

8.4 Four couples went for outings in their respective cars. Each of the couples went to a different place from among Goa, Pune, Mumbai, Delhi.

- ① Purish is not married to Punam and he did not have swift car.
- ② Nitin Mittal and his wife had been to Pune and did not travel by a Maruti 800 car.
- ③ Rajiv and his wife Reena did not have Nano car and they didn't go to Mumbai.
- ④ Kanya did not have Soni as her surname and had been to Goa.
- ⑤ Mr & Mrs Sharma did not use a Swift car.
- ⑥ The couple that have a Santro car went to Mumbai.
- ⑦ Abhay, who was not married to Meena Jain, has Nano car but did not go to Delhi.

Date ____/____/____

	Husband	Wife	Surname	Car	Place
1.	Punish	Meena	Jain	Santro	Mumbai
2.	Nitin	Punam	Mittal	Swift	Pune
3.	Rajiv	Reena	Soni	Maruti800	Delhi
4.	Abhay	Kanya	Sharma	Nano	Goa
		Meena	Jain		Delhi

From point ① Punish - Punam^x - Swift^x

② Nitin

② Nitin's surname is Mittal, he went to Pune & has

Nitin - Mittal[✓], Pune[✓], Maruti800^x

③ Rajiv - Reena[✓], Nano^x, Mumbai^x

④ Kanya - Goa[✓], Soni^x

⑤ Abhay - Meena^x, Jain^x, Delhi^x, Nano[✓]

Now, only Punish's wife & Surname column is empty & from the information Meena Jain is only fulfilling the condition.

Kanya went to Goa so suitable place is in Abhay's column & Soni's surname does not go with Kanya so it goes with Rajiv.

And the only surname left for Abhay is Sharma.

Nitin's wife is Punam, the only wife option left.

Now Rajiv can't go to Mumbai so he went to Delhi and then Punish went to Mumbai.

Couple having Santro car went to Mumbai so Punish have Santro car.

Nitin did not have Maruti 800 so the only option left is Swift car & hence Rajiv have Maruti 800 car.

Q. 1. What is Reena's surname?

- (a) Jain (b) Sharma (c) Soni (d) Mittal.

Ans = (c), Soni.

Q. 2. Which among the following is the correct couple?

- (a) Nitin - Meera (b) Rajiv - Reena
(c) Abhay - Punam (d) Punish - Reena.

Ans = (b), Rajiv - Reena.

Date ____ / ____ / ____

Q3. Which car did the Mittal's use?

- (a) Nano (b) Santro
(c) Maruti 800 (d) Swift.

Ans = (d), Swift.

Q4. Mr & Mrs. Jain to which place?

- (a) Mumbai (b) Pune
(c) Delhi (d) Goa

Ans = (a), Mumbai.

Q5. Which couple had been to Goa?

- (a) Purish - Meena (b) Nitin - Punam
(c) Rajiv - Reena (d) Abhay - Kanya

Ans = (d), Abhay - Kanya

Date ____ / ____ / ____

Q.B There are 6 different players who play 6 different sports - Cricket, Football, Hockey, Tennis, Badminton, Athletics. They like different colours - Red, Yellow, Blue, Pink, white, black not necessarily in the same order. They stay in 6 different cities - Ahmedabad, Bangalore, Kolkata, Delhi, Pune.

- ① The football player likes Red colour, but does not belong to either Kolkata or Delhi.
- ② The one who likes yellow colour and the athlete do not stay in Indore and Pune respectively.
- ③ The Hockey player does not like either yellow or Blue colour.
- ④ The one who likes Pink stays in Delhi.
- ⑤ Hockey player, Tennis player and Cricket player stay in Kolkata, Indore and Bangalore respectively.
- ⑥ One who stays in Pune likes Black.

Date ____ / ____ / ____

Sports	Colour	Place
Cricket	Yellow	Bangalore
Football	Red	Ahmedabad.
		Kolkata ^x Delhi ^x
Hockey	White	Kolkata
	Yellow ^x Blue ^x	
Tennis	Blue	Indore
	Yellow ^x	
Badminton	Black	Pune
Athletics	Pink	Delhi
	Black ^x	Pune ^x

⊕ Football = Red ✓
= Kolkata^x, Delhi^x

Yellow = Indore^x

Hockey = Yellow^x, Blue^x, Kolkata ✓

Pink = Delhi ✓, Bla:

Pune = Black ✓

As Tennis player stays in Indore so he does not like yellow.

Atheletic does not stay in Pune so does not like black.

Football player does not stay in Kolkata & Delhi. So it has Pune & Ahmedabad as options and one who stays in Pune likes black but football player like Red. So the only option is Ahmedabad.

Atheletic & does not stay in Pune so stays in Delhi and so likes Pink.

Therefore, Badminton player stays in Pune & likes Black.

Hockey player doesn't like yellow and blue so the only option is white.

Tennis player does not like yellow so likes Blue.

Cricket player has the only option left is yellow.

Date ____ / ____ / ____

Q1. Which colour does Badminton player likes?

(a) Pink

(b) Black

(c) Red

(d) Yellow

Ans = (b), Black.

Q2. One who like blue stays in which city?

(a) Indore

(b) Delhi

(c) Pune

(d) Ahmedabad

Ans = (a), Indore

Q3. One who stays in Kolkata plays which sport?

(a) Cricket

(b) Hockey

(c) Badminton

(d) Tennis

Ans = (b), Hockey.

Date ____ / ____ / ____

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Q4. Hockey player likes which colour?

(a) Pink

(b) Black

(c) Yellow

(d) white

Ans = (d), white

Q5. Blue colour is liked by which player?

(a) Hockey

(b) Cricket

(c) Tennis

(d) Athletics

Ans = (c), Tennis.

Date ____ / ____ / ____

Q.C. Eight students A, B, C, D, E, F, G, H have eight different items. Pen, Book, mobile, laptop, pendrive, tiffin, eraser, and scale. They went to three different classes namely ICD, DFC, ITM. Atleast two persons and utmost three persons went to each class.

Only D and G went to ITM and one of them has a tiffin. C has mobile and went to ICD. The one, who went to DFC has a eraser, but is not B. B and the one, who has a scale, went to DFC. Neither A nor F has a eraser, but one of them went to DFC. A and E went to same class. ~~E~~ has pendrive. The person, who has pen, did not go to either DFC or ITM. The one, who went ITM does not have a book. One among D and B has a laptop.

ICD		DFC		ITM	
Student	Item	Student	Item	Student	Item
1 C	Mobile	H PA^x B^x	Eraser	D	Tiffin Book laptop
2 A	Pen	B	Book	G	Tiffin
3 E	Pendrive	F	Scale		

D - ITM[✓]

Tiffin - D/G

G - ITM[✓]Eraser - B^x

E DFC DFC - A/F

As A & E went to same class and the vacant space is in ICD so A & E is in ICD and F is DFC and F has scale.

Pen - ITM^x, DFC^x

∴ Pen - ICD the vacant space is at A

A = Pen

ITM does not have book so DFC has book and vacant space is at B. B = Book

B or D has laptop. B has ∴ D = laptop so

G = tiffin. ∴ H = Eraser.

Q1. who went to DFC?

(a) A, B, D

(b) H, B, F

(c) A, G, F

(d) D, G.

Ans = (b), H, B, F.

Q2. who has a book?

(a) B

(b) A

(c) D

(d) H

Ans = (b), A.

Q3. who has a eraser?

(a) C

(b) B

(c) F

(d) H

Ans = (d), H

Q4. Who went to ITM?

(a) D, G

(b) A, C, F

(c) H, B, F

(d) A, B

Ans = (a), D, G

Q5. Who has a tiffin?

(a) A

(b) F

(c) G

(d) H

Ans = (c), G

Date ____ / ____ / ____

Q.11. An institute is organising exams of different subjects Geography, History, Science, Maths, English, Arts and Economics from 2 July to 9 July.

- ① Course should end with history
- ② 2^{3rd} July, being Sunday, should have no Exam.
- ③ Arts should be on previous day of Economics.
- ④ Science should be immediately after holiday.
- ⑤ There should be a gap of exactly one day between English and Economics.
- ⑥ There should be a gap of exactly two days between Geography and English, and Geography is before English.

Date	Day	Subject
2	Saturday	Geography
3	Sunday	(No exam)
4	Monday	Science
5	Tuesday	English
6	Wednesday	Arts
7	Thursday	Economics
8	Friday	Maths
9	Saturday	History

As 3 is Sunday so the other days are easily known.

Arts should come on previous day of Economics

Arts

Eco

Science on Monday means immediately after holiday.

English
(1 day gap)
Economics

Geography
1 day
2 days

∴ Maths =
Friday

English
1 day
Economics

Q 1. Which subject $\textcircled{P}$ precedes Maths?

(a) Geography (b) Science

(c) Economics (d) Arts

Ans = (c), Economics.

Q 2. The exam will start with which subject?

(a) Geography (b) Arts

(c) Maths (d) English

Ans = (a), Geography.

Q 3. Which subject exam will be on Friday?

(a) Geography (b) Maths

(c) Arts (d) English.

Ans = (b), Maths.

Q.4. Which subject follows science?

- (a) Arts (b) Maths
(c) History (d) English

Ans = (d), English.

Q5. How many days gap is there between Maths and History exam?

- (a) 2 days (b) No gap
(c) 1 day (d) 4 days

Ans = (b), No gap.

Q. E. Five students Jay, Dev, Nirav, Rahul, Zen like five different subjects & zoology, Physics, Botany, geology and History. And study in four different universities Delhi, Indore, Mumbai and Pune not necessarily in the same order.

- ① Rahul likes Zoology and study in Mumbai University.
- ② Nirav is neither in Pune nor in Delhi university and he likes neither geology nor history.
- ③ Zen likes physics but neither Mumbai university nor in Pune university.
- ④ Jay likes history in Delhi university.
- ⑤ Two students are from Indore university.

Student	Subject	University
Jay	History	Delhi
Dev	Geology	Pune
Nirav	Botany ^{history + geology}	Indore ^{pune + Delhi}
Rahul	Zoology	Mumbai
Zen	Physics	Indore ^{Pune}

Nirav - Pune^x
- Delhi^x
Geology^x
History^x

Zen - Mumbai^x
Pune^x

Nirav is not in Pune or Delhi or Mumbai
so only option is Indore.

