MBA PRO 2025 (CAT + OMETs)

Data Interpretation & Logical Reasoning

DPP: 3

Basics of LR Based DI

Directions (1-5) Read the following passage and answer the given questions.
In a society of 100 people, a survey has been conducted to know how many people like Chai and Coffee. It was found that 56 people like Chai, 34 people like only Coffee, 14 people like both Chai and Coffee.

Q1 How many people are there who like coffee?
(A) 44 (B) 48
(C) 34 (D) 14

Q2 How many people are there who like none of chai and coffee?
(A) 10
(B) 5
(C) 15
(D) Cannot be determined

Q3 How many people like exactly one type of drinks?
(A) 75 (B) 42
(C) 76 (D) 34

Q4 What is the difference between the number of people who like only Chai and only Coffee?
(A) 8 (B) 10
(C) 12 (D) 4

Q5 Find the number of people who like atleast one of Chai and Coffee.
(A) 76 (B) 80
(C) 90 (D) 88

Directions (6-10) Read the following passage and answer the given questions.
In a class of 189 students of Physicswallah Vidhyapeeth. 66 students passed in Physics, 53 students failed in Chemistry only and 21 students failed in both subjects

Q6 Find the number of people who passed in chemistry?
(A) 74 (B) 115
(C) 102 (D) 13

Q7 Find the number of people who failed in exactly 1 subject.
(A) 155 (B) 53
(C) 102 (D) 21

Q8 How many students are there who passed in both subjects?
(A) 102 (B) 21
(C) 155 (D) 13

Q9 Find the number of students who failed in atleast 1 subject.
(A) 155 (B) 21
(C) 176 (D) None of these

Q10 Find the difference in the number of students who passed in only Chemistry and only Physics.

Directions (11-15) Read the following passage and answer the given questions.
The following table shows the marks obtained by four students Amal, Bimal, Chandan, and Deepak in English and Hindi.

	English	Hindi
Amal	45	
Bimal		50
Chandan	44	
Deepak		46

It is also known that :
(1) The ratio of the marks obtained by Amal in

English and Hindi are in the ratio of 9: 11 respectively.
(2) The ratio of the marks obtained by Bimal in English and Hindi are in the ratio of 4: 5 respectively.
(3) The ratio of the marks obtained by Chandan in English and Hindi are in the ratio of 11: 13 respectively.
(4) The ratio of the marks obtained by Deepak in English and Hindi is 22: 23 respectively.

Q11 What is the total score of Amal in English and Hindi?

Q12 What is the difference of marks obtained by Chandan and Amal in Hindi?

Q13 What is the difference of marks obtained by Bimal and Deepak in English?

Q14 What is the sum of the marks scored by Bimal and Deepak in English?

Q15 What is the average of the marks obtained by all students in Hindi?

(A) 51.25 (B) 49.50
(C) 50.75 (D) 51.75

Answer Key

Q1	(B)
Q2	(A)
Q3	(C)
Q4	(A)
Q5	(C)
Q6	(B)
Q7	(A)
Q8	(D)
Q9	(C)
Q10	49
Q11	100
Q12	3
Q13	4
Q14	84
Q15	(C)

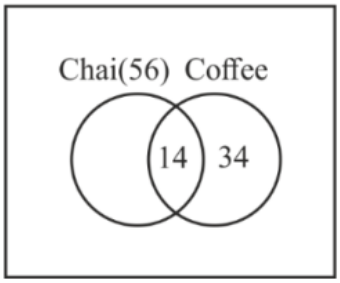
Hints & Solutions

Note: scan the QR code to watch video solution

Q1. Text Solution:

Topic: Venn Diagram

100 people are there out of which 56 people like chai, 34 people like coffee only and 14 people like both chai and coffee.

