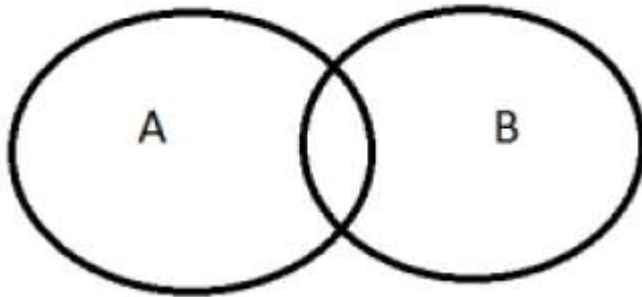# Topic:
Syllogism
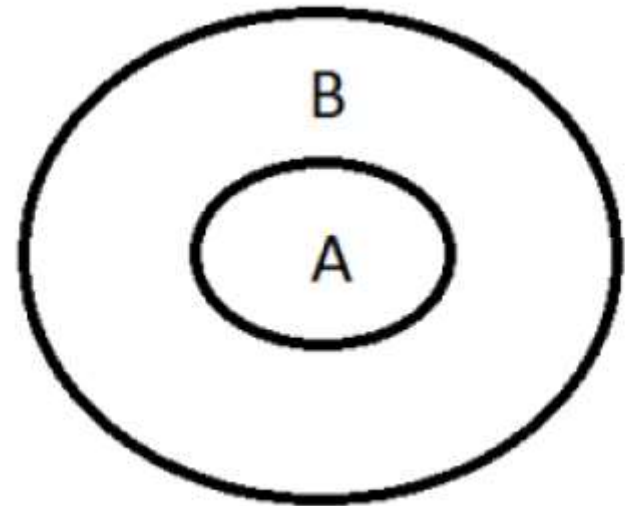
- There are 3 relations in syllogism.

1) Definite relationship.

2) Either and OR

3) Possibility

- <u>CONCEPT 1 Some A is B.</u>
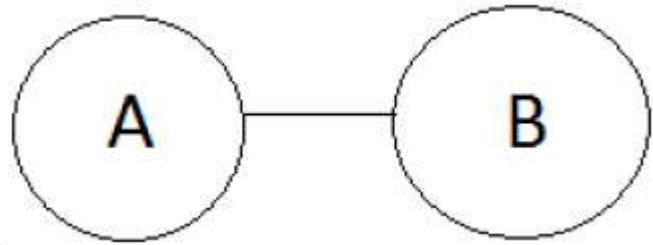- The Diagram for Some A is B is

- There are 2 definite conclusions,
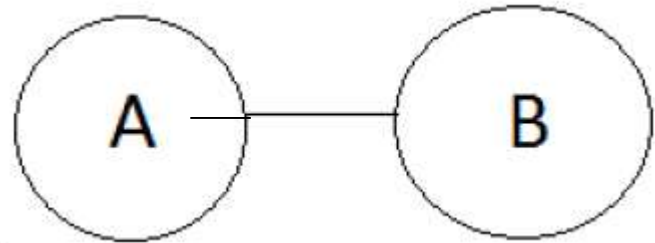- 1) Some A is B
- 2) Some B is A

- <u>CONCEPT 2 – All A is B</u>
- There are 3 definite Conclusions,

1) All A is B.

2) Some A is B.

3) Some B is A.

- <u>Concept 3 – No A is B</u>
- There are 4 definite Conclusions,

1) No A is B

2) No B is A

3) Some A is not B

4) Some B is not A

- Concept 4 – Some A are not B
- There are only 1 definite Conclusion,

1) Some A are not B.

- Note-

1) Positive statement not lead to negative statement and vice-versa.

2) Some- Many/ Maximum/Minimum/ Most of them/ 99%/ 50%. These are called particular statement.

3) All- Any/Every/Each/100%/All that. These are called universal statement.
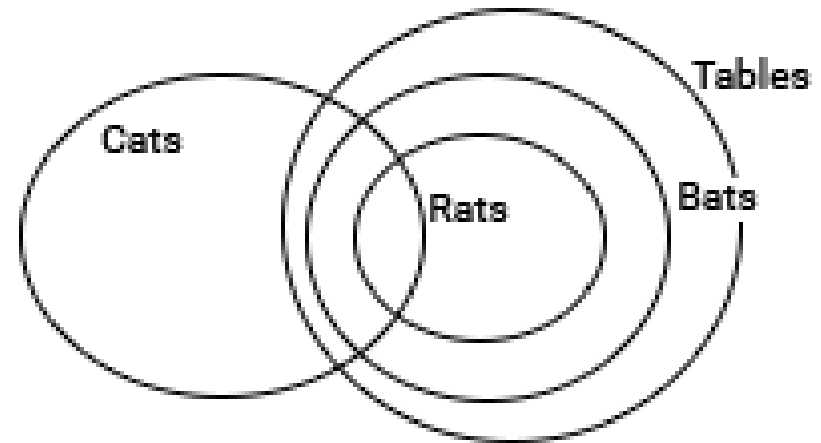
Statements: Some Cats are Rats.

- All bats are tables.
- All Rats are Bats.

Conclusion: I. Some Cats are bats

- II. All bats are rats
- III. All tables are cats
- IV. All bats are cats
- 1. Only I & II follow
- 2. Only II follows
- 3. Only I & IV follow
- 4. None of these
- Ans:4
- Clearly, from the diagram Conclusion I is true. So option 4.