Zen is not in Pune or Mumbai so the
option left is Indore. so Dev is in
pune university.

Nirav does not like geology nor history. so the
subject left is Botany.
So, Dev likes ~~geology~~ geology.

Date ____ / ____ / ____

Q.1. who likes geology?

(a) Nirav

(b) Dev

(c) Rahul

(d) Jay

Ans = (b), Dev.

Q.2. Which university is Zen from?

(a) Indore

(b) Mumbai

(c) Delhi

(d) Pune.

Ans = (a), Indore.

Q.3. who is from Pune university?

(a) Nirav

(b) Jay

(c) Dev

(d) Rahul

Ans = (c), Dev.

84. Which of the following combination is correct?

(a) Jay = History

(b) Nirav = History

(c) Zen = Zoology

(d) Rahul = Botany

Ans = (a), Jay = History.

85. Who is from Mumbai university?

(a) Zen

(b) Nirav

(c) Jay

(d) Rahul

Ans = (d), Rahul

Q F.

Six families Roy, Khan, Joshi, Verma, Parde and Mishra plans to go to six different cities Mumbai, Pune, Delhi, Nashik, Bhopal and Nagpur. They wish to go in 6 different months - Jan, Feb, March, April, May and June. Two of them want to travel by bus and two by rail and others by car and flight.

① Mr. Parde goes to Mumbai but not by air or bus.

~~② Mr. Sharma~~

② Mr. Roy prefers bus journey but doesn't travel in Feb or May.

③ Neither Mishra nor Khan family go to Bhopal or Delhi.

④ Nashik was visited in April.

⑤ Families going to Pune and Bhopal go by bus and car respectively.

⑥ Mr. Joshi goes to ^{Nagpur} ~~Nainital~~ in March by air and Mishra does not travel in April.

Family	City	Month	Travel
Roy	Delhi	Jan / June May ⁺ Feb ⁺	Bus
Khan	Nashik Bhopal ⁺ Delhi ⁺	April	Rail
Joshi	Nagpur	March	air
Verma	Bhopal	Jan / Feb / May / June	Car
Pande	Mumbai	Jan / Feb / May / June	Rail air ⁺ Bus ⁺
Mishra	Pune Nashik ⁺ Bhopal ⁺ delhi ⁺	Jan / Feb / May / June april ⁺	Bus

April = Nashik * As Mishra is not travelling in
Pune = Bus april so, he is not going to
Bhopal = Car Nashik. so only city left
is pune and pune is reached by
Bus.

* Khan
* Roy can't travel to Bhopal, Delhi & Nashik
so he travels to Nashik in April.

* Roy can travel to Bhopal or Delhi but
to Bhopal he has to travel by car but he
prefers bus, so he is travelling to Delhi

Date ____ / ____ / ____

Verma has only one city option left that is Bhopal and by Car.

Travel mode options left is rail ~~so~~ only and that is for Khan and Pande.

No further information is given regarding months.

Q.1. Which of the following visit Bhopal?

(a) Pande

(b) Verma

(c) Joshi

(d) Khan

∴ Ans = (b), Verma.

Q.2. Mr Joshi visited to ?

(a) Nagpur

(b) Mumbai

(c) Pune

(d) Delhi

Ans = (a), Nagpur

Q3. Mr. Khan travelled by ?

(a) Car

(b) Bus

(c) Rail

(d) Flight (air)

Ans = (c), Rail

Q4. Which of the following visit Delhi ?

(a) Khan

(b) Verma

(c) Mishra

(d) Roy

Ans = (d), Roy

Q5. Mr. Mishra travelled by ?

(a) Car

(b) Bus

(c) Rail

(d) Air

Ans = (b), Bus

Q. 6 Six friends A, B, C, D, E, F work in different companies namely, TCS, Reliance, Wipro, HCL, Idea, LIC. Each one read different newspaper i.e., Economic Times, Times of India, The Hindu, The Hindustan Times, Indian Express and The Pioneer not necessarily in the same order.

- ① The one reading Pioneer works in HCL and one reading Times of India works in TCS.
- ② E does not work in Wipro or Idea.
- ③ A works in Reliance, reads the Hindu.
- ④ F does not work in ~~LIC~~^{Idea} and the one who works in Wipro does not read the Hindustan Times.
- ⑤ B works in LIC.
- ⑥ Neither F nor D works in HCL.
- ⑦ The one who works in Idea reads neither the Hindustan Times nor Indian Express.
- ⑧ C works in TCS.

	Companies	Newspapers
A	Reliance	Hindu
B	LIC	Hindustan Times
C	TCS	Times of India
D	Idea HCL ^x	Economic Times Indian Express ^x Hindustan Times ^x
E	HCL Wipro ^x Idea ^x	Pioneer
F	Wipro HCL ^x Idea ^x	Indian Express. Hindustan Times ^x

Pioneer - HCL

Times of India - TCS

Wipro - ~~Hindustan Times~~^x

F & D does not work in HCL so only one left is E. And so he reads Pioneer.

Idea - ~~Hindustan Times~~^x

Indian Express^x

F does not work in Idea so D works in Idea & F in Wipro.

D & F does not read Hindustan Times, so only 6 left D does not read Indian Express as well so he reads Economic Times & F reads Indian Express

Q1. Who works in Wipro?

(a) C

(b) D

(c) F

(d) A

Ans = (c), F

Q2. Who reads Economic Times?

(a) D

(b) A

(c) B

(d) F

Ans = (a), D

Q3. C reads which newspaper?

(a) Pioneer

(b) Times of India

(c) Economic Times

(d) Hindu

Ans = (b), Times of India

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The one who works in Idea reads which newspaper?

(a) Pioneer

(b) Hindustan Times

(c) Hindu

(d) Economic Times

Ans - (d), Economic Times.

95.

The one who reads Hindustan Times works in which company?

(a) HCL

(b) LIC

(c) Idea

(d) Reliance.

Ans = (b), LIC

Q. 4. There are 7 persons A-G having seven different car name Audi, Nano, Honda city, Benz, Alto, Swift and Wagonr having different on road price 2LK, 4LK, 5LK, 3LK, 10LK, 12LK and 13LK not necessarily in the same order. Person having Honda city car price is of even number. Difference between price of car having by person D & A is less than 3LK. F is having Benz car. Addition of price of Wagonr car and Benz car is perfect square. Person C having Swift car have odd ~~num~~ number of price. Addition of price of wagonr car Swift car and Alto is perfect cube. Either A or G having Audi car and price is of prime number. Person having wagonr car is in between Nano and Swift car. Multiplication of price of wagonr and Swift is double the price of Honda city car and Honda city is placed above audi car. below ~~a~~ Alto car.

Date ____ / ____ / ____

Person	Car	Price
A	Nano	2LK
B	Wagonr	4LK
C	Swift	5LK
D	Alto	3LK
E	Honda	10LK
F	Benz	12LK 12/4
G	Audi	13LK

Honda = even number

~~A-B~~ ~~A-B~~ / ~~D-A~~ ~~A~~ < 3LK

Wagonr + Benz = perfect square

so possibility is $12 + 4 = 16$

Benz = $12 / 4$

Wagonr = $12 / 4$

Swift = odd number.

Swift + Alto = perfect cube.

so possibility is $5 + 3 = \underline{8}$

Swift = $5 / 3$

Alto = $5 / 3$

Audi = ~~A~~ / G, = prime number.

Wagonr is between Nano and swift so this condition is fulfilled by placing Nano at A. So Audi will be at $\checkmark$ of 6.

$$\begin{aligned} \text{Wagonr} \times \text{Swift} &= 2 \times \text{Honda} \\ \text{So assuming } 5 \times 4 &= 20 \\ &= 2 \times 10 \end{aligned}$$

$$\therefore \text{Wagonr} = 4 \text{ LK}$$

$$\text{Swift} = 5 \text{ LK}$$

$$\text{Honda} = 10 \text{ LK}$$

$$\text{Alto} = 3 \text{ LK}$$

$$\text{Benz} = 12 \text{ LK}$$

Honda is placed below Alto.

price of audi is prime number and options left are 13LK, 2LK, 3K

But A-B should be less than 8K

$$\text{So Audi} = 13 \text{ LK}$$

$$\therefore \text{Alto} = 3 \text{ LK}$$

$$\text{Nano} = 2 \text{ LK}$$

Q1. who is having Nano car?

(a) B

(b) A

(c) D

(e) F

Ans = (b), A

Q2. what is the price of Audi car?

(a) 12LK

(b) 8LK

(c) 4LK

(d) 10LK

Ans = (a), 12LK.

Q3. Swift car's price is?

(a) 4KL

(b) 13LK

(c) 12LK

(d) 5LK

Ans = (d), 5LK

q4. Alto car is owned by?

(a) G

(b) A

(c) D

(d) B

Ans = (c), D

q5. Which of the following is correct?

(a) 12 LK - Benz

(b) 10 LK - Audi

(c) 5 LK - Nano

(d) 3 LK - Honda City

Ans = (a), 12 LK - Benz

Date ____ / ____ / ____

Q I. Eight person A, B, C, D, E, F, G and H live on eight-store building. Lowermost floor is numbered 1 and topmost is 8. Their ages are 20, 24, 26, 27, 29, 31, 34 and 38 not necessarily in the same order. F lives three floors above the one who is 27 years old. C lives just above E. The difference of age between A and C is same as difference of age between D & H. The one who is 34 years old is living on top floor. Only two persons are elder to E. B is 26 years old. H is elder to F. The number of floors above D is same as below E. C lives on an odd numbered floor. B just lives above the one who is 24 years old. D is 5 years elder to G. One person lives between G and the one who is 24 years old. Difference of age between A and B is at least 3 years. The number of floors between G and C is same as A and E.

Floor	Person	Age
8	D	34
7	G	29
6	B	26
5	C	24
4	F	31
3	A	20
2	H	38
1	E	27

B is = 26

Only two persons are elder to F so $F = 31$.

H is elder to F mean $H = 34/38$.

D is 5 years elder than G. If $H = 38$

then $G = 33$ and 33 is not given.

∴ $H = 34$ and $G = 29$.

So there are two combinations of 5 years difference $24-29$ and $29-34$.

G cannot be 24 ∴ $G = 29$ and $D = 34$

$H = 38$

Now $A - C = D - H$.

$$= 38 - 34$$

$$= 4$$

$$A = 20/24$$

$$C = 20/24$$

$$∴ E = 27$$

C lives on odd no. floor so C can be on 7th or 5th floor.