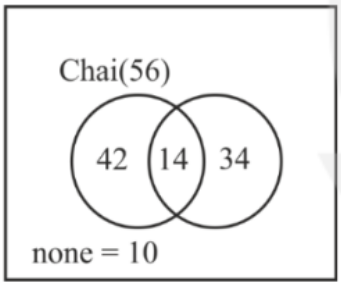


If 56 people like chai and 14 people like both chai and coffee then (56 – 14) = 42 people are there who like chai only.

Total 100 people are there so number of people who like none of chai and coffee

= 100 – 42 – 14 – 34

=10

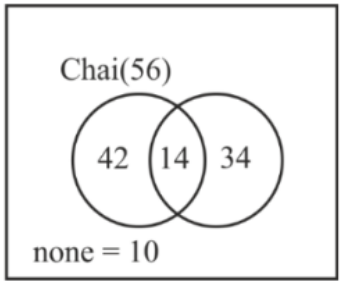


Required number of people = 14 + 34 = 48

Video Solution:

Q2. Text Solution:

Topic: Venn Diagram

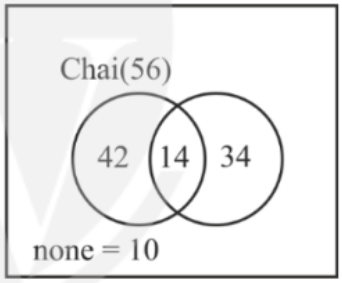


10 people are there who like none of chai and coffee

Video Solution:

Q3. Text Solution:

Topic: Venn Diagram

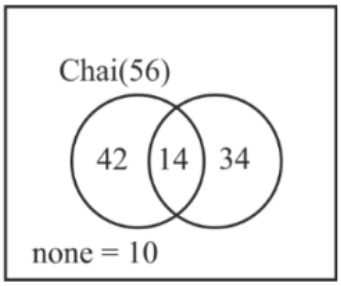


Required number of people = 42 + 34 = 76

Video Solution:

Q4. Text Solution:

Topic: Venn Diagram

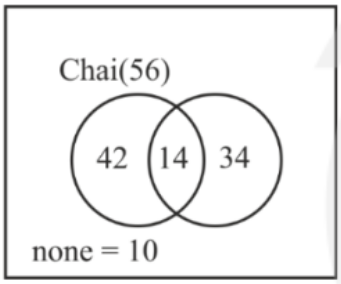


Required difference = 42 – 34 = 8

Video Solution:

Q5. Text Solution:

Topic: Venn Diagram



Required number of people = 42 + 14 + 34 = 90

Video Solution:

Q6. Text Solution:

Topic: Venn Diagram

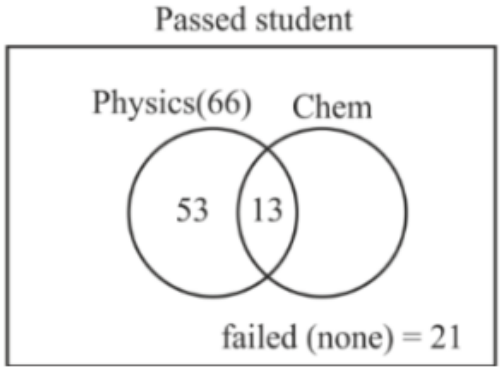
There were total of 189 students

66 students passed in Physics

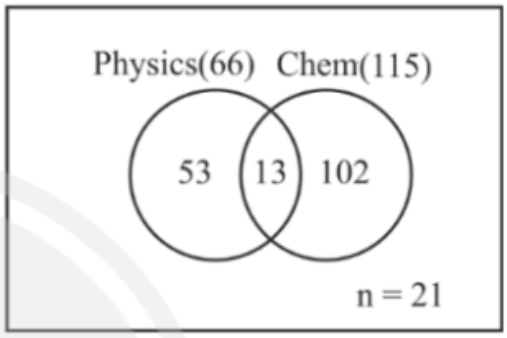
53 students failed in Chemistry only means these students are passed only in Physics

21 students failed in both subjects.

