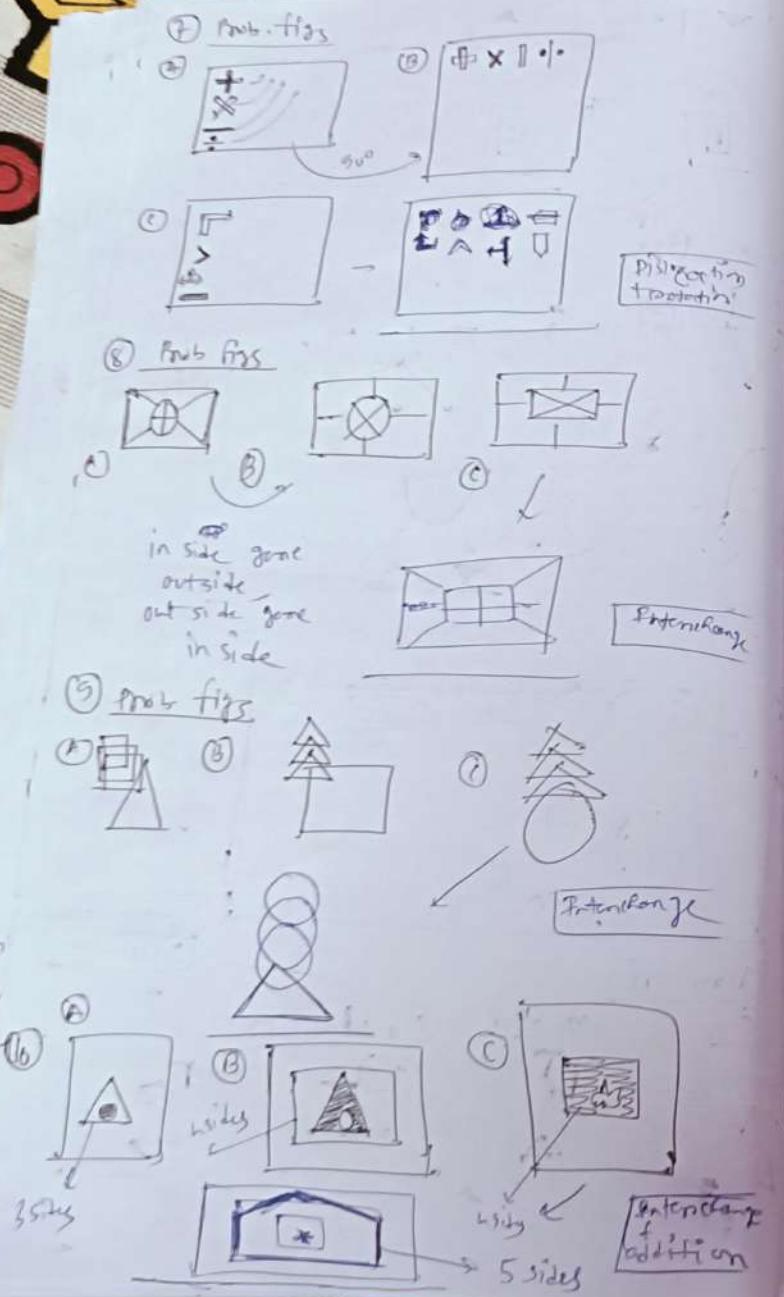
iii) Interchange of figures (--- n --)

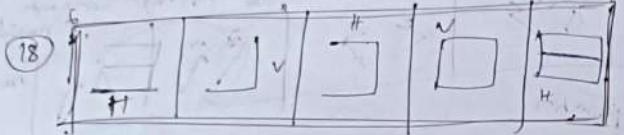
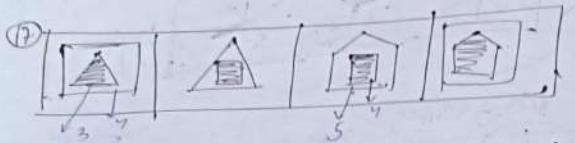
iv) Movement & rearrangement (--- n --)

v) Addition & deletion

vi) Identical figures (After this follow the above steps to get the pattern)







6 Data Sufficiency (imp)

① Nibbi & nibbi's salaries are in the proportion of 4:3 respectively. What is nibbi's salary?

statements

1) nibbi's salary is 75% of nibbi's salary.

2) nibbi's salary is Rs 4500.

X I alone is sufficient while II alone is not sufficient.

By ST - - - - while I - -

C) Either I or II is sufficient

D) Both I & II put together are sufficient

E) Neither I nor II is sufficient.

Addition

I) S1

While looking at S1, don't look at S2 & vice versa.

nibbi! nibbi!