- Statements: Some ships are boats. All boats are submarines. Some submarines are yatches. Conclusion:I. Some yatches are boats.
- II. Some submarines are boats.
- III. Some submarines are ships.
- IV. Some yatches are ships
- 1. All follow
- 2. Only II and III follow
- 3. Only III follows
- 4. Only IV follows
- Ans:2
- From the diagram we can infer that some submarines are boats and some submarines are ships. So 2nd option.
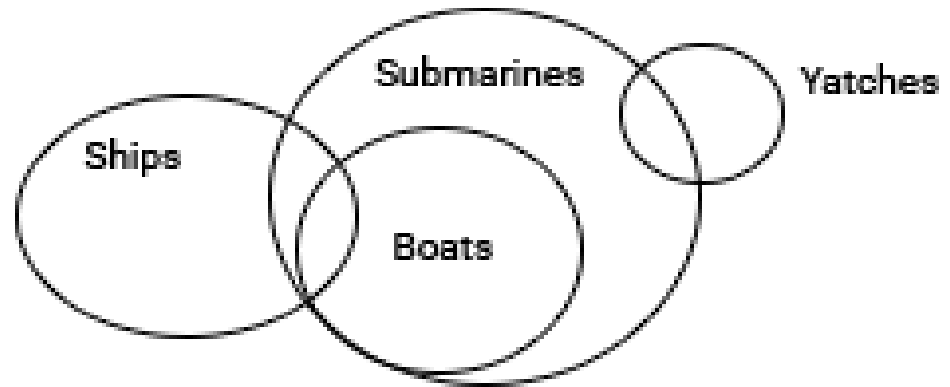
Statements: All Carrots are birds.
- Some telephones are Carrots.
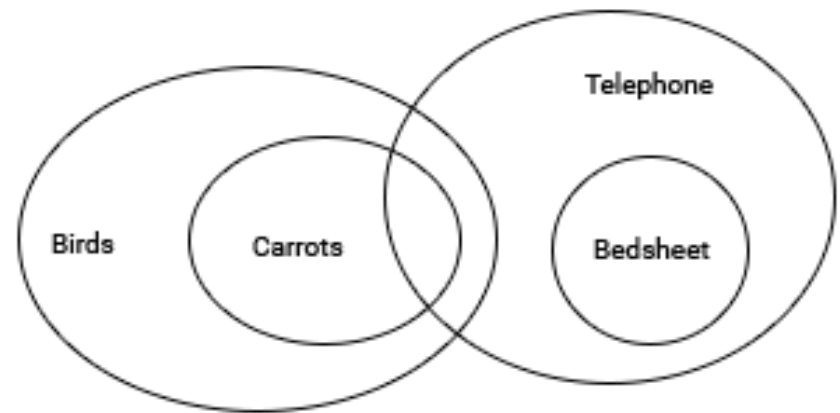- All bedsheets are telephone.

Conclusion:

I. All bedsheet are birds

II. Some bedsheet are birds

III. Some birds are telephone

IV. All telephone are birds

- 1. Only I follows
- 2. Only II follows
- 3. Only I and III follow
- 4. Only III follows
- Ans:4
- The diagram gives all the possibilities. But only conclusion III is true.
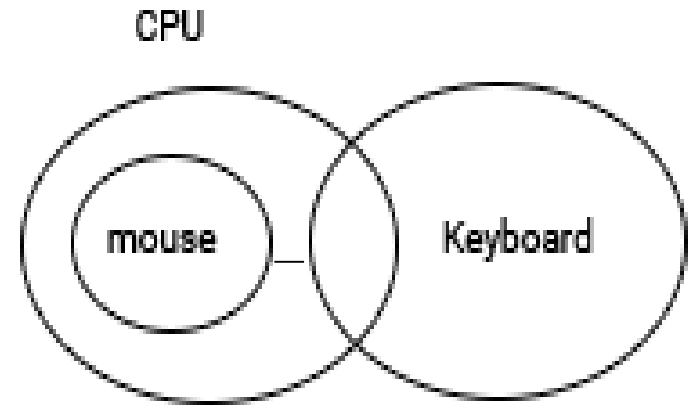
- Statements: Most CPUs are keyboards. No keyboard is a Mouse. All Mouses are CPU.
  Conclusion:

I. Some keyboards are CPU

II. All CPU's are Mouse

III. No Mouse is a keyboard

IV. Some Mouse are keyboard

- 1. Only I follows
- 2. Only II and III follow
- 3. Only I and III follow
- 4. Only II follows
- Ans:3
- Clearly from the diagram, I and III are true.
-

CPU

mouse   Keyboard

- Statements: All Samosas are Jalebi. All Jalebis are Tikki. All Tikkis are Barfi
  Conclusion:

I. All Jalebis are Barfi

II. All Tikkis are Samosas

III. All Samosas are Barfi

IV. All Barfi are Jalebi

- 1. Only I and II follow
- 2. Only I and III follow
- 3. Only II and III follow
- 4. All follow
- Ans:2
- Clearly from the diagram, I and III are true.

Barfi
Tikki
Jalebi
Samosa
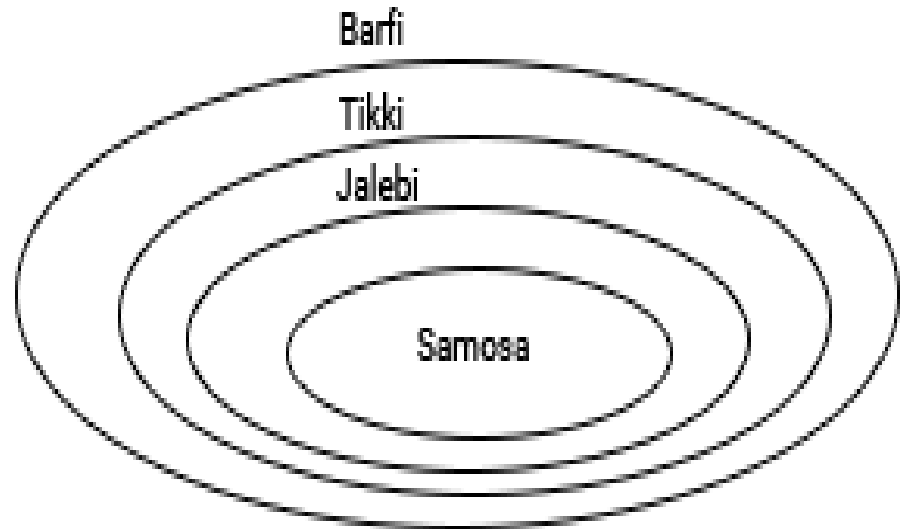
Statements: All locks are keys.

* All keys are bats.

Conclusions:

* I. Some bats are locks.

* II. Some locks are keys.

(1) if only conclusion I follows.

(2) if only conclusion II follows.

(3) if both conclusions I & II follow.

(4) if no conclusion follows.
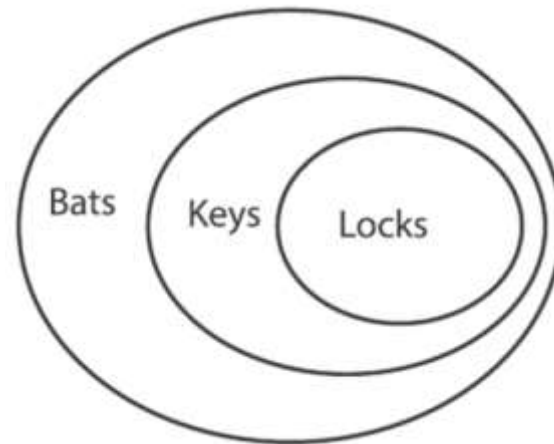
Ans: 3

- Statements: Some cups are pots.
- All pots are tubes.
- Conclusions:
- I. Some pots are cups.
- II. Some tubes are cups.