This can represented as,



Number of students who passed in chemistry only = 189 – 53 – 13 – 21 = 102 students.



Required number of people = 13 + 102 = 115

Video Solution:

Q7. Text Solution:

Topic: Venn Diagram

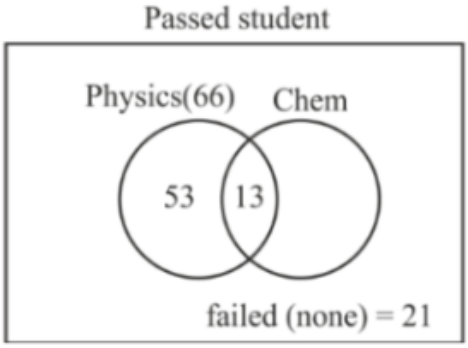
There were total of 189 students

66 students passed in Physics

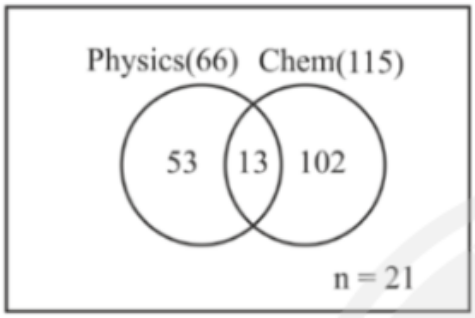
53 students failed in Chemistry only means these students are passed only in Physics

21 students failed in both subjects.

This can represented as,



Number of students who passed in chemistry only = 189 – 53 – 13 – 21 = 102 students.



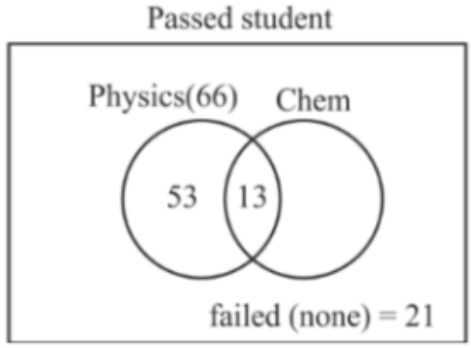
53 students failed in only chemistry
102 students failed in physics
Required sum = 53 + 102 = 155

Video Solution:

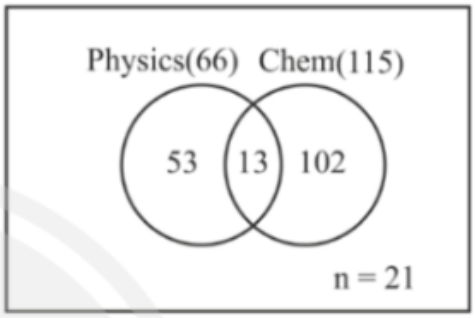
Q8. **Text Solution:**

Topic: Venn Diagram

There were a total of 189 students
66 students passed in Physics
53 students failed in Chemistry only means these students passed only in Physics
21 students failed in both subjects.
This can represented as,



Number of students who passed in chemistry only = 189 – 53 – 13 – 21 = 102 students.



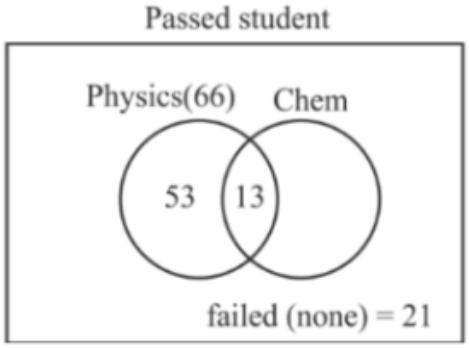
From the Venn diagram, 13 students are there who passed in both subjects.