= 4:3

4n, 3n

S1

Nibbi = 75% of nibbi's sal

$$\begin{aligned} \text{SN} \\ 3n &= \frac{25}{100} + 4n \\ \text{Nibbi} &= \frac{100}{25} \\ \underline{3n} &= 3n \end{aligned}$$

= 3n (S1 is not suff alone)

S2

$$3n = 4500$$

$$n = 1500$$

$$4n = 1500 = 6000 \quad (\text{S2 is suff alone})$$

I alone is suff. - while II alone is not sufficient

If S1 & SII both aren't suff alone, then we need to merge two till then not mix.

② ~~else~~ which what is the code for 'sky' in the code language?

S

In the code lang, 'sky is clear' is written as 'de nafa'. In the same code lang, 'make it clear' is written as 'de ja jo'.

~~A~~ I alone is sufficient while II alone is not sufficient.

~~B~~ II alone is sufficient while I alone is not sufficient.

~~C~~ Either I or II is sufficient.

~~D~~ Neither I nor II is sufficient.

I not suff alone

II → range two S₁

S₁ is clear = ② n for - ①
then it clear = ④ 2a + ①

(clear 2e)

(B) BH we can't find the S₁ (we need more for that).

∴ neither I, nor II is suff

(3) If m & n are positive integers, is the remainder of $(10m+n)/3$ larger than the remainders of $(10nm)/3$?

(i) I. m > n
The remainder of $n/3$ is 2

By AY Statement II alone is sufficient, but statement I alone is not sufficient to answer the question.

By B/Y Both the statements together are sufficient but neither of the statements alone is

sufficient to

By I & II Statement alone is suff

By Statement I & II together are not suff

$$R\left(\frac{10mn}{3}\right) > R\left(\frac{10n}{3}\right)$$

∴ m > n

Let m = 6, n = 3

$$\frac{10 \times 6 + 3}{3} = \frac{63}{3} = 0$$

$$\frac{10 \times 3 + 1}{3} = \frac{31}{3} = 0$$

∴ (no rem is zero b/c zero)

* b/c
(if after other cases we see 'yes' then the data is not suff.)

$$\frac{10 \times 2 + 1}{3} = \frac{21}{3} = 0$$

$$\frac{10 + 1 + 2}{3} = \frac{12}{3} = 0$$

Let m = 20, n = 1

$$\frac{10 + 20 + 1}{3} = \frac{31}{3} = 0$$

(∴ So, I alone isn't suff.)

$$\frac{10 \times 1 + 20}{3} = \frac{30}{3} = 0$$

But it can be possible that for 200th case or something like that it be come 'yes'
but we can't check that much cases, we need some method to prove its but
by inst. I? we can't find the method.

$$II) R\left(\frac{10n}{3}\right) > R\left(\frac{10n+m}{3}\right)$$

$$\frac{10n}{3} + \frac{m}{3}$$

get what
from this

$$\frac{10n}{3} + \frac{m}{3}$$

& also
that for this

No concrete method

\rightarrow Prove it
 I alone is not suff.

Now, let's merge I & II

$$\therefore \frac{10n}{3} + \frac{m}{3}$$

$$= \frac{10n}{3} + 2$$

$$\begin{aligned} m &> n \\ (m, m=4, n=1) \end{aligned}$$

$$\frac{10n}{3} + \frac{m}{3}$$

$$= \frac{10n}{3} + \frac{m}{3}$$

$$\therefore \frac{40}{3} + 2$$

$$= \frac{46}{3}$$

$$R = 1$$

$$(m, m=3, n=1)$$

$$= \frac{20}{3} + 2$$

$$= \frac{26}{3}$$

$$= 2$$

$$NO & YES$$

both are then

so not suff.

$$\frac{10+2}{3}$$

$$= 0$$

(yes, greater)

I & II together not suff

(we need a method to prove the statement
main), but by merging I & II we are

not getting its we are getting 27 & 34
in cases, so we need another method to know

which one is correct, but we can't find it
(here).

I & II together not suff.

By judge it judging $5/6$ or more released
we'll not judge the ans, we need a
concrete method to judge the ans.

Q) If n by are both integers greater than
1, is $n \times y > 100$?

S1: 'n' has exactly 7 unique factors

S2: 'n' has exactly 9 unique factors

\Rightarrow S. I alone is sufficient.

or S. II

\Rightarrow Both statements put together are suff.

\Rightarrow Either of the S's individual is suff.