If C lives on 7th floor the condition of number of floors above D and below E is not valid. so C lives on 5th floor.

C lives on 5th floor and E lives on 1st floor. and F on 4th and D on 8th floor.

A - B is atleast 3 years

$$\therefore A = 20$$

$$C = 24$$

G lives on 7th or 3rd floor

The number of floors between G and C is same as A and E

G lives on 7th floor and A lives on 3rd floor.

B lives just above the one who is 24 years old.

B lives on 6th floor and H lives on 2nd floor.

Q1. Who among the following is 34 years old?

(a) A

(b) D

(c) B

(d) G

Ans = (b), D

Q2. Who lives on floor number 7th?

(a) A

(b) D

(c) B

(d) G

Ans = (d), G

Q3. What is the age of G?

(a) 29

(b) 24

(c) 31

(d) 38

Ans = (a), 29

Q4. Which of the following combination is correct?

(a) E = 2nd floor

(b) B = 26

(c) A = 31

(d) C = 3rd floor.

Ans = (b), B = 26

Q5. Who is the eldest?

(a) B

(b) E

(c) H

(d) G

Ans = (c), H

Q. J.

Six persons A, B, C, D, E and F experts in six different fields Drama, story-telling, Sports, Dance, Singing, Mimicry not in the same order. And won different prizes Kalinga award, Gandhi Peace prize, Vyas Samman prize, Kabir Samman prize, Iqbal Samman prize and Saraswati

Samman prize for the year 2005. C and F have not won Gandhi Peace prize and Iqbal Samman. The winner of Kabir Samman is expert in the field of singing but he is certainly not E and B. B and D and A have won Kalinga award and Kabir Samman though not respectively. The experts of the field story-telling and E have won Gandhi Peace Prize and Iqbal Samman though not respectively. A is expert in field of Drama and winner of Iqbal Samman is expert in the field of mimicry.

Date ____ / ____ / ____

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Person	Field	Prize
A	Story - Telling Drama	Gandhi Peace Prize Kalinga Award
B	Story - Telling	Gandhi Peace Prize
C	Sports Dance	Vyas Prize / Saraswati Samman
D	Singing	Kabir Samman
E	Mimicry	Iqbal Samman
F	Sports Dance	Vyas Prize / Saraswati Samman

Gandhi Peace - C^x, F^x = story telling

Kalinga = A[✓] =

Vyas

Kabir Samman = singing = B^x, E^x = D[✓]

Iqbal Samman - C^x, F^x = E[✓] =

Saraswati Samman

If E won Iqbal Samman then the one who is expert in story telling wins Gandhi peace prize.

A = Drama = Kalinga.

E = Iqbal Samman = mimicry.

F = Iqbal^x, Kabir^x, Kalinga^x, Gandhi^x
= Vyas / Saraswati.

C = Gandhi^x, Vyas / Saraswati.

Gandhi Peace Prize has only one option left i.e. B.

Sports = C / F, Dance = C / F

Vyas = C / F, Saraswati = C / F

Date ____ / ____ / ____

Q1. Who is the winner of Kabir Samman?

(a) A (b) D

(c) E (d) F

Ans = (b), D.

Q2. Who is the expert in story-telling field?

(a) B (b) D

(c) E (d) A

Ans = (a), B

Q3. E is expert in which field?

(a) Dance (b) Sports

(c) Mimicry (d) Singing

Ans = (c), Mimicry

Q4. D has won which award?

- (a) Kabir Samman (b) Iqbal Samman
(c) Gandhi Peace Prize (d) None

Ans = (a), Kabir Samman.

Q5. Who is the winner of Gandhi Peace Prize?

- (a) E (b) C
(c) D (d) B

∴ Ans = (d), B.

Q. 11. Four students A, B, C, D live on the same side of a street in four houses, each of different colour Red, Blue, White, Green. Each student has a different favourite car.

(+) H

(1) A lives in red house.

(2) B ~~drinks~~ likes swift car.

(3) C lives in the first house on the left.

(4) In the second house from the right, he likes Nano car.

(5) C lives adjacent to the blue house.

(6) D likes Ato car.

(7) Swift is like by the one who lives in blue house.

(8) The white house is to the right of the red house.

Student → C B A D

car → 4 Santa swift Nano Alto

house colour → green Blue Red white

A → red

B → swift

D → Alto

swift is liked by the one who lives in blue house. Means B student likes in blue house and likes swift car.

white house is right of Red house the only possibility is Red should be right of Blue house.

A likes in Red house means A likes Nano car.

D likes Alto so last spot to the right is empty so, D lives in white house.

C lives in green house and likes Santa car.

Q1. Santro car is liked by whom?

(a) A

(b) B

(c) C

(d) D

Ans = (c), C

Q2. Who sits to the left of B?

(a) A

(b) B

(c) C

(d) D

Ans = (a), A.

Q3. A likes which car?

(a) Santro

(b) Swift

(c) Alto

(d) Nano

Ans = (d), Nano.

q4. D lines in which house?

(a) Red

(b) white

(c) Blue

(d) Green

Ans = (d), green.

Ans = (b), white.

q5. The one who lives in blue house likes which car?

(a) Santro

(b) Alto

(c) Nano

(d) Swift

Ans = (d), Swift.

Q. 5.1 Eight men A, B, C, D, E, F, G, H are sitting in two rows facing each other i.e., four persons in each row not necessarily in the same order. They have different surnames Sharma, Joshi, Bakshi, Mishra, Shaha, Roy, Verma, Vardhan.

- ① Sharma, Joshi, Bakshi, Mishra are facing south and the rest are facing north.
- ② Mr. Bakshi is sitting opposite ^{to} the one who is the immediate right of G, Mr. Roy.
- ③ Neither C nor E is Mr. Mishra.
- ④ Either H or A is Mr. Bakshi.
- ⑤ Mr. Mishra and Mr. Vardhan are sitting opposite to each other at an end.
- ⑥ Neither G nor E sits at an end.
- ⑦ Mr. Roy and Mr. Shaha are adjacent to each other.
- ⑧ B, Mr. Verma and is sitting to the immediate left of F, Mr. Vardhan.
- ⑨ A is Mr. Sharma and he is sitting opp Mr. Shaha.

Surname → Sharma Toski Bakshi Mishra

Men → A E H D South ↓

$G^x E^x$
 $G^x E^x$

$G^x E^x C^x$
 $G E^x$

Men → C G B F ↑ North

Surname → Shaha Roy Verna Vardhan

Mishra & Vardhan are sitting opposite to each other at an end.

G and E does not sit at any end.

Mr. Bakshi is sitting opposite to the one who is immediate right of G, Mr. Roy.
So G will not be at left corner of north facing ones then only this condition will become true.

Bakshi is either H or A. But A is Sharma.
∴ Bakshi = H.

Only seat in north facing is left and the only surname left is Shaha.

Sharma & Shaha sitting opp to each other.

Toski is the only surname left in south facing
E can't be at any corner ∴ Toski = E

Date ___ / ___ / ___

Mishra is not C $\therefore$ Mishra = D

$\therefore$ Shaha = C

Q1. Who is Mr. Joshi?

(a) A

(b) E

(c) D

(d) B

Ans = (b), E

Q2. Who sits to the right of Mr. Bakshi?

(a) Shaha

(b) Mishra

(c) Joshi

(d) Verma

Ans = (c), Joshi

Q 3. Who is to the left of G?

(a) Shaha

(b) Mishra

(c) Joshi

(d) Verma

Ans = (a), Shaha

Q 4. B is seated opposite of?

(a) G

(b) F

(c) D

(d) H

Ans = (d), H

Q 5. Which pair is at the corner?

(a) D, G

(b) D, F

(c) A, H

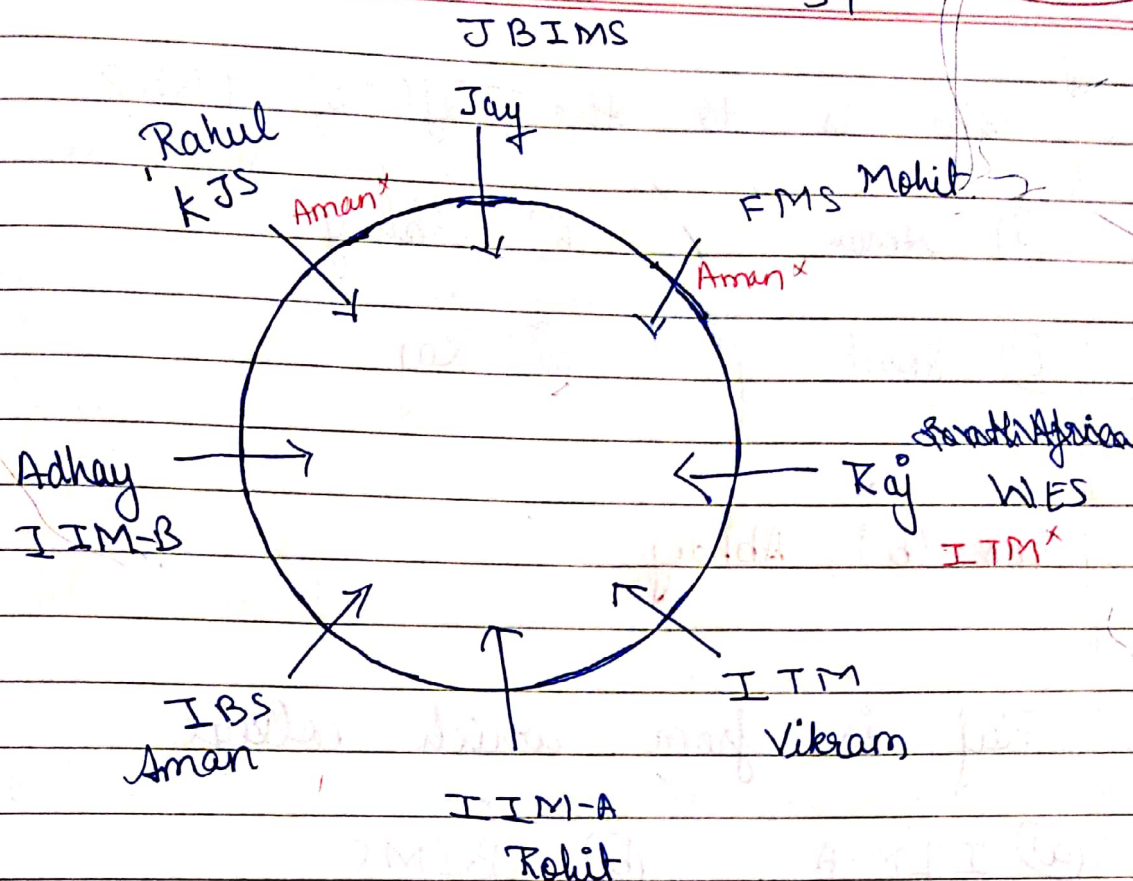
(d) C, G

Ans = (b), (d), D, F.