Video Solution:

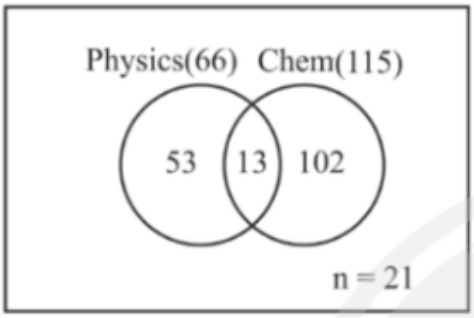
Q9. **Text Solution:**

Topic: Venn Diagram

There were total of 189 students
66 students passed in Physics
53 students failed in Chemistry only means these students are passed only in Physics
21 students failed in both subjects.
This can represented as,



Number of students who passed in chemistry only = 189 – 53 – 13 – 21 = 102 students.



Required number of students = 53 + 102 + 21 = 176 students.

Or one can directly find this as,189 – 13 = 176

Video Solution:

Q10. **Text Solution:**

Topic: Venn Diagram

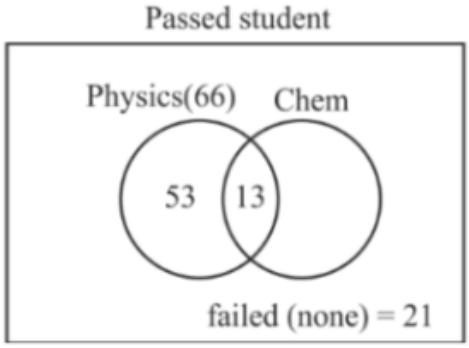
There were a total of 189 students

66 students passed in Physics

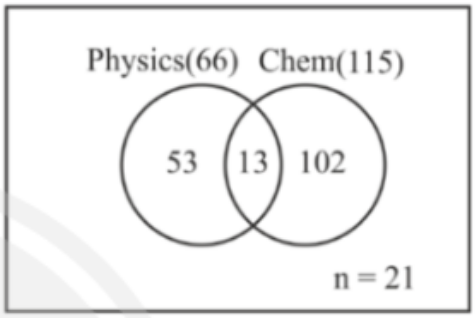
53 students failed in Chemistry only means these students passed only in Physics

21 students failed in both subjects.

This can represented as,



Number of students who passed in chemistry only = 189 – 53 – 13 – 21 = 102 students.



Required difference = 102 – 53 = 49

Video Solution:

Q11. **Text Solution:**

Topic: Tables

The ratio of marks obtained by Amal in English and Hindi is 9 : 11. So, 9x = 45

x = 5

11x = 11 × 5 = 55 Marks (Hindi)

The ratio of marks obtained by Bimal in English and Hindi is 4 : 5

So, 5y = 50

y = 10

4y = 40

For Chandan:

English : Hindi = 11 : 13

11z = 44

z = 4

13z = 52

For Deepak:

English : Hindi = 22 : 23

23a = 46

a = 2

22a = 44

	English	Hindi	Total
Amal	45	55	100
Bimal	40	50	90
Chandan	44	52	96
Deepak	44	46	90

100 is the correct answer.

Video Solution:

Q12. Text Solution:

Topic: Tables

	English	Hindi
Amal	45	55
Bimal	40	50
Chandan	44	52
Deepak	44	46

Required difference = 55 – 52 = 3

Video Solution:

Q13. Text Solution:

Topic: Tables

	English	Hindi
Amal	45	55
Bimal	40	50
Chandan	44	52
Deepak	44	46

Required difference = 44 – 40 = 4

Video Solution:

Q14. Text Solution:

Topic: Tables

	English	Hindi
Amal	45	55
Bimal	40	50
Chandan	44	52
Deepak	44	46

Required sum = 40 + 44 = 84

Video Solution:

Q15. Text Solution:

Topic: Tables

	English	Hindi
Amal	45	55
Bimal	40	50
Chandan	44	52
Deepak	44	46

Required average = $\frac{55+50+52+46}{4}$ = 50.75

Video Solution: