SYLLOGISMS

SYLLOGISMS—THEORY

Syllogisms can be defined as a deductive scheme under which a formal argument is made. It consists of a major and a minor premise, leading up to a conclusion.

For example, let us look at the following example:

Major Premise: Every crime is deplorable;

Minor Premise: Eve teasing is a crime;

Conclusion: Eve teasing is deplorable.

Questions based on Syllogisms always first state the premises and then ask you to derive the conclusion on the basis of the relationship existing between the different elements of the premises.

The best method for solving syllogisms involves the use of Venn Diagrams. We will first look at the main types of premises and then look in detail at the process to be used to solve questions of syllogisms.

PREMISES—VARIOUS PATTERNS

A premise is defined as a proposition antecedently supposed or proved as a basis of argument or inference. In other words: something assumed or taken for granted.

Type 1: All A's are B's (Or No A is not B):

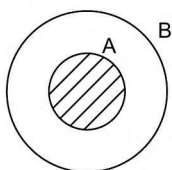There are two possible Venn diagrams for this situation. These are:
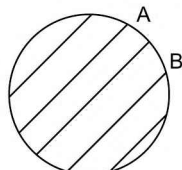

Fig. A   **Fig. B**

The following reactions to the premise *All A's are B's* are valid:

(a) *Some B's are A's.* This is a definite conclusion.
This is true in both Figures A and B.

(b) *Some B's are not A's.* This is a probable conclusion and will occur only if the conclusion *All B's are A's* is not true.

Hence, it can be stated that if All A's are B's, then either All B's are A's (No B is Not A) or Some B's are not A's. As can be seen in the figures above, either *Some B's are not A's* (Figure A) or *All B's are A's* (as seen in Figure B).

Type 2: Some A's are B's

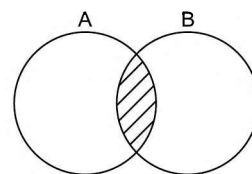This premise is represented by the following figure:

Fig. A

The valid reaction to this premise is:

Some B's are A's

This is a definite conclusion (as can be seen clearly in figure A above.)

Although the above figure also supports the conclusion—some B's are not A's, this cannot be taken as a definite conclusion. This is because, when we say that *Some A's are B's,* it does not mean that there have to be some B's that are not A's.

Type 3: No A is B

This premise is represented by the following figure:

Fig. A

The conclusion *No B is A* is a valid conclusion.

Type 4: Some A's are not B
(Or All A is not B)

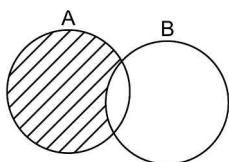There could be three possible Venn Diagrams in this case, as shown below:

Fig. A   **Fig. B**

Fig. C

STANDARD PROCESS FOR SOLVING SYLLOGISM QUESTIONS

The most logical process of solving Syllogism questions is through Venn diagrams. The following examples will make the process clear:

Solved Examples

1. (A) All tigers lays eggs. (B) All cats lay eggs.
   (C) Some cats can fly. (D) All tigers cannot fly.
   (E) All tigers are cats. (F) All tigers cannot swim.
      (a) BEA   (b) ABE
      (c) DEC   (d) ECB

In the above question, it can be clearly seen that the sequence BEA is the most appropriate since if all cats lay eggs is true and it is also true that all tigers are cats, then it will also be true that all tigers lay eggs.
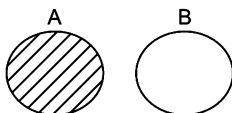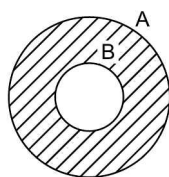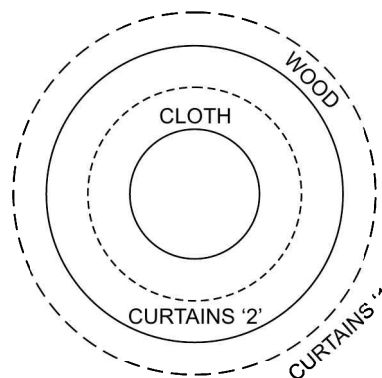
2. (A) Some curtains are cloth. (B) All cloth is wood.
   (C) All that is wood is cloth. (D) All cloth are curtains.
   (E) All curtains are wood. F. Some curtains are wood.
      (a) BED   (b) BDF
      (c) FAB   (d) FBA.

BDF is the most logical sequence here since if we take B and D as the premises, then the curtains which are cloth, will also be wood.

The Venn diagram for BD will look like this—

Hence, F is the correct conclusion.