\Rightarrow Both S's put together not suff.

$$N = a^p \times b^q \times c^r \times \dots$$

$$\text{Given } x = a^p + b^q + c^r + \dots$$

the no. of factors of $N = (p+1)(q+1)(r+1)\dots$

$$I) \quad (p+1)(q+1)(r+1)\dots = 7$$

now fib. \sim positive no. & he can get 7 by
only

\exists $x \in \mathbb{Z}$ s.t.

$$(P+1)(Q+1)(R+1) = 2^k$$

we need all them

$$P=6$$

$$Q=a^3$$

$$R=a^6$$

$N_{\min} \rightarrow x > 1$ s.int.

$$\text{let } a=2$$

$$N_{\min} 2^6 = 64$$

y is also > 1 s.int.

$$y_{\min} = 2$$

$$\text{now } (R+1)$$

$$= 2^6 + 2$$

$$= 128$$

$$\therefore (R+1)_{\min} = 128 > 100$$

That means that $R+1$ will always be > 100

$\therefore S_1$ is suff alone.

$$\text{S2 } N = a^3 b^3 c^n$$

$$N = (P+1)(Q+1)(R+1)$$

$$(P+1)(Q+1)(R+1) = a^3$$

We can write a^3 by 1^3 or $3+3$.

If 1^3 then, $P+1 = 3$, $P=8$.

$$N = a^3$$

$$N_{\min} = a^3$$

$N_{\min}, n > 1$ s.int

$$\text{let } a=2$$

$$N_{\min} = 2^3$$

$$= 8$$

$N_{\min}, y > 1$ s.int

$$\text{let } y_{\min} = 2$$

$$y_{\min} (2^3 + 2) > 100$$

$\therefore y_{\min}$ will always be > 100 (from S_1)

$\leftarrow S_2$ is suff alone

$$P+1, Q+1, R+1$$

$$(P+1)(Q+1) = 3 - 3$$

$$P=3, Q=2$$

$$\therefore N = a^3 b^3$$

$$= a^2 b^2$$

$$14, \underline{a=2, b=2} \quad (\text{so that } n>1)$$

$$\begin{cases} N = a^3 \\ \min = 4 \\ y > 1 \text{ s.int} \\ y_{\min} = 2 \\ \therefore N_{\min} = 2^3 = 8 > 100 \end{cases} \quad \begin{array}{l} a+b+c \\ a=2+b=2 \\ \cancel{a} \end{array}$$

But 1 is not a prime no. $\therefore a=2, b=2$

now, $a=2, b=2$
so water factors can be $a=6$

$$a=2^2, b=3 \text{ (multiplied)}$$

now
 $K = 2^2 \times 3^2$
 $= 36$

$$U_{\min} = 3.6$$

$$Y_{\min} = 2$$

$$(xy)_{\min} = 3.6 \times 2
= 7.2 \text{ ft}/100$$

now $(xy)_{\min} > 7.2 \text{ ft}/100$, that means $xy > 100$ is not true here (for S_2).

from $S_1 \xrightarrow{\text{setting}} Y_{\min}$ can't
from $S_2 \xrightarrow{\text{no}} \text{determine}$
hot suff.
∴ S_2 is not suff. alone.

I alone is suff.

⑤ The given Qn has 2 statements. Find out whether the Qn can be answered with any of the given 2 statements.

who among P, Q, R, S & T each having

a diff. weight is the lightest?

A) P is heavier than R.

B) S is lighter than T & Q.

C) If S. I alone is suff.

D) If ... IT

E) Both S put together are not suff.

F) If both the S. together are suff.

G) If the Qn can't be answered using both the statements together.

H) In & P, we will

let R = 5kg, P = 3kg

But no concrete method to prove the S1

∴ I not suff. alone

H) Same, no concrete method to prove

S2

∴ II not suff. alone

Answer I & II

No relation b/w I & II. so we can't

solve Hb as we can't get any method

∴ No relation is there.

∴ I & II together not suff.

But ~~actually~~, actually, this Qn can't be answered as there are not enough data.

Q. If the sum is arranged in the both the statements together.

Q1 Data Interpretation (Q13-19)

Patterns, Long time

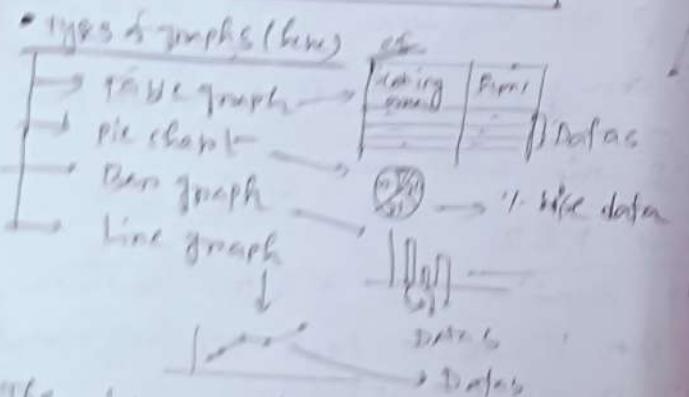
• Basics

Graph → Value table (Bar, Bar chart, Pie)