(1) if only conclusion I follows.

(2) if only conclusion II follows.

(3) if both conclusions I & II follow.

(4) if no conclusion follows.

Ans: 3

- Statements: All bags are books.
- Some purses are bags.
- Conclusions:
- I. Some books are purses.
- II. Some books are bags
(1) if only conclusion I follows.
(2)   if only conclusion II follows.
(3) if both conclusions I & II follow.
(4) if no conclusion follows.
Ans: 3

- Statements: Some cars are jeeps.

- All pens are cars.

- Conclusions:

- I. No pen is jeep

- II. Some jeeps are cars.

(1) if only conclusion I follows.

(2)   if only conclusion II follows.

(3) if both conclusions I & II follow.

(4) if no conclusion follows.

Ans: 2

- Statements: Some cats are dogs.

- No dog is cow.

- Conclusions:

- I. No cow is cat.

- II. No dog is cat.
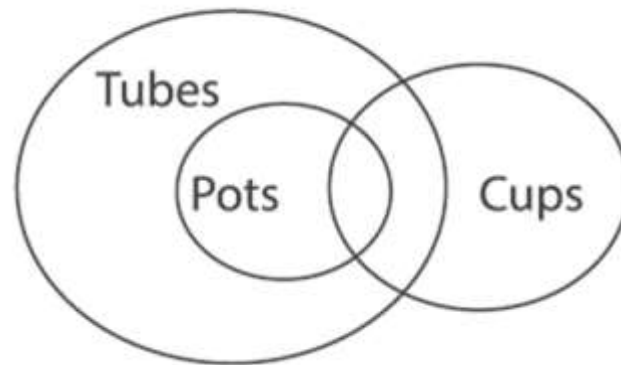
(1) if only conclusion I follows.

(2) if only conclusion II follows.

(3) if both conclusions I & II follow.

(4) if no conclusion follows.

Ans: 4
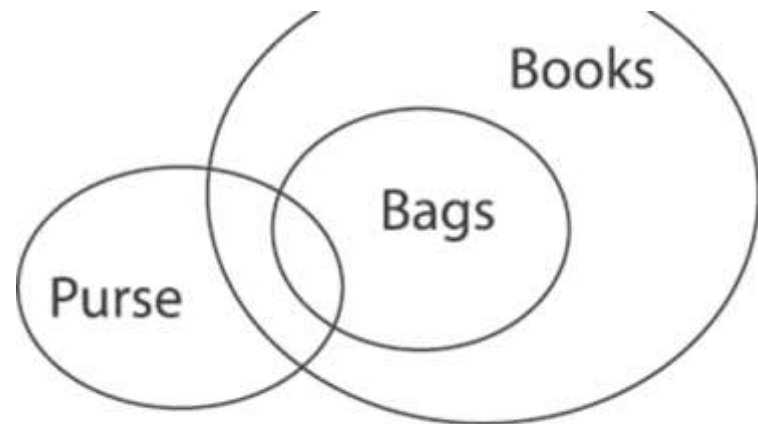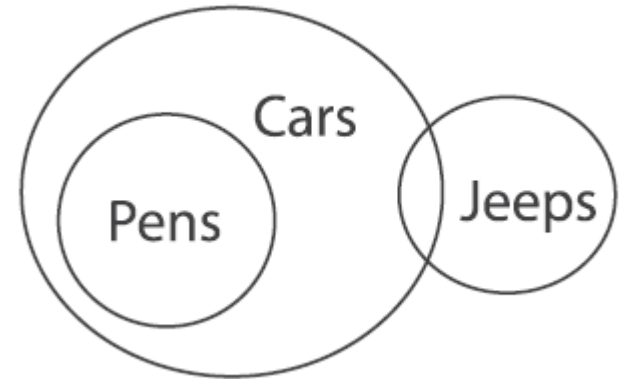
or
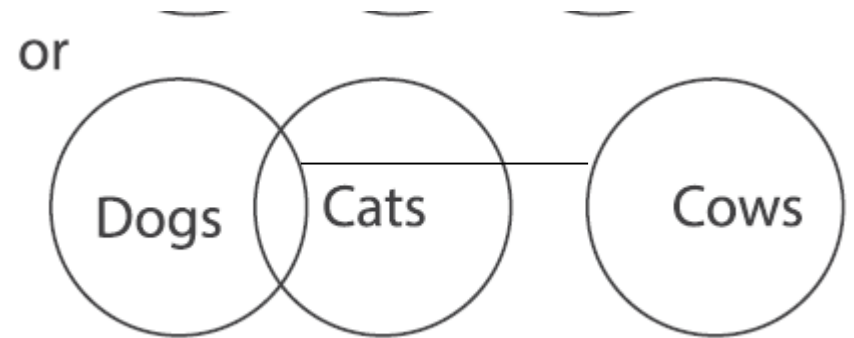
- **Statement:**
  i) Some cats are white.
  ii) All white are dog.
  iii) No dog is snow.

  Conclusion:
  i) No cats are dogs.
  ii) Some cats are dogs.
  iii) No White is Snow.
  (1)   if only conclusion I and II follows.
  (2)   if only conclusion II and III follows.
  (3)   if both conclusions I & II follow.
  (4)   if no conclusion follows.
- Ans: 2
- Statement one and two both are positive, so conclusion must be positive. Now, from given conclusion we can see that conclusion one is not at all correct because it is negative.
  Now, in conclusion two we can say that it might be correct because conclusion is positive but we have to solve it for knowing correct conclusion.

- **Statements:** Some actors are singers. All the singers are dancers.