3. (A) All balls are talls. (B) Some talls are dolls.
   (C) Some dolls are balls. (D) Some talls are not balls.
   (E) All talls are dolls. (F) No talls are dolls.
      (a) EAC   (b) BCD
      (c) ABC   (d) EDC

EA will give the following figure which will give C as the conclusion. Hence, the answer is (a).
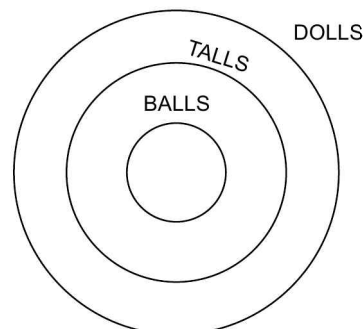
4.
   (A) Some stone is bone. (B) All slipper is bone.

   (C) All bone is stone. (D) No stone is slipper.

   (E) No bone is stone. (F) Some bone is slipper.

   (a) BCA   (b) AFE

   (c) DEC   (d) CEA

   (CAT 1996)

💡 (a) is the obvious answer here, since if all bone is stone(C), then obviously, some stone is bone(A).

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5. (A) No rice is a pest. (B) All pest is lice.

   (C) Some rice is lice. (D) All rice is pest.

   (E) All rice is lice. (F) No rice is lice.

   (a) BEF   (b) FCB

   (c) ABF   (d) BDE

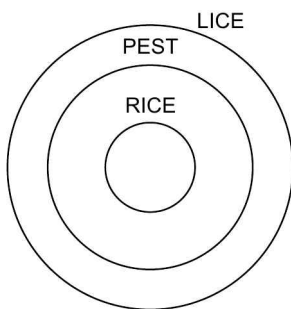💡 BDE will give the following Venn Diagram which makes E the correct conclusion for the premises BD.


6. For this question, you have to base your conclusion on the three premises (viz: a, b and c). Identify the correct answer from amongst the options given to you:

Statements a. Some cakes are bikes

   b. Some bikes are hills

   c. All laptops are bikes

Conclusions I. All laptops are hills

   II. Some laptops are cakes

   III. Some cakes are hills

   IV. Some laptops are not cakes

1) Only I follows

2) Only either II or IV follows

3) Only I or III follow

4) Only I and IV follows

5) None of these

💡 For the question above, the following Venn Diagram can be drawn:
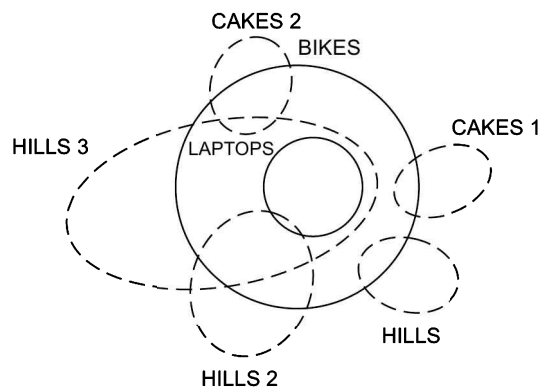
It is clear from the figure that the conclusion 'All Laptops are Hills' does not hold.

Similarly, some Cakes are hills is also not necessarily true. If we take a look at II & IV, we can conclude that one of them has to be true. Hence, the answer is (2).

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7. (A) No hyenas laugh. Some who laugh are lions. Some lions are not hyenas.

   (B) All ghosts are red. Some ghosts do not dance. Some dancers are not red.

   (C) Australians indulge in swearing. Those who swear are fined. Some who are fined are not Australians.

   (D) Some Europeans are Spanish. All Europeans are British. Some British are Spanish.

   (a) A and B   (b) C only

   (c) A and D   (d) D only

💡 The following Venn Diagram can made for the sequence A:
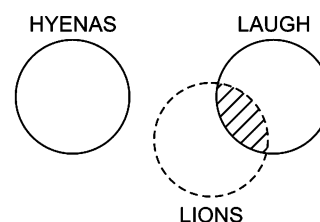
Obviously, the lions who laugh are not hyenas. Hence, the conclusion is justified.

The following Venn Diagram will be made for the sequence D:
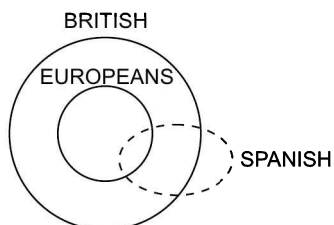
It is obvious that whatever circle we draw for Spanish (apart from the one shown) it will have to intersect the circle for Europeans. This in effect, means that, it has also to intersect with the British circle. Hence, the conclusion that 'Some British are Spanish' is justified.

8. (A) All Pakistanis are brave. All baskets are Pakistanis: All brave are baskets.

(B) No golfers are Asian. All golfers are athletic. Some Asians are pros.

(C) All burgers are chips. Some refreshments are burgers. Some refreshments are chips.

(D) Some bowlers are fast. All bowlers are spinners. Some spinners are fast.