→ Estimated (e.g., means, likely)

$$\frac{\% \text{ change in final val} - \text{initial val}}{\text{Initial Val}} \times 100$$

- ↑ → means decrease } /↓
- ↓ → means increase } ↑



Q) The data given in the following table summarizes the monthly budget of an average household. The approximate percentage of the monthly budget not spent on savings is 110% (B3 part C) (P8V).

Category	Amount (Rs.)	Total
Food	4000	
Clothing	1200	
Rent	2000	
Savings	1500	
Other expenses	1800	
		Rs. 8280/-
		10500

$$\text{Savings} = \frac{1500}{10500} \times 100$$

$$= \frac{1}{7} \times 100$$

$$= 14.28\%$$

$$\approx 14\%$$

∴ Not spent on Savings = 100% - 14% \rightarrow (Ans)

$$= 86\%$$

Q2 Alfa is a digital platform for this in a city. It offers 3 types of robes - pool mini & prime. The table below presents the no. of robes for the past four months. The Alfa form earns one US dollar for every 100 units contributed by Prime to the total revenue of Alfa, for the entire duration?

Type	months			
	Jan	Feb	Mar	Apr
pool	190	220	215	190
mini	110	120	180	70
prime	75	180	120	50

If share of the revenue contributed by Prime Minister from total revenue is $\frac{75+100}{135+100}$

$$\frac{175}{235} \approx 75\%$$

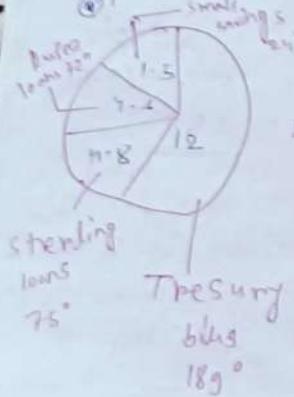
$$75\% - 100\% = 25\%$$

$$\Rightarrow 25.07\%$$

exact calc is not needed in dep.
Do by approximation

The following pie charts shows the government of India's debt position in the year 1980 & 1985.

①



Year - 1980

Debt - RS 2205

Chances

Year - 1985

Debt - RS 1413

Chances

i) The item in which the debt is smaller during 1985 compared to 1980 is

by Prime Minister's contribution

Here it's degree so, total = 360° (not 100)

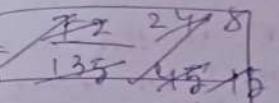
Don't see the partitions of graphs the data of 2 graphs are not same so, it can happen too. \rightarrow diff. \rightarrow It's because diff. data.

Bonus (B), (C) [Small savings & sterling loans]

ii) The ratio of rice loans of 1980 to that of 1985 is mostly nearly

Rice loan 1980

Rice loan 1985



Non farm options

$(15 \times \frac{1}{2}) = 50\%$

$\rightarrow 75 \rightarrow \frac{8}{10} = 80\%, \frac{15}{10} = 30\%$

$\frac{3}{7} \times \frac{3}{6} = \frac{1}{2} = 50\%$

$\frac{72}{135} = 23 \approx \frac{24}{72} = \frac{1}{3}$

$\frac{1}{3} = 33\%$ (opposite)

$\therefore 3:10$

iii) The item whose proportionate debts from ratio 3:2 between the 2 years is

$\frac{\text{Small savings (1980)}}{\text{Small savings (1985)}} = \frac{175}{10} = \frac{3}{2}$

\therefore Small savings

iv) If the debt during 1980 increases to three fold, then the increase in debt on treasury bills from the present is most nearly

Initial amount = 100

$100 \rightarrow 2y$	\therefore increase = $2y - 1$
$100 \rightarrow 3y$	\therefore increase = $3y - 1$
$100 \rightarrow 5y$	\therefore increase = $5y - 1$
$100 \rightarrow 10y$	\therefore increase = $10y - 1$
$100 \rightarrow 15y$	\therefore increase = $15y - 1$

\therefore times increased = $(n-1) \times 100\%$

Hence, given n times increased
= $\frac{1}{100} \times (n-1)$

If the total debt for each of the 2 years is \$5.1 lakh then the ratio of debt on Sterling loans of 1980 to that of 1986 is most nearly $11.3 : 2.3$ because $11.3 \approx 11$ (In this case we can compare the pie chart proportions as the dates is equal now)