- **Conclusions:**

1. Some actors are dancers.

2. No singer is actor.

- **A.**Only (1) conclusion follows

- **B.**Only (2) conclusion follows

- **C.**Either (1) or (2) follows

- **D.**Neither (1) nor (2) follows

- **E.**Both (1) and (2) follow

- Ans:A
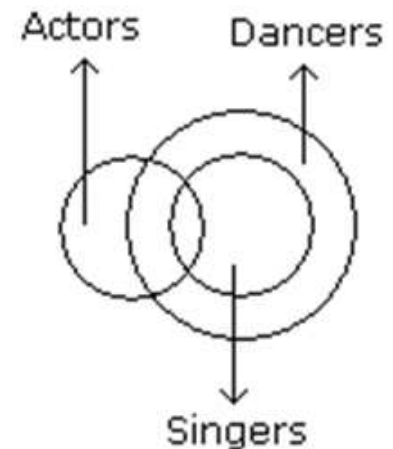
Only (1) follows.

-
  Statements: Some mangoes are yellow. Some tixo are mangoes.
- **Conclusions:**
1. All mangoes are yellow.
2. Tixo is a yellow.
- **A.** Only (1) conclusion follows
- **B.** Only (2) conclusion follows
- **C.** Either (1) or (2) follows
- **D.** Neither (1) nor (2) follows
- **E.** Both (1) and (2) follow
- Ans:D
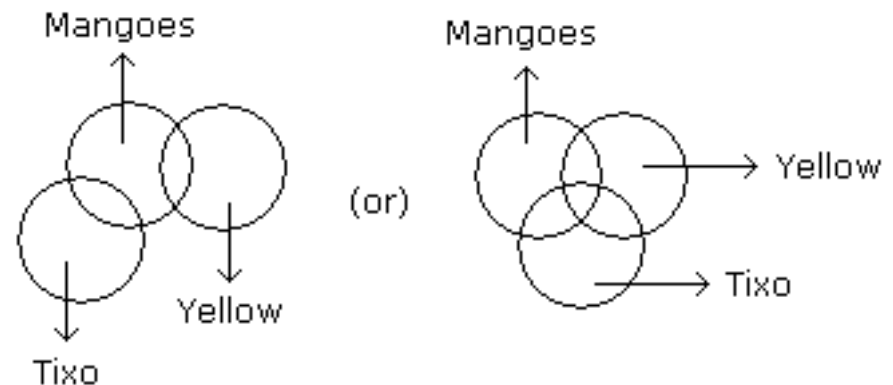
None of the two follows.

- **Statements:** Some ants are parrots. All the parrots are apples.

- **Conclusions:**

1. All the apples are parrots.

2. Some ants are apples.

- **A.** Only (1) conclusion follows

- **B.** Only (2) conclusion follows

- **C.** Either (1) or (2) follows

- **D.** Neither (1) nor (2) follows

- **E.** Both (1) and (2) follow

- Ans:B
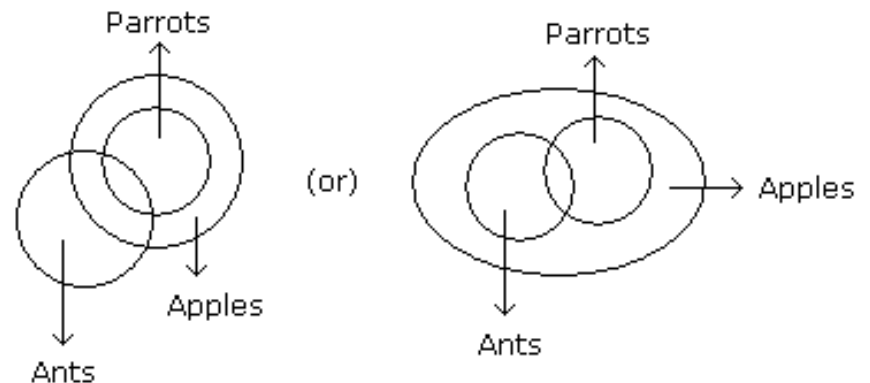
Only (2) follow.

- **Statements:** Some papers are pens. All the pencils are pens.
- **Conclusions:**
1. Some pens are pencils.
2. Some pens are papers.
- **A.**Only (1) conclusion follows
- **B.**Only (2) conclusion follows
- **C.**Either (1) or (2) follows
- **D.**Neither (1) nor (2) follows
- **E.**Both (1) and (2) follow
- Ans:E
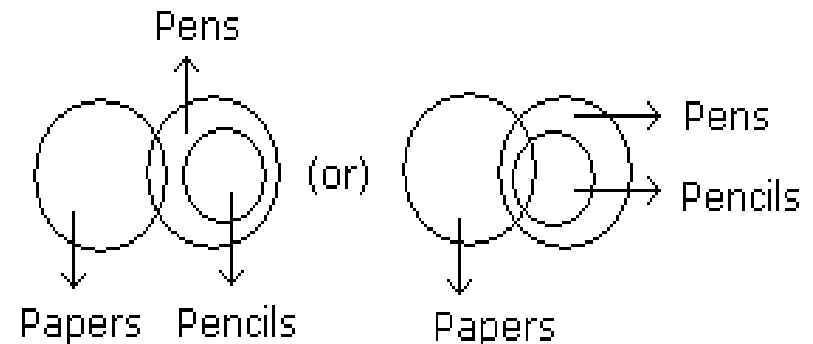
Both (1) and (2) follow.

- **Statements:** No door is dog. All the dogs are cats.
- **Conclusions:**

1. No door is cat.
2. No cat is door.
3. Some cats are dogs.
4. All the cats are dogs.

- **A.** Only (2) and (4)
- **B.** Only (1) and (3)
- **C.** Only (3) and (4)
- **D.** Only (3)
- **E.** All the four
- **Answer:** Option **D**
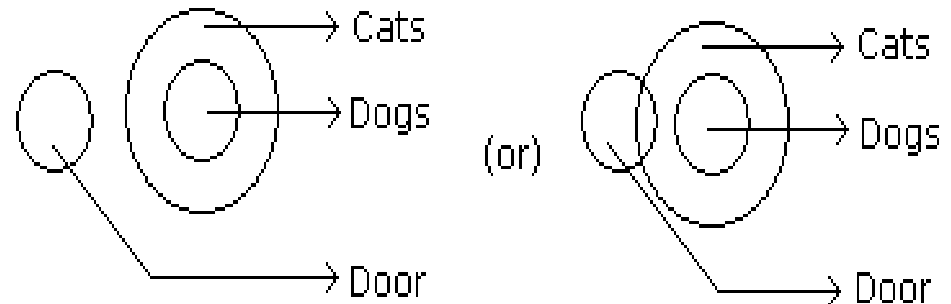
Only (3) follows.