Date ____ / ____ / ____

Q.M. Eight students Aman, Raj, Jay, Abhay, Rohit, Rahul, Mohit and Vikram of eight different colleges FMS, JBIMS, ITM, IBS, IIM-A, IIM-B, KJS, KES not necessarily in the same order.

- ① Aman sits opposite to the one from FMS, who is second to the left of Rahul.
- ② student of IIM-A is two places away to the left of Raj. Raj is not from ITM.
- ③ Aman is not from IIM-A. Jay is from JBIMS sits opposite to the one from IIM-A and is not adjacent to Aman.
- ④ Neither Mohit nor Vikram is from IIM-A.
- ⑤ Abhay is from IIM-B, is adjacent to both from KJS and IBS.
- ⑥ Mohit is not from ITM and the one from KJS is opposite to the one from ITM.



Jay = JBIMS is opposite to the one from IIM-A.

IIM-A = Aman*, Mohit*, Vikram*, Jay*, Raj*
option left is Rohit

Raj = IITM* ∴ IIM-A = Rohit

Abhay = IIM-B adjacent to one from KJS and IBS

KJS opposite to IITM

IITM = Mohit*, Raj* ∴ IITM = Vikram

Aman is opposite to one from FMS. Only position for FMS is opposite of IBS.

∴ Aman = IBS

FMS is second to left of Rahul ∴ KJS = Rahul

From all the student option FMS = Mohit

Raj = WES

Q1. Who is to the left of IBS?

(a) Aman

(b) Abhay

(c) Rohit

(d) Raj

Ans = (b), Abhay

Q2. Raj is from which college

(a) IIM-A

(b) JBIMS

(c) IITM

(d) WES

Ans = (d), WES.

Q3. Who is opposite of vikram?

(a) Rahul

(b) Jay

(c) Mohit

(d) Abhay

Ans = (a), Rahul.

Q4. who is from FMS?

(a) Raj

(b) Jay

(c) Vikram

(d) Mohit

Ans = (d), Mohit.

Q5. Which of the following is correct?

(a) Rahul = IITM

(b) Abhay = IIM-A

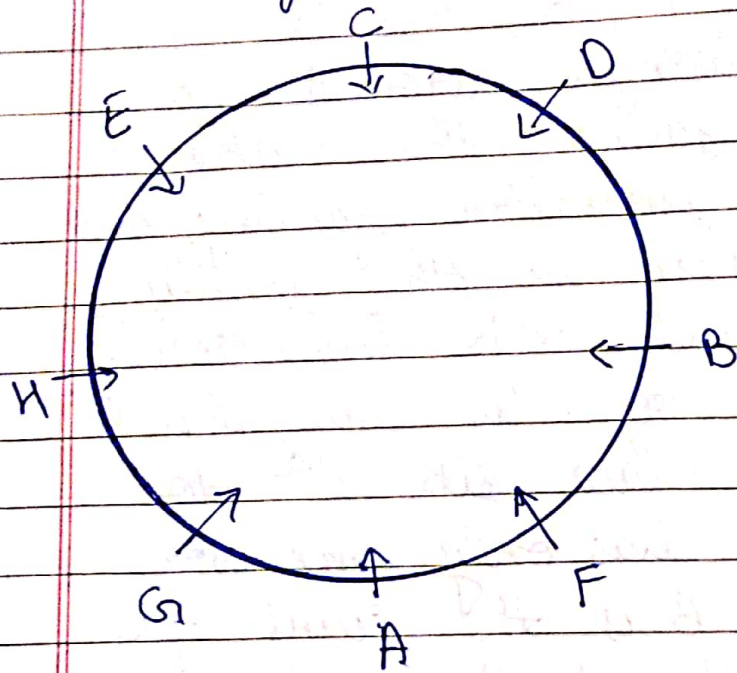
(c) Rohit = IIM-A

(d) Aman = FMS

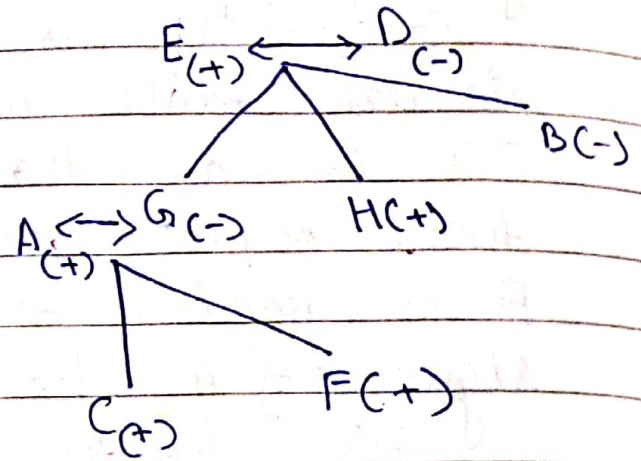
Ans = (c), Rohit = IIM-A.

QX Eight family members A, B, C, D, E, F, G and H are sitting around a circular table and facing the centre. It is a three-generation family and two couples are there in the family. F is grandson of D and sits immediately right of A who is son-in-law of D. H's brother-in-law sits 2nd to the right of H. E has only one son and two daughters. B is the aunt of C. F's aunt sits opposite to H. G has two sons. E is 3rd to the right of B. Two pairs of females are sitting opposite to each other. H is an unmarried male. E is father of B. B is not married to A. E is grandfather of C. D is not neighbour of H.

Sitting Arrangement



Family Tree



(+) = Male

(-) = Female

A is son-in-law of D. F is grandson of D and E is grandfather of C.
So E is husband of D.

G has two sons must be F and C.
There are two couples in family

① E and D

② A and G

B is aunt of C so, B is sister of G.

E has only 1 son i.e. H.

F is immediate right of A.

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(Saath)

H's brother-in-law sits 2nd to the right of H. H's brother-in-law is A.
So A is 2nd to the right of H.

F's aunt sits opposite to H. F's aunt is B.
So B sits opposite to H.

E is 3rd to right of B. Two females are sitting opposite to each other.
D and G two females opposite each other.

D is not neighbour of H. So G is exactly between H and A.

Only one empty position is left for C.

Date ____/____/____

Q 1. How many females are in the family?

(a) 5

(b) 3

(c) 4

(d) 2

Ans = (b), 3

Q 2. How many males are in the family?

(a) 4

(b) 3

(c) 5

(d) None

Ans = (c), 5

Q 3. Who is the mother of H?

(a) A

(b) D

(c) G

(d) E

Ans = (b), D

Q4. who is second to the right of A?

(a) E

(b) D

(c) H

(d) B

Ans = (d), B.

Q5. Which is the correct couple?

(a) A, G

(b) C, H

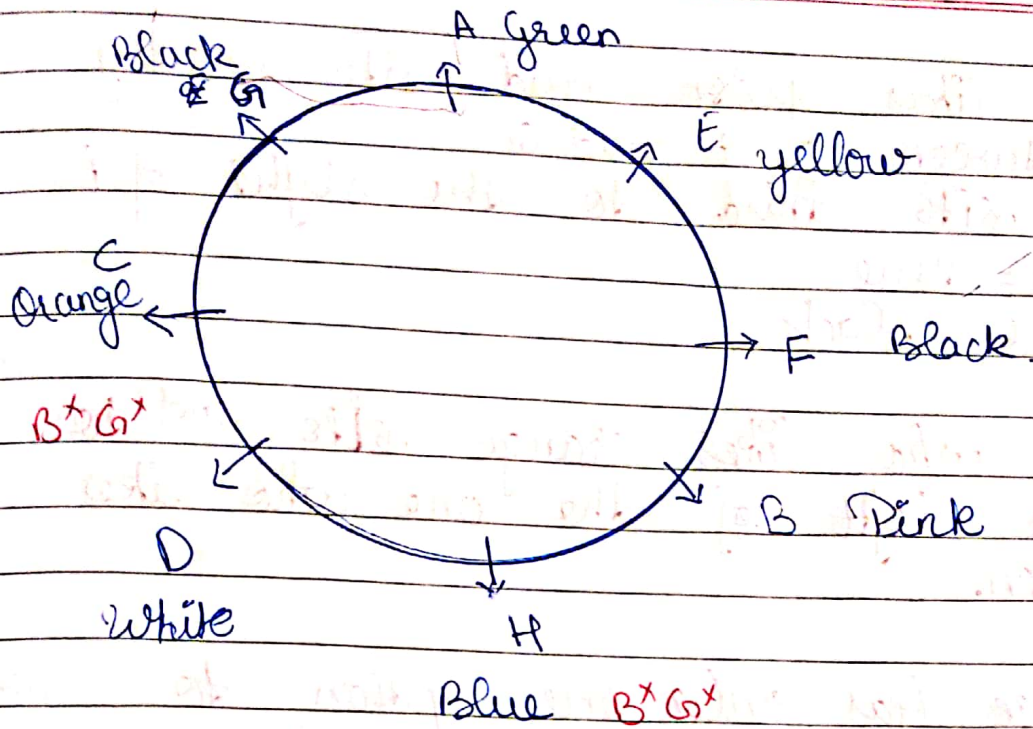
(c) G, B

(d) D, G

Ans = (a) A, G

Date ____ / ____ / ____

30. Eight people A, B, C, D, E, F, G, H are sitting around a circle facing outward. All of them like different colours Red, Blue, Green, yellow, Orange, Pink, Black, white. D is sitting third to the right of F. The one who likes the blue sits on the immediate left of D, who doesn't like Red. B sits fourth to the left of G. Neither B nor G is an immediate neighbour of D. ~~E belongs~~ E likes yellow and sits third to the left of one who likes blue. The one who likes Pink sits second to the right of the one who likes yellow. The one who likes black sits second to the right of D. ~~R~~ A likes green and sits exactly between E and G. The one who likes orange sits second to the left of the one who ~~has~~ likes green. H sits third to the right of E.