$\frac{23}{36}$ (Comparing directly the dates are same now)

(But actually $\frac{23}{36} \times 100\% = \frac{36}{36} + 100\%$)

$$\approx \frac{72}{36} \approx \frac{2}{1} \therefore 2:1$$

① Tips & tricks of not using calculator

Convert it into 2 dig = $\frac{22.95}{100}$

rupee loans = 72°
 $360^\circ = 23$
 $36^\circ = 2.3$

$22.95 = 23$ (total 360°)

$72 = 4.6$

$\left. \begin{array}{l} \text{approx} \\ \text{approx} \\ \text{approx} \end{array} \right\} \text{approximation}$

Small savings

Sterling loans = 75°

$72 + 4.6$

$75 + 4.8$ (approximate)

rupee loans = 180°

$180^\circ = 11.5$

$180^\circ = 12$

Small Savings = $\frac{1}{23} (12 + 7.6 + 4.8)$
 ≈ 1.5

① $36^\circ = 23$

$\frac{1}{23} = \frac{1}{36} \times 2 = 0.2$

$\frac{1}{24} = 0.2 - 0.1 = 0.1$

$\frac{1}{1.5} = 0.2 + 0.1 = 0.3$

② $4113 \text{ m} \xrightarrow{22.95} \frac{4113}{100} = 41.13$
 $= 41$

thusing bills = 980°

$360^\circ \rightarrow 41$
 $180^\circ \rightarrow 20.5$

Sterling loans = 36°

$36^\circ \rightarrow 4.1$

Small savings = g°

$36^\circ \rightarrow 4.6$

$9^\circ \rightarrow 1$

Rupee loans

$41 - (1 + 2.5 + 4.1)$

$0.15 \cdot 7$ (approx)

$360^\circ \rightarrow 41$

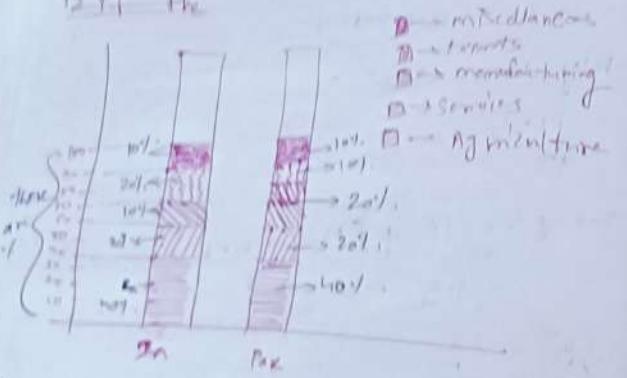
$90^\circ \rightarrow 10$

$45^\circ \rightarrow 5$

$10 + 15 + 15$ (approx)

Q) The following bar chart shows the composition of the GDP (in billions) of India & Pakistan.

B) If the



Q) If the total GDP of Pak. is Rs. 10,000 Cr., then a GDP amount accounted for by manufacturing is?

$$\frac{20(%) \text{ (in Brs)}}{100(%) \text{ (in Brs)}} \times 10000 \text{ (in bln)} = \underline{\underline{2000 \text{ in bln}}}$$

(in bln
don't round)

20% of 10,000
Answer of 20% (some thing)

Obtain in bln
TOTAL how much
(add all) You are
obtaining

Q) What fraction of India's GDP is accounted for by services

$$\frac{20(%) \text{ (in Brs)}}{100(%) \text{ (in Brs)}} = \underline{\underline{\frac{1}{5} \text{ th}}}$$

Q) If the total GDP of India is Rs. 30,000 Cr., then the GDP accounted for by agriculture, services and miscellaneous is?

$$\frac{(agr + serv + misc) \times 3,0000}{100}$$

$$= \frac{20+10+10}{100} \times 30000$$

$$= \underline{\underline{21,000 \text{ Cr}}}$$

in which country accounts for higher earning out of services & miscellaneous together?

In, serv + mis = 20 + 10 = 30%.

PAK serv + mis = 20 + 10 = 30%.

Both spend equal amounts \times (not ans)

higher % is not asked, hence higher earning is asked i.e. Rs. But GDP is not given here. So we can't determine which one is higher.

Can't be determined \approx

If the total GDP is the same for both the countries, then what % is PAK's income through agriculture over India's income through services?

IN GDP = PAK GDP

PAK's income through agric = 40%.

In's \downarrow \rightarrow serv = 20%.