- **Statements:** All green are blue. All blue are white.
- **Conclusions:**

1. Some blue are green.
2. Some white are green.
3. Some green are not white.
4. All white are blue.

- **A.** Only (1) and (2)
- **B.** Only (1) and (3)
- **C.** Only (1) and (4)
- **D.** Only (2) and (4)
- **Answer:** Option **A**
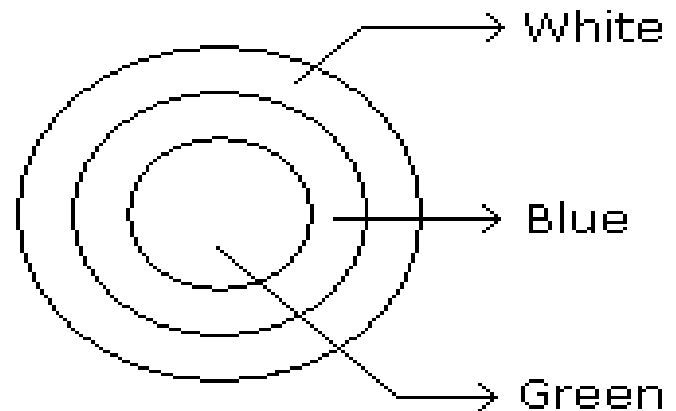
Only (1) and (2) follows.

- Statements:
- Some receipts are challans. Some challans are papers. Some papers are books. All books are files.
- Conclusions:

I.   Some papers are files.

II.   Some books are receipts.

III.   No book is receipt.

(a) Only I follows

(b) Only I and II follow

(c) Only I & either II or III follow

(d) Only I and III follow

Ans. (C)
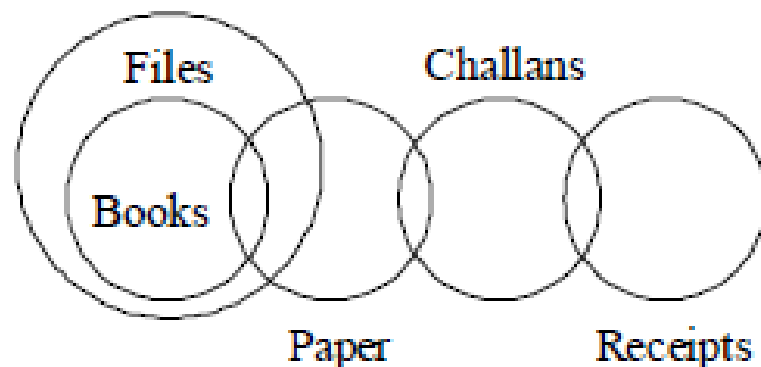
- Concept-5 Either & OR Conditions

1) Two Conclusion

2) Individual statement wrong.

3) One positive other negative.

4) Subject and Predicate either should be same or replaceable to each other.

Note- There should be at least one particular statement.

Note- You can also do with common sense.

Statement: All radios are pencils

Some pencils are files

Conclusion: I. No radio is file

II. Some files are radio

A) Only I follows

B) Only II follows

C) Either I or II follows

D) Neither I nor II follows

E) Both I and II follows

Ans. (C)

- **Statements:** Some diggers are jokers
  All jokers are cute.
  Conclusion: I. Some diggers are cute.
  II. No diggers are cute.
  III. Some diggers are not cute
  IV. All diggers are cute.
  A) I and III follows
  B) Either II or IV follows
  C) II and either III or IV follows
  D) Either III or IV and I follows
  E) Either I or II and either III and IV follows
- Ans. (D)

- **Statements:** Some bags are pockets. No pocket is a pouch.

- **Conclusions:**

I.   No bag is a pouch.

II. Some bags are not pouches.

III. Some pockets are bags.

IV. No pocket is a bag.
     A) either I or IV follows
     B) II & III follow
     C) I & III follow
     D) All follow

- Ans. (B)

- **Statements:** All cones are cylinders. Some cones are squares. No square is a rectangle. **Conclusions:**
  I. At least some cones being rectangle is a possibility.
  II. Some cylinders are cones.
  A) only I follows
  B) only II follows
  C) either I or II follows
  D) neither I nor II follow
  E) both I and II follow
- Ans. (E)

- Concept 6 – All A is B.
- There are 2 possible case.

1) All B are A is Being possible.

2) Some B are not A is being possible.
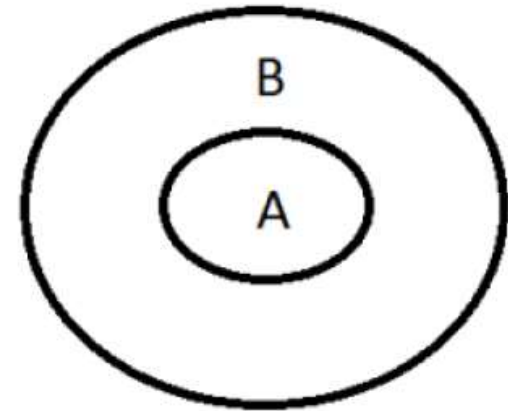
- Concept 7- Some A are B.
- There are 4 possible case.

1) All A are B is possibility.

2) All B are A is possibility.

3) Some A are not B is possibility.

4) Some B are not A is possibility.
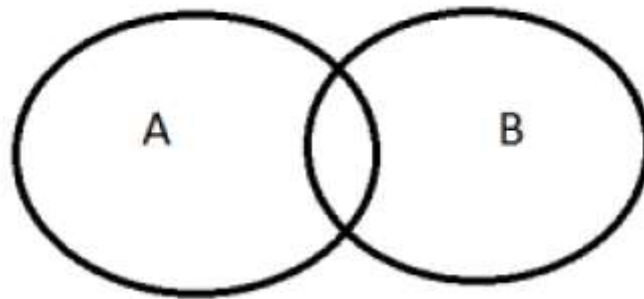
- Concept-8 No A is B.
- There are no possible case.
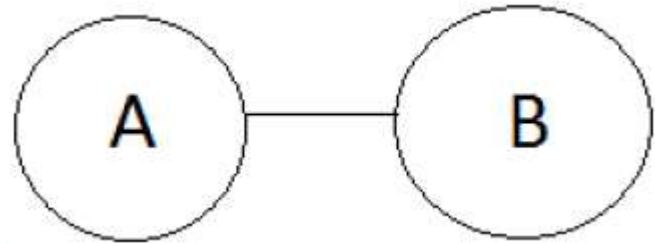
- Concept- 9 Some A are not B.
- There are 6 possible case

1) No A is B is possibility.