D is third to the right of F.

One who likes blue is sitting immediately left of D.

B & G are not immediate neighbours of D.

E = yellow sits third to the left of one who likes blue.

One who likes pink sits 2nd to the right of the one who likes yellow.

One who likes black sits 2nd to the right of D.

A likes green and sits exactly between E and G.
H sits third to the right of E.

H = Blue

∴ G = Black.

One who likes orange sits 2nd to the left of the one who likes green.

Orange has only one option to fulfill all the condition is C.

∴ Orange = C

So, Pink = B

The one who likes black sits 2nd to the right of D.

∴ Black = F

So, White = D

Q1. Who likes black?

(a) C

(b) H

(c) G

(d) F

Ans = (d), F.

Q2. Who is immediate left of H?

(a) B

(b) G

(c) D

(d) E

Ans = (a), B

Q3. C likes which colour?

(a) yellow

(b) Orange

(c) Pink

(d) white

Ans = (b), Orange.

Q4. Who is opposite of E?

(a) D

(b) A

(c) G

(d) B

Ans = (a), D

Q5. Which of the following is correct?

(a) G - Pink

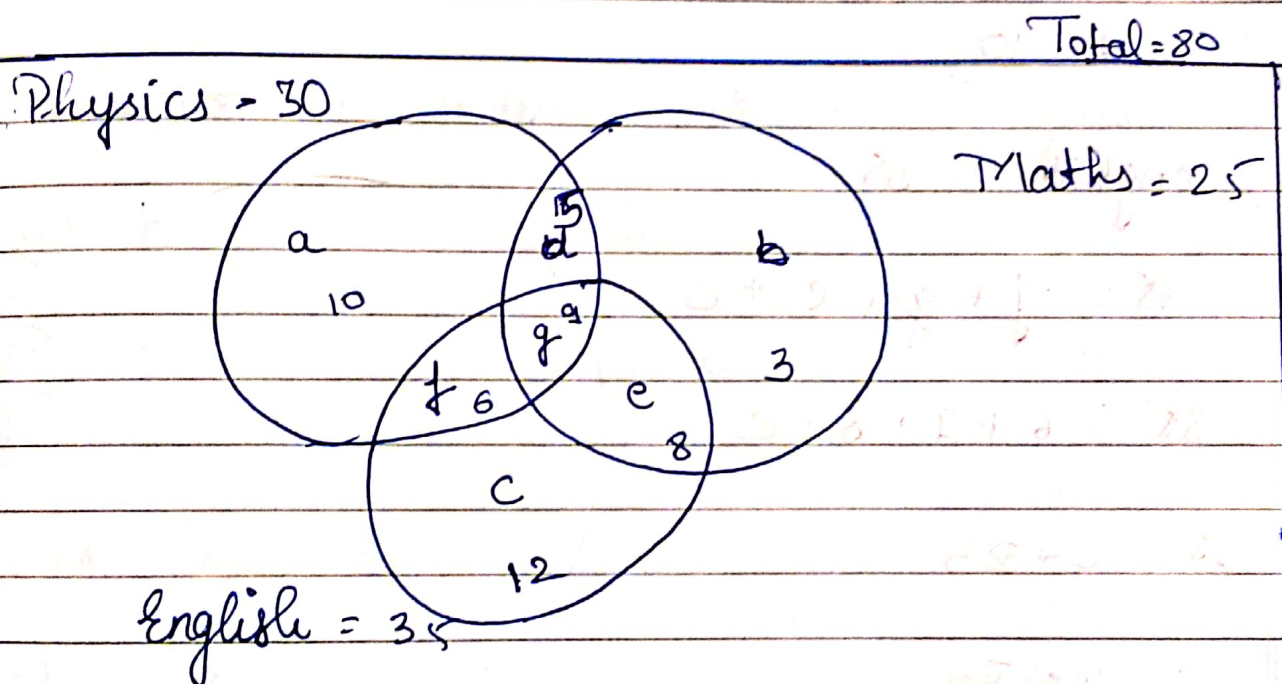
(b) A - Orange

(c) F - Black

(d) E - white

Ans (c), F - Black.

Q.P. In a college classroom of 80 students, 30 students like Physics, 35 students like English and 25 students like Maths. It is also known that 15 students like both Physics and English, 17 students like both English and Maths and 14 students like both Physics and Maths, 2 students like Physics, Maths and English.



$g = 2$ = likes all the three subjects.

$$d + g = 14 \quad = \quad g + d = 14 \quad = \quad d = 5$$

$$e + g = 17 \quad = \quad e + g = 17 \quad = \quad e = 8$$

$$f + g = 15 \quad = \quad f + g = 15 \quad = \quad f = 6$$

$$\text{physics} = 30$$

$$30 = a + d + g + f$$

$$30 = a + 5 + 9 + 6$$

$$30 = a + 20$$

$$a = 30 - 20$$

$$a = \underline{10}$$

$$\text{English} = 35$$

$$35 = f + g + e + c$$

$$35 = 6 + 9 + 8 + c$$

$$35 = c + 23$$

$$c = 35 - 23$$

$$c = \underline{12}$$

$$\text{Maths} = 25$$

$$25 = d + g + e + b$$

$$25 = 5 + 9 + 8 + b$$

$$25 = b + 22$$

$$b = 25 - 22$$

$$b = \underline{3}$$

$$\text{Total} = a + b + c + d + e + f + g + n$$

$$80 = 10 + 3 + 12 + 5 + 8 + 6 + 9 + n$$

$$80 = 53 + n$$

$$\underline{n = 27}$$

Q1. Number of students like only Physics?

(a) 30

(b) 10

(c) 15

(d) 14

Ans = (b), 10.

Q2. Now what is the number of students who like both Maths and English but not Physics?

(a) 10

(b) 27

(c) 17

(d) 8

Ans = (d), 8.

Q3. What is the number of students who don't like any of the three subjects?

(a) 9

(b) 80

(c) 27

(d) 10

Ans = (c), 27

Q4. What is the number of students who like all the three subjects?

(a) 9

(b) 27

(c) 80

(d) 14

Ans = (a), 9

Q5. How many students like both Maths and Physics but not English?

(a) 14

(b) 5

(c) 10

(d) 6

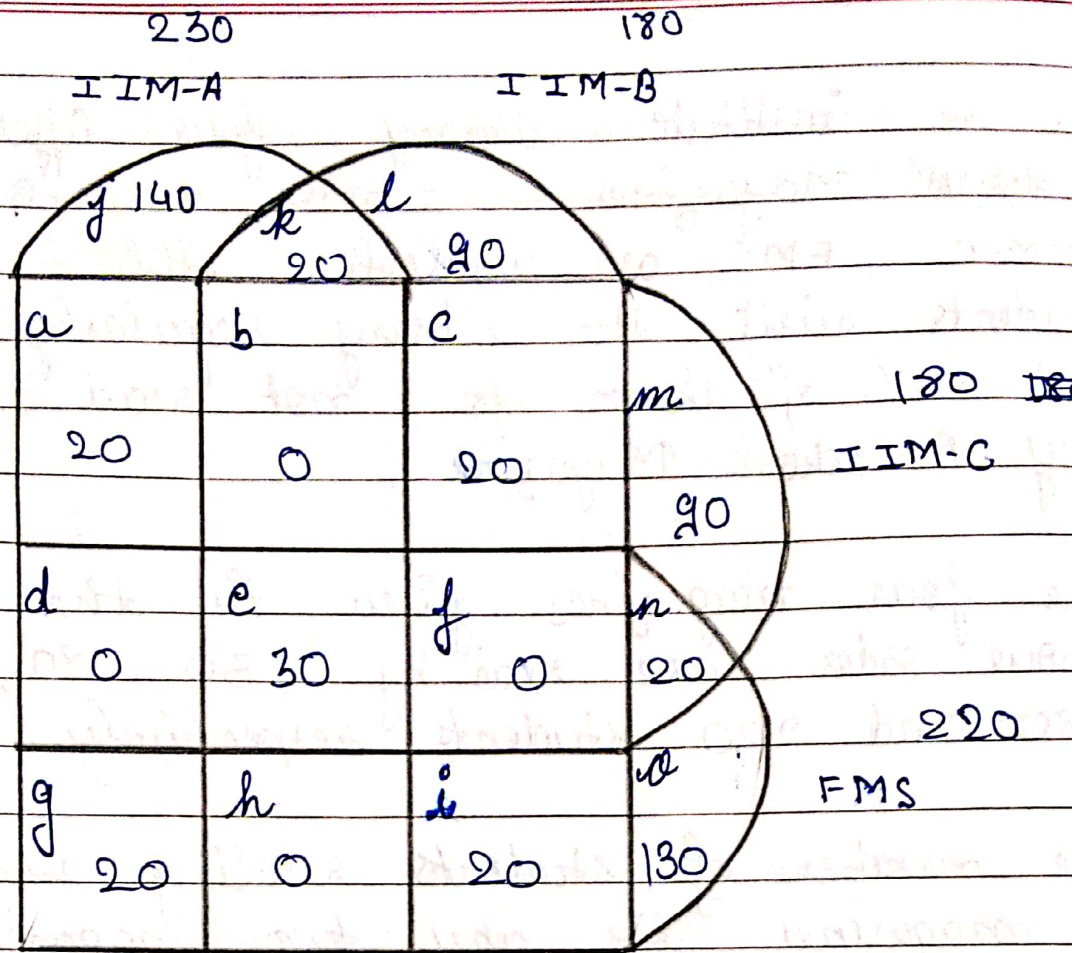
Ans = (b), 5

Q.9. - In an institute library, four different B-school Magazines - IIM-A, IIM-B, IIM-C, FMS are available. All students visit the library regularly but 20% of them do not read any B-school Magazine.

The four magazines given in the above order are read by 230, 180, 180 and 220 students respectively.

The number of students reading exactly 2 magazines for any two magazine is 20.

There are 30 students who read all the four magazines but there is no one who reads exactly three out of the four magazine.