PAK's income is 2 times than In,

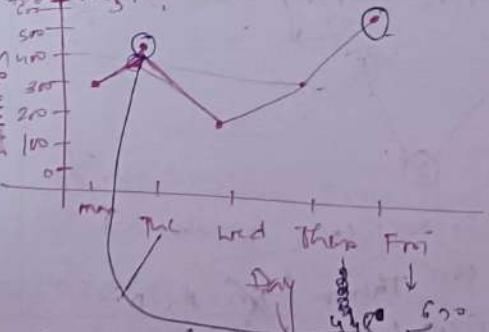
2 times = $(2 \rightarrow) + 100$

? 100% - none

(Q)

$$\frac{\text{Final} - \text{Init}}{\text{Init}} \times 100 = \frac{40 - 20}{20} \times 100 \\ = 100\%.$$

② The following graph gives earnings of Mr. X on different days. On which pair of days was the average earnings the highest?



\therefore Tue, Fri

2nd highest & 1st highest

\therefore 1st will also be highest

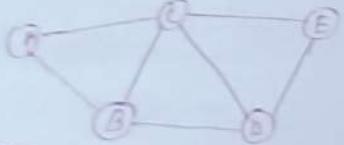
Avg will also be highest

Q 2 days (Thurs & Fri) are left for theaigning before a major election. The city administration has received route from five political parties for taking out their processions along the following routes.

Congress - A-C-D-E
BJP - A-B-C-D-E

SFI - A-B-C-E
BSP - B-C-D-E
CPM - A-C

Street B-D can't be used for a political procession on Thurs due to a religious procession. The district administration has a policy of not allowing more than one procession to pass along the same street on the same day. However, the administration must allow all parties to take out their procession during these 2 days.



Religious procession can be allowed

Congress - From Sat Thurs / Fri AC(DE)

BJP - Fri (10 AM) : A-B-D-E

SFI - Thurs/Fri

BSP - A-B-C-E

CPM - Thurs/Fri

Congress - 10 AM on Thursday

Q 2 which of the following is not true?

common - AC(DE) (10 AM)

SFI - A-B-C-E (10 AM)

Given, they can take place on

same day ("no common route")

(T)

ii) CPM - A-C-D (No Thurs)

common - A-C(DE) (Thurs)

(T)

iii) The BJP - A-B-D-E (No Thurs)

common - A-C(DE) (Thurs)

(T)

iv) Congress - A-C(DE) (Thurs)

BSP - B-C-E (No Thurs)

Given, they can take out the procession

on same day (F)

Congress - A-C(DE) (Thurs)

BSP - B-C-E (Thurs)

C: No common route

Given, they can take place on Thurs

(T)

v) It's false

If the religion procession can

be cancelled then it can

take place on Thurs

(T)

Congress - A-C(DE) (Thurs)

BSP = B-C-E (Thurs)

SFI = A-B-C-E (Thurs)

-

X Fresh PTO

<u>Party</u>	<u>path</u>	<u>possibility</u>
Congress	A-B-C	Thurs
BJP	A-B-C-D-E	Fri
SP	A-B-C-D-E	Thurs
BSP	B-C-E	Fri
Cpm	A-C-P	Fri

i) Cong & SP same day - T

ii) Cpm can't only Thurs - T
be allowed on

iii) BJP, my Fri - T

iv) Cong & BSP on same day - F

⑥ Logical deduction / Deductive reasoning -

- i) Statement & Conclusions
- ii) Statement & Argument
- iii) Statement & Assumption
- iv) Statement & Course of Action

⑦ Statement & Conclusions

- Some tips

Don't apply common sense / logic. Here
Just think of the given statement
& based on that draw the conclusion.
The 'common sense' here must need to

be applied only on the given statement

① Statement: Teachers scolded Ram in front of all students.

Conclusion: The teacher disliked Ram
[Rule 1 - Don't assume]

False (\because Here we are assuming (Common sense))

there can be many reasons that teacher has scolded Ram) [Take the statement always]

② S - With the increase in consumption of Petroleum products, it is feared that Petrol will be a basic commodity in near future.

C - Petroleum products should be used efficiently.

True

Rule 2 - If in the conclusion 'Result or Advice' is given always consider it as True (Point to be noted: the L. should must & be related to the statement have to)

• Conclusion same as inference

③ S - Many people have been admitted in the hospital. It is assumed that junk food is poisonous.

C - Junk food is always poisonous.

False

(Here, it is they are not Don't Pre-Assume / assuming that junk food is poisonous, there is no guarantee so the C. is not correct)

⑦ S - many medicines contain Fish oil.

X All the vegetarians are pescetarian

X Some vegetarians consume such medicines to cure the diseases.

Rule 4 - Don't consider morality, ethics, sympathy, empathy etc like that (just focus on the given statement)

⑧ S - An ad of a company says -

If you are a software engineer we want to hire you?