2) No B is A is possibility.

3) Some A is B is possibility.

4) Some B is A is possibility.

5) Some B are not A is possibility.

6) All B are A is possibility.

7) All A are B is possibility.
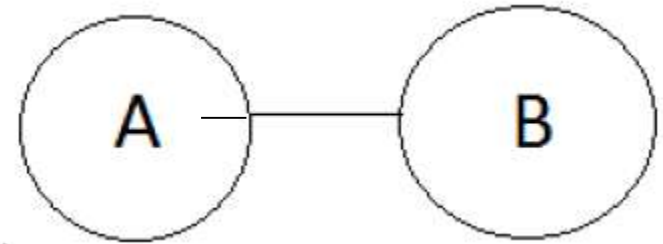
Statements- All B are A. All A are C. Some C are D. No D is G. Some G are X.

Conclusions-

I.   Some A are D is possibility.

II.   Some B are D is possibility.

III. All C are G is possibility.

IV. All X are A is possibility.

V.   No G is D is possibility.

(a) I & II follows   (b) I, II & IV follows

(c) I, II & V follows   (d) I, II, IV & V follows

Ans. (b)

- Statements:
- Some cups are not bolts.
- All dusters are balls.
- All cups are balls.
- Conclusions:
- I. All bolts are cups.
- II. Some dusters are cups is a possibility.

A) Only I follows
B) Only II follows
C) Either I or II follows
D) Neither I nor II follows
E) Both I and II follows

Ans. (B)

- Statements:
- All marks are grades.
- No grade is a score.
- All scores are letters.
- Some letters are characters.
- Conclusions:
- I. Some scores are characters.
- II. All marks being letters is a possibility.
- III. All characters are grades is a possibility.

A) Only II follows
B) Only II and III follows
C) All follows
D) Only I nor III follows
E) None of these

Ans. (B)

- Statements:
- No cat is rat.
- All rats are dog.
- Some dog are lion.
- Conclusions:
- I. No cat is lion.
- II. No dog is a rat.
- III. Some dog is rat is a possibility.
- IV. At least some lions are cat.

A) Either 1 or 2 and 3 follows
B) Either 1 or 4 follow
C) Either 1 or 4 and 3 follow
D) All follows
E) None of these

- Ans. (B)

- Question below contains two conclusions followed by statements. Find from which of the statements given, both the conclusions follow.

- Conclusions:

- I. Some Red is Blue

- II. Some Blue is Black

- Statements:

A) All Red is yellow. All Yellow is Black. Some Black is Blue.
B) All Red is Yellow. Some Yellow is Black. All Black is Blue.
C) No Red is Yellow. All Yellow is Black. Some Black is Blue.
D) Some Red is Yellow. All Yellow is Black. No Black is Blue.
E) None of these

- Ans. (E)

- Question below contains two conclusions followed by statements. Find from which of the statements given, both the conclusions follow.
- Conclusions:
- I. Some Oranges are not Kiwis
- II. Some Apples are not Bananas
- Statements:

A) Some Kiwis are Apples. No Apple is Orange. All Orange are Bananas.
B) All Kiwis are Apples. Some Apples are Oranges. All Oranges are Bananas.
C) No Kiwi is Apple. All Apples are Oranges. No Orange is Banana.
D) No Kiwi is Apple. No Apple is Orange. All Oranges are Bananas.
E) None of these

- Ans. (C)

- Statements:
- Some Rubber are Pen.
- All Pen are Pencil.
- All Rubber are scale.
- Conclusions:
- I. Some Rubber being Pencil is a possibility.
- II. Some Scale being Pen is a possibility.

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

Ans. (d)

- Statements:
- All violet are green.
- All yellow are orange.
- Some violet are orange.
- No yellow is violet.
- Conclusions:
- I. All orange can be violet.
- II. All green being yellow is a possibility.
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either conclusion I or conclusion II follows
(d) If neither conclusion I nor conclusion II follows
(e) If both conclusion I and conclusion II follow
Ans. (d)

- Statements:
- All Bag is Pouch.
- Some Bag is Curtain.
- No Curtain is Cloth.
- Some Pouch is Floor.
- Conclusions:
- I. Some Pouch are not Cloth.
- II. All Floor can be Curtain.
- III. All Pouch are Bag.
- IV. Some Cloth can be Pouch.
- (a)   None follows
- (b)   Only I, II and IV follow
- (c)   Only III follows
- (d)   Only II & III follow
- (e)   None of these
Ans. (b)

Ranking

The position of a thing/person etc. in a definite order is called as 'Rank'.

In this type of test, relative position or rank of some person or object is given and candidates are required to find the rank or position of other person or object.

Type - 1
Rank of a person in a queue

Position of person from upward
= [Total no. of persons – position of person from down] + 1.

Position of person from downward
= [Total no. of persons – position of person from up] + 1.

Position of person from right
= [Total no. of persons – position of person from left] + 1.

Position of person from left
= [Total no. of persons – position of person from right] + 1.

Example : Anita ranks twelfth in a class of forty six. What will be her rank from the last?

(a) 34th   (b) 35th

(c) 36th   (d) 37th

Sol. (b) Rank of Anita from the last

= [Total students – her rank from first] + 1

= (46 – 12) + 1 = 35th

Type - 2

Total no. of persons
= [Position of person from upward/right + Position of person from downward/left] – 1.

Total = L + R – 1
Total = T + B - 1

Example : Rakesh ranks 7th from the top and 28th from the bottom in a class. How many students are there in the class?
(a) 34   (b) 35
(c) 36   (d) 37

Sol. (a) Total no. of students = [7 + 28] – 1 = 34.

Type - 3

When two persons change their rank in a queue

If two persons are on a definite position from up and down (or left and right) and they interchange their ranks, then

Total no. of persons in the queue :

= [present position of first person + previous position of second person] – 1

.

Example :In a row of girls, Shilpa is eighth from the left and Reena is seventeenth from the right. If they interchange their positions, Shilpa becomes fourteenth from the left. How many girls are there in the row?

(a) 34　　　　(b) 35

(c) 30　　　　(d) 37

Sol. (c) Total no. of girls

= [present position of Shilpa + previous position of Reena] – 1

= (14 + 17) – 1 = 30

Type - 4

Previous position of first person or present position of second Person

= Difference of the two positions of second person + previous position of second person.