There are 30 students who read all the four magazines.
 $\therefore e = 30$

Out of four magazines, students reading exactly two magazines is possible in 6 different combinations.

$${}^4C_2 = 6$$

IIM-A - IIM-B ; IIM-A - IIM-C ;
 IIM-A - FMS ; IIM-B - IIM-C ;
 IIM-B - FMS ; IIM-C - FMS.

each of these there is 20
 $\therefore 6 \times 20 = 120$.

$$a = c = g = i = k = n = 20$$

No one reads all the three magazines

$$d = b = f = h = 0$$

$$\text{TIM-A} = 230$$

$$230 = j + k + a + b + d + e + g + h$$

$$230 = j + 20 + 20 + 0 + 0 + 30 + 20 + 0$$

$$230 = j + 90$$

$$j = 230 - 90$$

$$j = 140$$

$$\text{TIM-B} = 180$$

$$180 = k + l + b + c + e + f + h + i$$

$$180 = 20 + l + 0 + 20 + 30 + 0 + 0 + 20$$

$$180 = l + 90$$

$$l = 180 - 90$$

$$l = 90$$

$$IIMC = 180$$

$$180 = a + b + c + m + n + f + e + d$$

$$180 = 20 + 0 + 20 + m + 20 + 0 + 30 + 0$$

$$180 = m + 90$$

$$m = 180 - 90$$

$$m = 90$$

—°

$$FMS = 220$$

$$220 = d + e + f + n + o + i + h + g$$

$$220 = 0 + 30 + 0 + 20 + o + 20 + 0 + 20$$

$$220 = o + 90$$

$$o = 220 - 90$$

$$o = 130$$

—°

$$o = 130$$

—°

Q1. What is the number of students who read only FMS magazine?

(a) 220

(b) 150

(c) 130

(d) 170

Ans = (c), 130

Q2. What is the number of students who read all the three magazine?

(a) 110

(b) 810

(c) 50

(d) 30

Ans = (d), 30

Q3. What is the number of students who read exactly ~~a~~ IIM-B and FMS magazine?

(a) 20

(b) 40

(c) 130

(d) 150

Ans = (a), 20

Q3 Q4. How many students read only IIM-A magazine?

(a) 230

(b) 140

(c) 160

(d) 250

Ans = (b), 140

Q5. How many students read only IIM-C magazine?

(a) 110

(b) 180

(c) 20

(d) 70

Ans = b (c), 90

Q. R. Six students Jaya, Kanya, Mina, Poonam, Rupa, Seema are to be divided into three teams of two students each for different groups of Finance, Marketing and HR.

Poonam does not want to be in the same team as Rupa.

Seema does not want to be in Finance team.

If Jaya is selected for Marketing, then Mina must be selected for HR.

Kanya and Mina must be selected in the same team.

From the given conditions,
 teams can be (Kauya, Mina),
 (Poonam, Jaya), (Rupa, Seema) or
 (Kauya, Mina), (Poonam, Seema),
 (Rupa, Jaya).

If Jaya is in Marketing team,
 then Mina is in HR team.

Seema cannot be in Finance team.
 Jaya cannot be in Marketing team.

So the possibilities of teams are as follows,

	Finance	Marketing	HR
1	Rupa, Jaya	Poonam, Seema	Kauya, Mina
2	Rupa, Jaya	Kauya, Mina	Poonam, Seema
3	Kauya, Mina	Poonam, Seema	Rupa, Jaya
4	Poonam, Jaya	Rupa, Seema	Kauya, Mina
5	Poonam, Jaya	Kauya, Mina	Rupa, Seema
6	Kauya, Mina	Rupa, Seema	Poonam, Jaya

Q1. If Rupa is selected for HR team, then who must be the team mate of Poonam?

(a) Taya

(b) Seema

(c) Mina

(d) Either (A) or (B)

Ans = (d), Either (A) or (B)

Q2. If Rupa is selected for Marketing, who must be her team mate?

(a) Taya

(b) Seema

(c) Poonam

(d) Mina

Ans = (b), Seema

Q3. If Seema wants to be in the Marketing, then in how many ways can the teams be selected?

(a) 5

(b) 4

(c) 3

(d) 2

Ans = (b), 4

Date ____/____/____

Q4. If Rupa wants to be in Finance, then in how many ways can the team be selected?

(a) 5

(b) 4

(c) 3

(d) 2

Ans = (d), 2

Q5. Who is not selected in Marketing team?

(a) Mina

(b) Rupa

(c) Seema

(d) Jaya

Ans = (d), Jaya

Q.5. ^{Teams} Six players Arun, Bina, Charlie, Dev, Emma, Firdous play a game. In the first round of the every team plays with every other team exactly once. If a team wins, it scores 40 points, if a team loses, it loses 10 points and a draw results in 20 points for each team. After the first round, the top two teams advance to the finals.

Results of the first round.

- (1) ~~Team~~ Team Charlie won nor lost a match.
- (2) Team Bina and Emma lost exactly one match.
- (3) Team Firdous lost exactly three matches.
- (4) Team Dev won as well as lost exactly two matches.
- (5) Team Arun lost exactly two matches.
- (6) The match played between team Emma and team Firdous was draw.

Date ____ / ____ / ____

Charlie had drawn a match with every other team the five matches should reflect in the other's score sheets also.

The number of matches drawn by Arun and Bina should be at least '1' each and Emma and Firdous should be at least '2'.

The number of matches drawn is 6;
There are 2 losses, so we must have 2 wins.

Win = 40 points, Loss = 10 points (deduct)
Team Arun, draw = 20 points.

$$\text{Wins} = 2 \times 40 = 80$$

$$\text{Loss} = 2 \times 10 = 20$$

$$\text{draw} = 1 \times 20 = 20$$

$$80 - 20 + 20 = 80 \text{ points}$$

Team Bina,

$$\text{Win} = 3 \times 40 = 120$$

$$\text{Loss} = 1 \times 10 = 10$$

$$\text{Draw} = 1 \times 20 = 20$$

$$120 - 10 + 20 = 130 \text{ points}$$

Team Charlie,

$$\text{Win} = 0 \times 40 = 0$$

$$\text{Loss} = 0 \times 10 = 0$$

$$\text{Draw} = 5 \times 20 = 100$$

$$0 - 0 + 100 = \underline{100 \text{ points}}$$

Team Dev,

$$\text{Win} = 2 \times 40 = 80$$

$$\text{Loss} = 2 \times 10 = 20$$

$$\text{Draw} = 1 \times 20 = 20$$

$$80 - 20 + 20 = \underline{80 \text{ points}}$$

Team Emma,

$$\text{Win} = 2 \times 40 = 80$$

$$\text{Loss} = 1 \times 10 = 10$$

$$\text{Draw} = 2 \times 20 = 40$$

$$80 - 10 + 40 = \underline{110 \text{ points}}$$

Team Jaiden,

$$\text{Win} = 0 \times 40 = 0$$

$$\text{Loss} = 3 \times 10 = 30$$

$$\text{Draw} = 2 \times 20 = 40$$

$$0 + 40 - 30 = \underline{10 \text{ points}}$$

Team	Win	Loss	Draw	Score
Arun	2	2	1	80
Bina	3	1	1	120
Charlie	-	-	5	100
Dev	2	2	1	80
Emma	2	1	2	110
Firdous	-	3	2	10

Q 1. Which ~~two~~ teams have highest score?

(a) Dev

(b) Arun

(c) Emma

(d) Bina

Ans = (d), Bina

Q 2. Which team have the lowest score?

(a) Emma

(b) Firdous

(c) Dev

(d) Bina

Ans = (b), Firdous

Q3. How many many teams have high score more than team Arun?

(a) 3

(b) 2

(c) 5

(d) 4

Ans = (a), 3

Q4. How many teams have the same score?

(a) 3

(b) 4

(c) 2

(d) 5

Ans = (c), 2

Q5. What is the total score of charlie team?

(a) 120

(b) 110

(c) 80

(d) 100

Ans = (d), 100

Q1. The table shows the income and expenditure in lakhs of X & Y in five different years.

year	Income		Expenditure	
	X	Y	X	Y
1995	510	-	-	375
1996	550	500	465	-
1997	-	-	370	380
1998	580	590	490	-
1999	515	-	-	495

Note = profit = Income - Expenditure.

$$\text{Profit \%} = \frac{\text{Profit}}{\text{Expenditure}} \times 100$$

Q.A. If the percentage profit of A^x in year 1995 is 20%. then his expenditure is by how much percent more or less than that of A^x in year 20 1998?

(a) 11% more

(b) 18% less

(c) 8% less

(d) 13% less.

Ans = (d), 13% less -

$$\text{Expenditure of X in 1995} = \frac{510}{1.2} = 425 \text{ lakh}$$

$$\therefore \text{Required percentage} = \frac{490 - 425}{490} \times 100$$

$$= 13\% \text{ less}$$

Q.B. In year 1998, A^x expended 10 lakh more than Y. Find what is the profit percentage? of Y in the same year?

(a) 23%

(b) 25%

(c) 35%

(d) 20%

Ans = (a), 23%

$$\text{Required profit percentage} = \frac{590 - 480}{480} \times 100 = 23\%$$

Qc. What is the average income (in lakhs) of X and Y together in year 1997 if percentage profit earned by X was 16% and that of Y was 17%?