C -

✗ Company hires no person with other qualification.

✗ Company says it is in need of software engineers.

II follows

⑨ S - India is a democratic country.

C - No other country in the world

is democratic.

✗ There are many other countries in the world that are democratic.

(∴ the statement has nothing that is taking (saying about other countries) anything)

Neither 1 nor 2 follows

⑩ S - Shyam is one of the probable students for securing 1st rank in the class.

C -

✗ Shyam will secure 1st rank.

✗ Shyam will not secure 1st rank.

Neither 1 nor 2 follows

Rule 5 : Probable (chance → either means on or)

⑪ S - An ad - "50% off on all electronic goods upto 31st January".

C -

✗ After 31st Jan, no discount will be provided. (∴ they can give 60% off, 10% off on next year)

✗ No sale of electronic goods after 31st Jan. Both Neither 1 nor 2 follows

⑩ 3
Due to recession, Company is lasting.
It's 200 employees.

C
Company is well known fair pricing etc.
X All other competitors of company
are also affected because of recession.
X Does the S talks about any other company?
No, So it's fine assumption
whether I or II follows.

⑪ 5
From nothing except the fact of my
ignorance.

C The writer is a poor reader. He
should read more to improve his knowledge.
X Knowledge is a deep ocean
to be explored by confused by a single
person.
(Answer)

My II follows

⑫ 5
High FB is important to be a scientist.

C All the average student should not aspire
to be a scientist.
(Answer)
X

X All highly gifted students become
scientist
portion 2, now I follows my 2 follow

⑬ 3
If both the partners work as a
team, marriage will be successful. The
couple celebrated golden jubilee of their
wedding 1st year. 50 years

C Both the partners are compatible with
each other.
X Some marriages do not last even ten years.

I - only I follows

⑭ 5
Each man makes his own world, world
is neither black nor white.

C This world is black for some people.

C This world is white for some people.

Every people will have their own world &
unlike this man's world those worlds
can be black or white or etc.

Both I & II follows

⑮ 5
Many offices are located in buildings
with multiple floors. If a building has
more than 3 floors, it has a lift.

C All floors of buildings with multiple
floors may be reached in lifts.

X Only floors above the 3rd floors have
lifts. (Ans 3 → Lift from where consideration for
X 4th floor doesn't have lifts.)

X All buildings have lifts. (Ans 2 floor
no lifts)

(1) S - All guilty Singers were arrested.
Rakesh & Rajesh were among those arrested.

C-

1) All singers are guilty. X

2) All arrested people are singers.

3) Rakesh & Rajesh were not singers. ✗

4) Rakesh & Rajesh were guilty. ✗

↳ (10) ^{concrete} They were arrested
by guilty singers |
 |
 They were arrested
 so they are guilty.
 (concrete)

If the C. is concrete, then only
choose; if it's ambiguous then
don't choose it. - Rule 6

① Statement - Assumptions

• Important tips

S - Assumption

Without any proof, when we assume
Something

Solve with it with your Common Sense, logic,
General Awareness (Kind of opposite of S & C)

Implicit → Indirect = \Rightarrow True
Explicit → Direct = False

We can't directly assume
from the S/C, but directly
derive from the S, i.e. true/false

We can derive
the assumption
is it's true

• Every, each, none, all, only etc \Rightarrow Assumption
↓
False

(1) S - Liquid Soap should be used in place
of Soap bars to wash hands.

Assumption: Soap bars are harsher to
skin than liquid soaps.

Rule 1: Stick to the statement (the a. has
to be relevant to the S) -

Here in S, washing hand with soap
is mentioned; but in ass., the nature of
Soap bars etc is mentioned (harsh).
There is nothing related to wash hand
in ass., so it's an explicit ass.

• Explicit \Rightarrow F

(2) S: Electric vehicles produce less air
pollutants, cement

Assum.: Electric vehicles will be the only means
of transportation in future \Rightarrow Explicit \Rightarrow False

R2: Assumptions that talk about past or future
are always explicit \Rightarrow False

(3) S: Warning: "Cell phone use prohibited
beyond this point".

Assu: This warning is not necessary \Rightarrow Against

R3: Assum: going against the S \Rightarrow Explicit \Rightarrow F

Q 9 S: Seats allocated for only physically disabled people (gen)
Ans: only females who are physically disabled can occupy such seats (specific)

Rq: If the S. is generalized & the assumption is specific & vice versa (S. is specific & assu. is general)
 \rightarrow Explicit \rightarrow False

Explicit \rightarrow False

Q 10 S: Govt has asked the financial institutions to lower their interest rate for agricultural loans.