OR

= Difference of the two positions of first person + previous position of second person.

.

Example : In a row of children, Dipa is fifth from the left and Vijay is sixth from the right. When they interchange their places among themselves, Dipa becomes thirteenth from the left. Then what will be Vijay's position from the right ?

(a) 4th   (b) 14th
(c) 8th   (d) 12th

Sol. (b) Present position of Vijay = Difference of the two positions of Dipa + previous position of Vijay
= (13 − 5) + 6 = 14th

Practice Questions

1. In a class of forty students, Samir's rank from the top is twelfth. Alok is eight ranks below Samir. What is Alok's rank from the bottom?

(a) 20th

(b) 21st

(c) 22nd

(d) 19th.

2. Akshay is 16th from the left end in the row of boys and Vijay is 18th from the right end. Avinash is 11th from Akshay towards the right end and 3rd from Vijay towards the right end. How many boys are there in the row?

(a) Data inadequate

(b) 42

(c) 40

(d) 48

3. In a row of children facing North, Ritesh is twelfth from the left end. Sudhir who is twenty-second from the right end is fourth to the right of Ritesh. Total how many children are there in the row?

(a) 35

(b) 36

(c) 37

(d) 34

4. In a row of 40 students facing North, Kailash is 6th to the left of Soman. If Soman is 30th from the left end of the row, how far is Kailash from the right end of the row?

(a) 17th

(b) 16th

(c) 15th

(d) 26th

5. Madhu is l8th from the left end and Sandhu is 11th from the right end of a row of 40 children. How many children are there between Madhu and Sandhu in the row?

(a) 10

(b) 9

(c) 12

(d) 11

6. In a class of 20 students, Alisha's rank is 15th from the top. Manav is 4 ranks above Alisha. What is Manav's rank from the bottom ?

(a) 10th

(b) 11th

(c) 9th

(d) 12th

LOGARITHM

WHAT IS LOGARITHM?????

- A logarithm is the power to which a number must be raised in order to get some other number.

- For example, the base ten logarithm of 100 is 2, because ten raised to the power of two is 100:

    log 100 = 2

    because

    $$10^2 = 100$$

- The base unit is the number being raised to a power.

- There are logarithms using different base units.

- We can also take 2 as the base unit.
- For instance, the base two logarithm of eight is three, because two raised to the power of three equals eight:

$$\log_2 8 = 3$$

because

$$2^3 = 8$$

Base Ten Logarithms

- Base ten logarithms are expressions in which the number being raised to a power is ten. The base ten log of 1000 is three:

  log 1000 = 3

  $$10^3 = 1000$$

- A base ten log is written as

  log

  and in equation form as

  log a = r

Natural Logarithms

- Logarithms with a base of 'e' are called natural logarithms.

- What is 'e'?

- 'e' is a very special number approximately equal to 2.718. 'e' is a little bit like pi in that it is the result of an equation and it's a big long number that never ends.

- A natural logarithm is written

  ln

and in equation form as

  ln a = r

Relationship between Logarithm and Exponential

- Logarithms are the "opposite" of exponentials, just as subtraction is the opposite of addition and division is the opposite of multiplication.

- Logs "undo" exponentials or we can say logs are the inverses of exponentials.

antilog

$a^x = m$ ....is equivalent to........... $\log_a m = x$

log
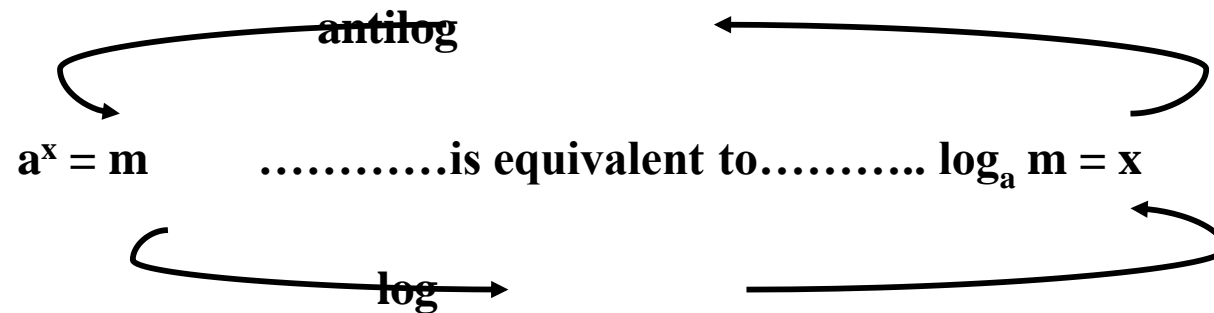
Characteristic and Mantissa

- CHARACTERISTIC
  - It is the integral part of the value
- MANTISSA
  - It is the decimal part of the value

Characteristic and Mantissa

$$\text{Log}_{10}\ 15\ =\ 1.176\ =\ \boxed{1} + \boxed{0.176}$$

Characteristic   Mantissa

Laws of Logarithms

- **Product rule** - multiplication becomes addition

$$\log_a(xy) = \log_a x + \log_a y$$

- **Quotient rule** - division becomes subtraction

$$\log_a\left(\frac{x}{y}\right) = \log_a x - \log_a y$$

- **Power rule** - exponent becomes multiplier

$$\log_a(x)^y = y\log_a x$$

Laws of Logarithms

- $\log_x(x) = 1$

- $\log_a 1 = 0$

- $\log_a x = \dfrac{1}{\log_x a}$

- Change of Base Formula

$$\log_a b = \frac{\log_c b}{\log_c a}$$

- If base is not mentioned, then base will be 10.