(a) 438.2

(b) 436.9

(c) 408.2

(d) 440.9

Ans = (b), 436.9

$$\begin{aligned} \text{Income of X in 1997} &= \frac{16 \times 370}{100} + 370 \\ &= 429.2 \text{ lakh} \end{aligned}$$

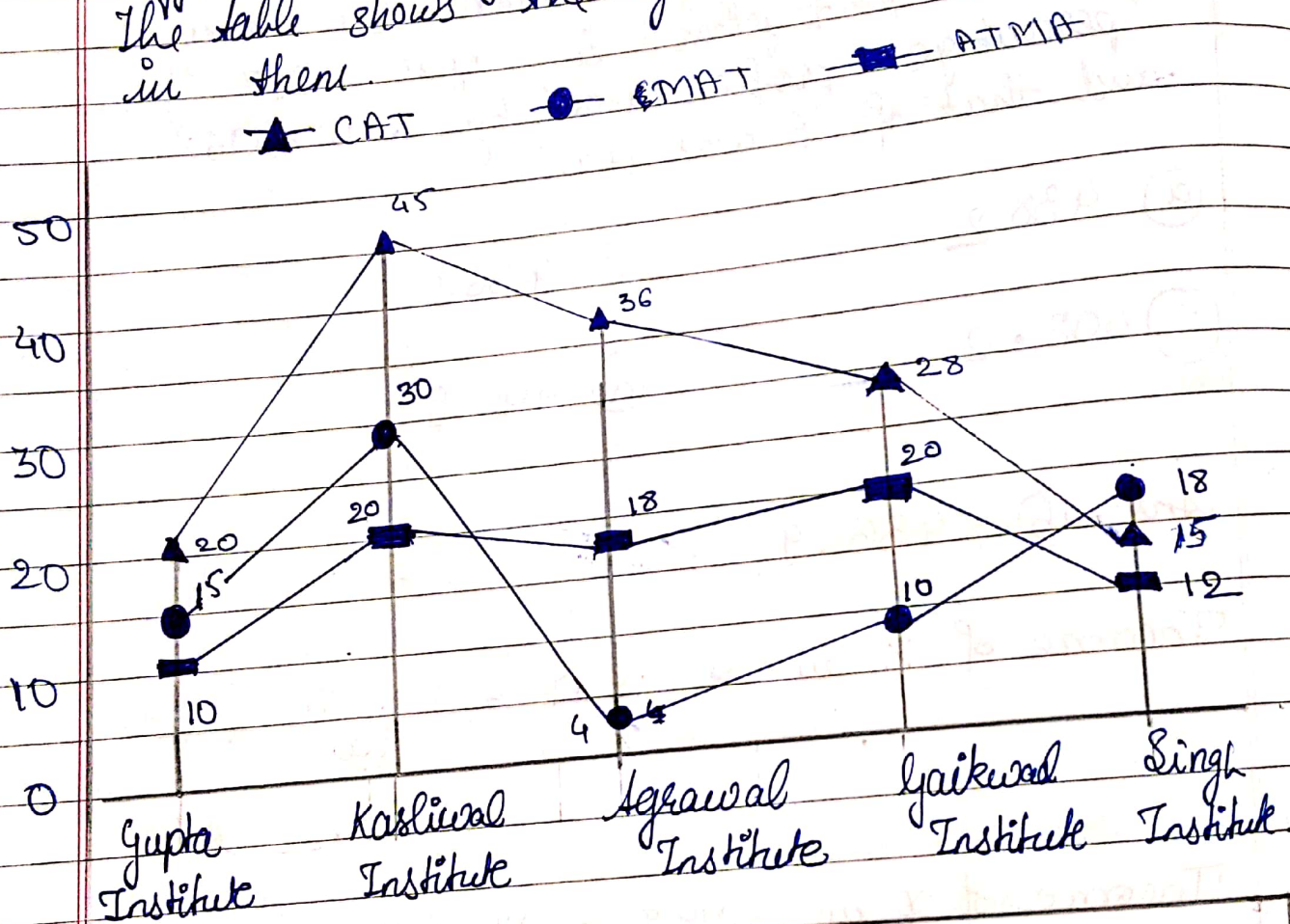
$$\begin{aligned} \text{Income of Y in 1997} &= \frac{17 \times 380}{100} + 380 \\ &= 444.6 \text{ lakh} \end{aligned}$$

$$\text{Total X and Y} = 429.2 + 444.6 = 873.8 \text{ lakh}$$

$$\therefore \text{Average} = \frac{873.8}{2} = 436.9 \text{ lakh}$$

Date ____/____/____

Q.2. The line graph shows the number of students who qualified three different MBA entrance exams from five different coaching institute. The table shows the female students in them.



Exams	Percentage of females				
	Gupta Institute	Kasliwal Institute	Agrawal Institute	Gaikwad Institute	Singh Institute
CAT	10	25	20	15	20
MAT	25	36	30	20	18
ATMA	16	32	28	20	24

Q.A- Find the total number of males who were qualified for CAT exam from all the five institutes together (in thousands).

(a) 14.85

(b) 114.85

(c) 115.45

(d) 112.85

Ans = (b), 114.85 thousand.

Total Number of males =

$$= \frac{96}{100} \times 20 + \frac{75}{100} \times 45 + \frac{80}{100} \times 36 + \frac{85}{100} \times 28 +$$

$$\frac{70}{100} \times 15 = 114.85 \text{ thousand}$$

Q.B. The total number of females ^{who} qualified from Kallival institute is what percent more than the number of females from the Singh Institute who qualified MAT exam?

(a) $160 \frac{2}{3} \%$

(b) 50%

(c) $233 \frac{1}{3} \%$

(d) 550%

Ans = (c), $233 \frac{1}{3} \%$

= Required percentage

$$= \frac{30 \times 36 - 18 \times 18}{100}$$

$$= \frac{30 \times 36 - 18 \times 18}{18 \times 18} \times 100 = 233 \frac{1}{3}\%$$

Q.C. What is the total number of

Q.C. What is the difference between total number of males from Agrawal institute and total number of males from Singh institute who qualified all the three exam?

(a) 8040

(b) 8600

(c) 8160

(d) 7660

Ans = (d), 7660

Number of male student from Agrawal institute =

$$\left(\frac{80}{100} \times 36 + \frac{70}{100} \times 4 + \frac{72}{100} \times 18 \right)$$

= 42.04 thousand

Number of male students from single institute =

$$\left(\frac{70}{100} \times 15 + \frac{82}{100} \times 18 + \frac{76}{100} \times 12 \right) = 34.38 \text{ thousand}$$

$$\therefore \text{Required difference} = 42.04 - 34.38 = 7.66 \text{ thousand}$$

QD. Total number of female students from Kasliwal etc institute and Gupta institute together who qualified for the MAT exam is what percent of total number of female student from Agrawal and Jaikwad institute for the same exam?

(a) 167%.

(b) 330%.

(c) 145%.

(d) 145%.

Ans = (b), 330%.

Total no. of female students from Kasliwal & Gupta institute who qualified MAT

$$= \frac{36}{100} \times 20 + \frac{25}{100} \times 15 = 14.55 \text{ thousand}$$

Date ____ / ____ / ____

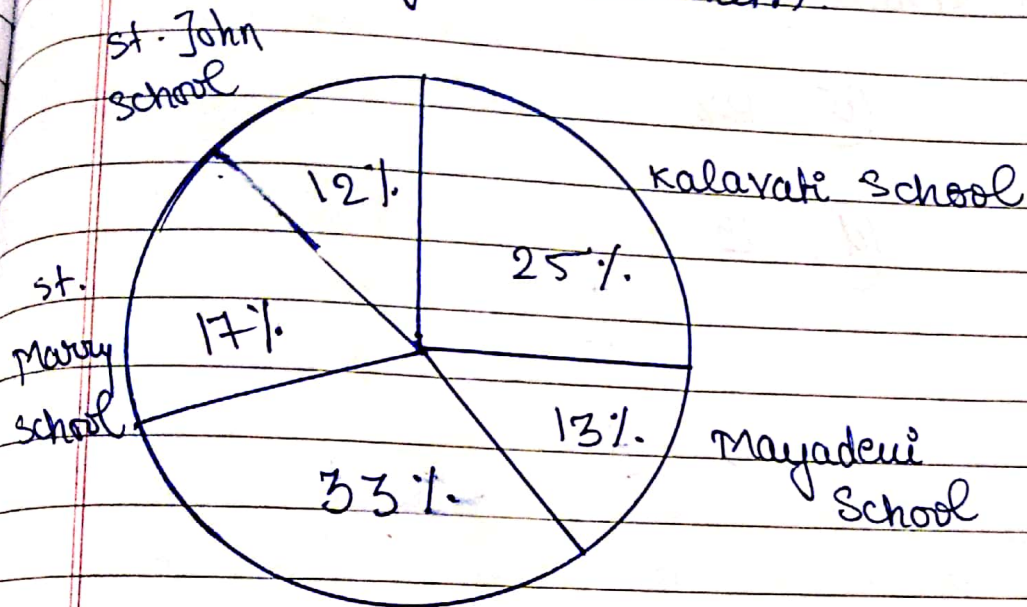
93

Total no. of females from Agrawal & Gaikwad institute who qualified MAT

$$= \frac{30}{100} \times 4 + \frac{20}{100} \times 16 = 4.4 \text{ thousand.}$$

$$\therefore \text{Required Percentage} = \frac{14.55}{4.5} \times 100$$
$$= 323.33\%$$

- Q3. Pie - chart shows the percentage break-up of employee working in various departments and table - chart shows the female employees in them.



Naik School

Total Number of Employees = 600.

Department	Number of Females
Naik School	42
St. John School	47
St. Mary School	49
Kalavati School	29
Mayadevi School	44

Date ____ / ____ / ____

Q A. The number of females working in Kalauati school is what percent of the total number of employees working in that school?

(a) 6

(b) 28

(c) 11

(d) 19

Ans: (d), 19.

Kalauati School

$$\text{total employee} = 600 \times \frac{25}{100} = 150.$$

Required No. of females = 29

$$\text{Required percentage} = 150 \times \frac{x}{100} = 29$$

$$\therefore x = 19.33$$

$$= \underline{19\%}$$

Q B. What is the respective ratio between the number of Males working in Mayaduni school and the total number of employee in that school?

(a) 17:39

(b) 15:37

(c) 18:43

(d) 13:41

Ans: (a) 17:39

Total employee in
Mayadevi School = $600 \times \frac{13}{100} = 78$.

$$\text{Number of Males} = 78 - 44 = 34$$

$$\therefore \text{Male} : \text{Total} \\ 34 : 78 \\ 17 : 39$$

9c. The number of females working in St. Mary school forms what percent of the total number of employee in all the schools together?

(a) 7.73

(b) 9.31

(c) 5.23

(d) 8.17

Ans: (d), 8.17

Total employees all together = 600

No. of females in St. Mary School = 49

$$\text{Required Percentage} = 600 \times \frac{x}{100} = 49$$

$$x = 8.17\%$$

QD. What is the respective ratio of the number of Males working in St. John School to the number of females working in that school?

(a) 41:68

(b) 16:33

(c) 25:47

(d) 35:59

Ans = (c), 25:47.

Total No. of employees
in St. John School = $600 \times \frac{12}{100} = 72$.