X This will increase per hectare productivity in future \rightarrow F

\rightarrow This move will help farmers in paying less interest amount & thus their profits may increase.

\downarrow T
only II follows
 \rightarrow (This is may not will be assumed & this assumption is logical, but may happen may not (not like Washing hands with liquid soap, as soap bar is harsh than liquid soap & then it was continued), but here it is assumed)

Q 11 S: If he is smart, he'll crack the interview.
Ans: To crack the interview smartness is required. \rightarrow T (By book)
 \rightarrow He'll definitely crack the interview \rightarrow F
only I follows

Q 12 S: Sunlight is good (gen).
Ans: Source of vitamin D.
X 1) Sun is the only source of Vitamin D.
X 2) Vitamin D is obtained in very small amounts from Sun. \rightarrow F
neither I nor II follows (against S.)

Q 13 S: If Ram studies hard, he will get 1st Rank.
Ans: Ram will study hard. \rightarrow (2 possibilities)
 \rightarrow Ram will not study hard.

Both either I or II is implicit (\because It's a possibility)

Q 14 S: To regain the market share, company X has decided to launch new products. \rightarrow (more)
Ans: Company X is incurring heavy losses. \rightarrow F
 \rightarrow There are many competitors in the market. \rightarrow T
 \rightarrow It may happen, may not as there may be other reasons, we can't tell it so this is not true.

This is always true & for other competitors they lost their share / there can be any other reasons.

But assume Q is always true.

Only if follows

III. Statement & Arguments

TIPS

Need to determine which arg is strong & which is weak

Statement is always true, but we need to consider h/w/s, morals, ethics (opposite of s/e).

To have a strong arg we must have to notice practicality or can say the arg must have to be practical.

Adv & disAdv both are strong, but we can't tell that both of them are strong at the same time (if they goes opposite dir or c/o then 'both' is not true).
i.e. means is either Adv or DisAdv
is strong

Q. Should Military training be made compulsory in our country?
Ans) Yes every child should go through this training.

Weak arg
No, it's not compulsory in USA.

Comparison
If neither I nor II is strong

weak arg

Q. Should abortion be legalized in India?

A: Yes, it is legal in many countries.
No, abortion is also a kind of murder.

Half explanation, not based on fact, no proof etc

Neither I nor II is strong

Q. Should Disarmament policy be adopted by India?

A: Yes, it'll promote peace & wonderful. Encourage other countries to do the same.
No, it will pose a security threat to India.

Strong

If India adopts this & other countries don't follow India, then India will face security risk. So it's a weak arg.

(opposite of security)

My arg II - Strong

Q. Should the private sectors be allowed to participate in development of railways?

A: Yes, this is one of the ways to provide better services to the public. → strong

No, there will be exploitation & fares may also increase. → Against : weak

May be there is no strong proof

My arg I - Strong

Q5: Should more big industries be started in urban areas?
A: Yes, it will create job opportunities.
But no, it will increase population & pollution.
↳ S

If option II is strong

• If → choose Both

Q6: Is it essential to ensure that all food supplied for consumption remains unadulterated & uncontaminated?
A: Yes, first fundamental right under the Constitution says down that every citizen has a right to life. ↳ S
B: No, virtually all items of food in India have chemicals or adulterants.

Like mixing peoples lives
only I-strong : weak

Q7: Should Govt. relax Foreign Direct Investment?
A: No, it will not help the domestic traders.

B: Yes, it will boost growth → S
development against dev
only II Strong : weak

Q8: Should basic computer knowledge be made a compulsory subject?
A: No, there are many other important courses available which should be made compulsory. (Comparison → 2)

Q9: Students should be given the choice.

X (Ans) : No one - Strong

✓ X
But the comp. is need & its future; everyone must know basics
otherwise they can't survive in the future.

Q10: Is govt justified in spending such a huge amount on space missions of the country? Are space missions of the country are of paramount importance.
→ No proof : weak

2) No, if this amount is spent on dev.,
most, every body will benefit from it.
only II - Strong

Q10: Should govt close down loss making Public Sector enterprises?
A: No, all employees will lose their jobs & earning → no profit : weak
B: Yes, in a competitive world the rule is 'survival of the fittest'. ↳ S
universal truth

only II - Strong

Q11: Should Capital Punishment be abolished?
A: Yes, it should be abolished because life is the gift of the God. Even the state has no right to take away one's life. ↳ S

B: The gift of the God is more valuable than human life.
No, ignorance of law is making all the criminals fearless. So, to reduce the crime rate, capital punishment is necessary. → S (weak)
(experience) ↳ Both I, II - Strong