In mathematics logarithms were developed for making complicated calculations simple.

$$x = 365.49 * 1474.3$$

$$\log_{10}(x) = \log_{10}(365.49 * 1474.3)$$

$$\log_{10}(x) = \log_{10}(365.49) + \log_{10}(1474.3)$$

$$\log_{10}(x) = \log_{10}(10^2 * 3.6549) + \log_{10}(10^3 * 1.4743)$$

$$\log_{10}(x) = 2 + \log_{10}(3.6549) + 3 + \log_{10}(1.4743)$$

$$\log_{10}(x) = \log_{10}(10^5) + \log_{10}(3.6549) + \log_{10}(1.4743)$$

Q: The value of $\log_{(.01)}(1000)$ is:

Q: The logarithm of 0.0625 to the base 2 is:

Q: If $\log_8 X = 2/3$, then the value of x is :

Q: If $\log_x y = 100$ and $\log_2 x = 10$, then the value of y is :

Q: The value of $\log_2 (\log_5 625)$ is:

Q: If $\log_2 [\log_3 (\log_2 X)] = 1$, then x is equal to:

Q: If $\log_{10} 125 + \log_{10} 8 = x$, then x is equal to :

Q: $(\log_5 3) \times (\log_3 625)$ equals :

Q: If $\log_{12} 27 = a$, then $\log_6 16$ is :

Q: The value of $(\log_3 4)(\log_4 5)(\log_5 6)(\log_6 7)(\log_7 8)(\log_8 9)$ is:

Q: If $\log_{10} 2 = 0.3010$, what is the number of digits in 2^{64}

NUMBER, RANKING & TIME SEQUENCE TEST

NUMBER TEST

- How many 7's are there in the following series which are not immediately followed by 3 but immediately preceded by 8 ?

8 9 8 7 6 2 2 6 3 2 6 9 7 3 2 8 7 2 7 7 8 7 3 7 7 9 4

(a) 10
(b) 3
(c) 2
(d) 0
(e) None of these

8 9 8 [7] 6 2 2 6 3 2 6 9 7 3 2 8 [7] 2 7 7 8 7 3 7 7 9 4

Answer : C

Question

- In the following number sequence, how many such even numbers are there which are exactly divisible by its immediate preceding number but not exactly divisible by its immediate following number ?
3 8 4 1 5 7 2 8 3 4 8 9 3 9 4 2 1 5 8 2

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

3 8 4 1 5 7 2 [8] 3 4 [8] 9 3 9 4 2 1 5 8 2

Answer : B

Question

- Nitin was counting down from 32. Sumit was counting upwards the numbers starting from 1 and he was calling out only the odd numbers. What common number will they call out at the same time if they were calling out at the same speed ?

    (a) 19
    (b) 21
    (c) 22
    (d) They will not call out the same number
    (e) None of these

Answer

- Answer : D
- Nitin :

32 31 30 29 28 27 26 25 24 23 22 21 20...

- Sumit :

1 3 5 7 9 11 13 15 17 19 21 23 26...
  Clearly, both will never call out the same number.

Question

- How many numbers amongst the numbers 9 to 54 are there which are exactly divisible by 9 but not by 3 ?

  (a) 8
  (b)6
  (c) 5
  (d) Nil

Answer

- Answer : D
- Any number divisible by 9 is also divisible by 3.

Question

- A number is greater than 3 but less than 8. Also, it is greater than 6 but less than 10. The number is

    (a) 5
    (b) 6
    (c) 7
    (d) 8
    (e) 9

Answer

- Answer : C
- According to first condition, the number is greater than 3 but less than 8.
  Such numbers are 4, 5, 6, 7.
- According to the second condition, the number is greater than 6 but less than 10.
  Such numbers are 7, 8. 9.

  Clearly, the required number is the number satisfying both the above conditions *i.e., 7.*

RANKING TEST

- In this, generally the ranks of a person both from the top and from the bottom are mentioned and the total number of persons is asked.
- However, sometimes this question is put in the form of a puzzle of interchanging seats by two persons.

Question

- Rahul ranked ninth from the top and thirty eighth from the bottom in a class. How many students are there in the class ?

    (a) 45
    (b) 46
    (c) 47
    (d) 48

Answer

- Clearly, the whole class consists of :

  (i) 8 students who have a rank higher than Rahul;

  (ii) Rahul; and

  (iii) 37 students who have rank lower than Rahul.

  i.e. (8 + 1 + 37) = 46 students.

  Hence, the answer is (b).

- In a row of boys, Deepak is seventh from the left and Madhav is twelfth from the right. If they interchange their positions, Deepak becomes twenty-second from the left. How many boys are there in the row ?
    (a) 19
    (b) 31
    (c) 33
    (d) Cannot be determined
    (e) None of these

Answer

- Deepak's new position is 22nd from left. But it is the same as Madhav's earlier position which is 12th from the right.

- Thus, the row consists of (21 + 1 + 11) = 33 boys.
- Hence, the answer is (c).

Question

- Manish ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class ?

(a) 40 (b) 44 *(c) 50 (d)55 (e) 58*

Answer

- Number of boys who passed
  = (15 + 28) = 44.
- Total number of boys in the class
  = 44 + 6 + 5 = 55

TIME SEQUENCE TEST

- Satish remembers that his brother's birthday is after fifteenth but before eighteenth of February whereas his sister payal remembers that her brother's birthday is after sixteenth but before nineteenth of February. On which day in February is Satish's brother's birthday ?

(a) 16th (b) 17th (c) 18th (d) 19th
(e) None of these

Answer

- According to Satish, the brother's birthday is on one of the days among 16th and 17th February.

- According to Kajal, the brother's birthday is on one of the days among 17th and 18th February.

- Clearly, Satish's brother's birthday is on the day common to both the above groups, i.e. 17th February.

- Hence, the answer is (b).

- A bus for Delhi leaves every thirty minutes from a bus stand. An enquiry clerk told a passenger that the bus had already left ten minutes ago and the next bus will leave at 9.35 a.m. At what time did the enquiry clerk give this information to the passenger ?
  (a) 9.10 a.m. (b) 8.55 a.m. (c) 9.08 p.m.
  (d) 9.05 a.m. (e) 9.15 a.m.

Answer

- The next bus will leave at 9.35 a.m. This means that the previous bus had left at 9.05 a.m. But it happened ten minutes before the clerk gave the information to the passenger. Thus, the enquiry clerk gave the information at 9.15 a.m.
- Hence, the answer is *(e).*

Question

- If the seventh day of a month is three days earlier than Friday, what day will it be on the nineteenth day of the month ?

    (a) Sunday

    (b) Monday

    (c) Wednesday

    (d) Friday

Answer

- As mentioned, the seventh day of the month is three days earlier than Friday, which is Tuesday.
- So. the fourteenth day is also Tuesday and thus, the nineteenth day is Sunday.
- Hence, the answer is (a).

Question

If the day before yesterday was Thursday, when will Sunday be ?

(a) Today
(b) Two days after today
(c) Tomorrow
(d) Day after tomorrow

Answer

- Answer : C
- If day before yesterday was Thursday, so today is Saturday.
  Tomorrow will be Sunday.

THANK YOU!