No. of females = 47

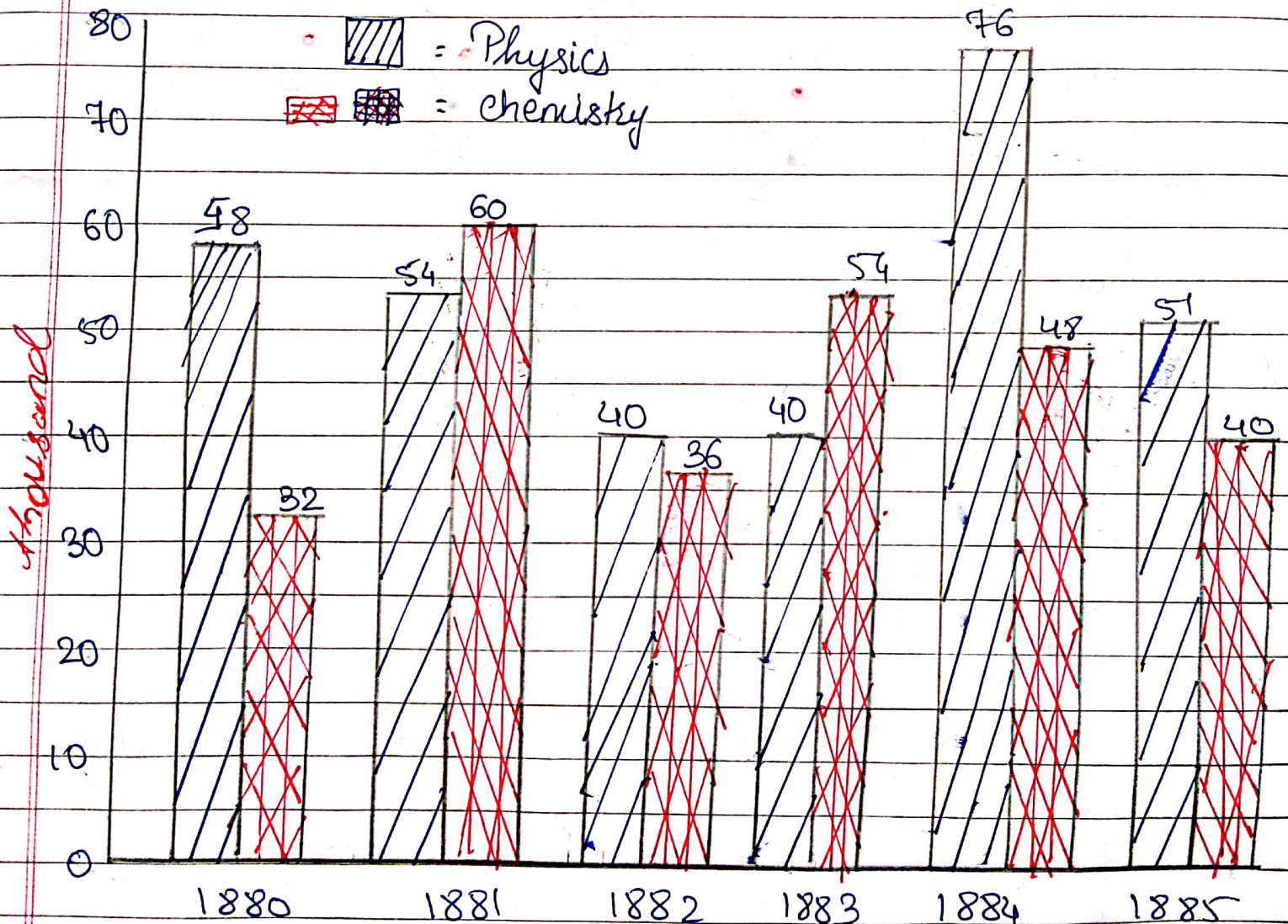
No. of Males = $72 - 47 = 25$

∴ Male : Female

25 : 47

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Q 4. Bar-graph shows the number of physics and chemistry books produced by a company in different years and the line graph shows the percentage of sale of these books in different years.

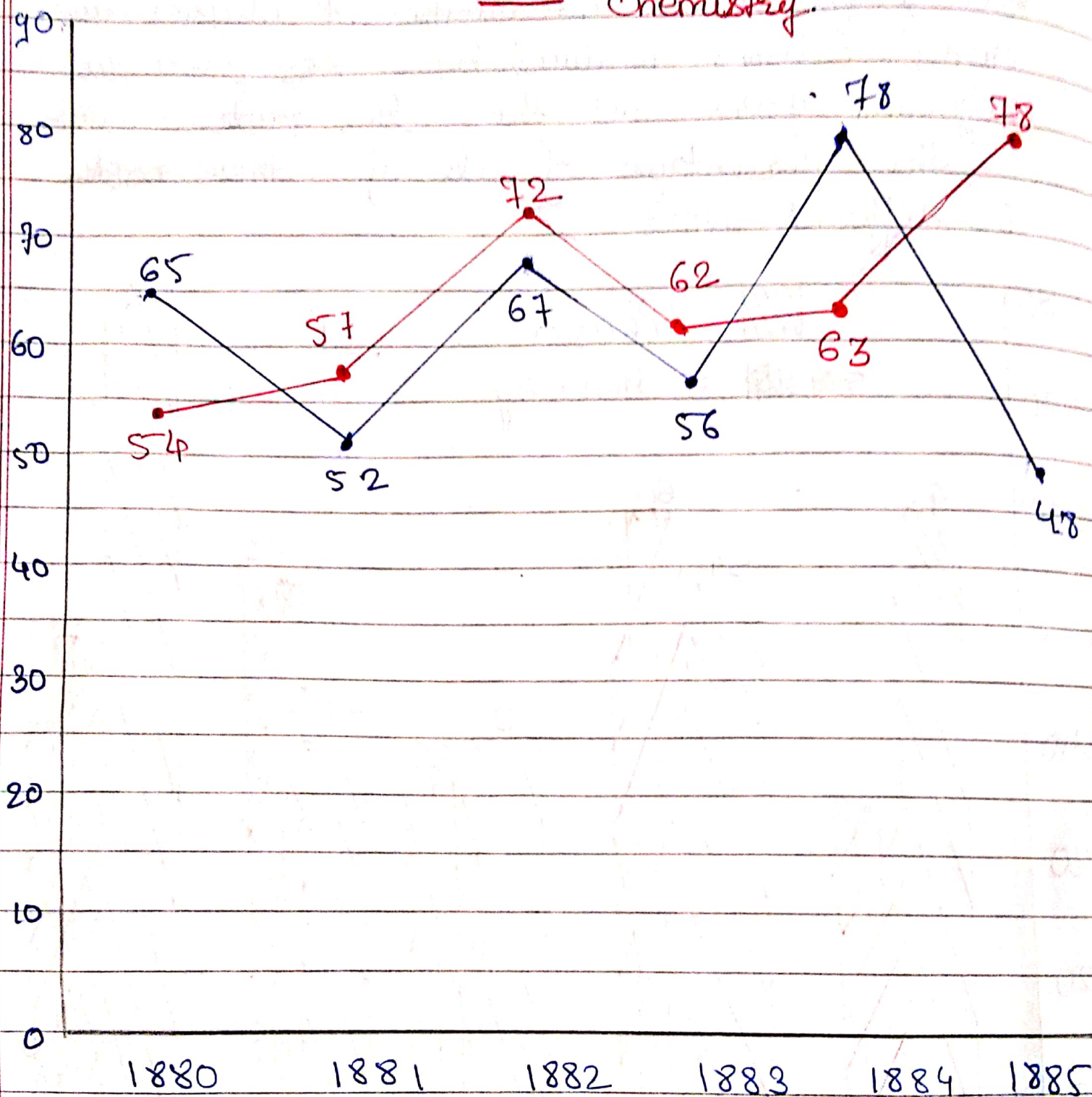


Date ____ / ____ / ____

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Saathi

— Physics
— Chemistry



Q. A. what is the total number of physics books sold in all 6 years together?

(a) 195,240

(b) 1,92,240

(c) 198,740

(d) 198,280

Ans = (c), 198,740

$$1880 \Rightarrow 58 \times \frac{65}{100} = 37.7$$

$$1881 \Rightarrow 54 \times \frac{52}{100} = 28.08$$

$$1882 \Rightarrow 40 \times \frac{67}{100} = 26.8$$

$$1883 \Rightarrow 40 \times \frac{56}{100} = 22.4$$

$$1884 \Rightarrow 76 \times \frac{78}{100} = 59.28$$

$$1885 \Rightarrow 51 \times \frac{48}{100} = 24.48$$

$$37.7 + 28.08 + 26.8 + 22.4 + 59.28 + 24.48 = 198.74$$

$$= 198740$$

Q.B. what is the total number of sold physics books in the year 1883?

(a) 33480

(b) 33560

(c) 32190

(d) 34100

Ans = (a), 33480.

Production of physics books in 1883 = 54 thousand

Books sold =

$$54 \times \frac{62}{100} = 33.48$$

$$= 33480$$

Q.C. what is the difference between the number of chemistry books sold in 1884 and physics books unsold in 1881?

(a) 6500

(b) 4100

(c) 5000

(d) 4320

Ans = (d), 4320

Production of Chemistry books in 1889, = 48000.

Chemistry books sold in 1889,

$$48 \times \frac{63}{100} = 30.24$$

$$= \cancel{302} \quad 30240.$$

Production of Physics books in 1881 = 54000

Physics books sold in 1881,

$$54 \times \frac{52}{100} = 28.08$$

$$= 28080.$$

$$\text{unsold} = 54000 - 28080 = 25920$$

$$\begin{aligned} \text{difference required} &= 30240 - 25920 \\ &= \underline{4320} \end{aligned}$$

QD. What is the number of unsold chemistry books in 1882?

(a) 10200

(b) 10080

(c) 20100

(d) 10800

Ans = (b), 10080.

Production of chemistry books in 1882 = 36000

Sold chemistry books =

$$36 \times \frac{72}{100} = 25.92$$

$$= 25920$$

$$\text{unsold} = 36000 - 25920$$

$$= \underline{\underline{10080}}$$

Q.E. Total number of Physics books unsold in all the years together.

(a) 126266

(b) 319000

(c) 120260

(d) 198740

Ans = (c), 120260

Total Physics books production =

$$58 + 54 + 40 + 40 + 76 + 51 = 319$$

$$= 319 \times 1000$$

$$= 319000$$

$$\text{Sold} = 198740$$

$$\text{unsold} = 319000 - 198740$$

$$= \underline{\underline{120260}}$$