(a) C and D   (b) Band C

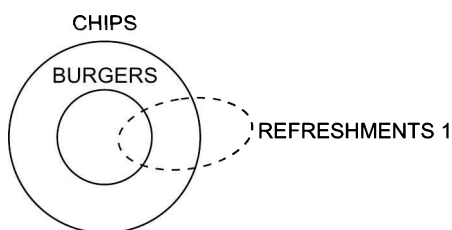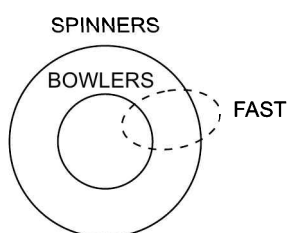(c) A only   (d C only

The following Venn Diagram can be made for the sequence C:

The conclusion for C is justified in exactly the same way as the one for the sequence D of Solved Example 7.

The following Venn Diagram can be made for sequence D:

As is clear from the diagram above, the conclusion is justified on the basis of the same logic as for the last two diagrams.

PRACTICE EXERCISES

Type 1

Directions for Questions 1 to 10: *In each of the questions below are given two statements followed by two conclusions numbered I and II. You have to take the two given statements as true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow(s) from the given statements, disregarding commonly known facts.*

Give answers   (a) *if only conclusion I follows.*
               (b) *if only conclusion II follows.*
               (c) *if either I or II follows.*
               (d) *if neither I nor II follows*
               (e) *if both follow*

1. *Statements*: (A) All cats are dogs.
                   (B) All dogs are brown.
    Conclusions: **I.** *All cats are brown.*
                   II. *All brown are dogs.*

2. *Statements*: (A) All computers are pentiums.
                   (B) Some pentiums are machines.
    Conclusions: **I.** *Some computers are machines.*
                   II. *Some machines are computers.*

3. *Statements*: (A) Some apples are fruit.
                   (B) Some fruits are sour.
    Conclusions: **I.** Some apples are sour.
                   II. Some sours are fruit.

4. *Statements*: (A) Some rods are sticks.
                   (B) Some scales are rods.
    Conclusions: **I.** Some sticks are rods.
                   II. Some scales are sticks.

5. *Statements*: (A) Architects marry only fair girls.
                   (B) Bimla is very fair.
    Conclusions: **I.** Bimla was married to an Architect.
                   II. Bimla was not married to an Architect.

6. *Statements*: (A) Sehwag is a good batsman.
                   (B) Batsmen are physically powerful.
    Conclusions: **I.** *All physically powerful are Batsmen.*

II. Sehwag is physically powerful.

7. *Statements*: (A) Some cats are white.

   (B) Milk is white.

   Conclusions: **I.** *Some cat is milk.*

   II. Some white is milk.

8. *Statements*: (A) All pens are long.

   (B) All pencils are long.

   Conclusions: **I.** *All pens are pencils.*

   II. Some pens are pencils.

9. *Statements*: (A) All resorts have scenery.

   (B) Mahabaleshwar is a resort.

   Conclusions: **I.** Mahabaleshwar has scenery.

   II. Places other than resorts don't have scenery.

10. *Statements*: (A) All teenagers go to cinema.

    (B) Raveesh doesn't go to cinema.

    Conclusions: **I.** *Raveesh is not a teenager.*

    II. Going to cinema is not essential to be a teenager.

Type 2

Directions for Questions 11 to 40: *In each of the questions below are given three statements followed by four conclusions numbered I, II, III and IV. You have to take the three given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow(s) from the given statements disregarding commonly known facts.*

11. *Statements*: (A) Some apples are fruits.

    (B) All vegetables are fruits.

    (C) All fruits are vegetables.

    Conclusions: **I.** Some apples are vegetables.

    II. All vegetables are fruits.

    III. All fruits are apples.

    IV. All vegetables are apples.

    (a) Only I and II follow.

    (b) Only II follows.

    (c) Only I and IV follow.

    (d) Only II and IV follow.

    (e) None of these.

12. *Statements*: (A) Some cars are four wheelers.

    (B) All four wheelers are vehicles.

    (C) Some vehicles are SUVs.

    Conclusions: **I.** Some SUVs are four wheelers.

    II. Some vehicles are four wheelers.

    III. Some vehicles are cars.

    IV. Some SUVs are cars.

    (a) All follow

    (b) Only II & III follow

    (c) Only III follows

    (d) Either III or IV follows

    (e) None of these.

13. *Statements*: (A) All principals are men.

    (B) Some women are principals.

    (C) All humans are women.

    Conclusions: **I.** All humans are men.

    II. Some humans are principals.

    III. Some men are principals.

    IV. All women are men.

    (a) Only I follows

    (b) Only II follows

    (c) Only I and III follow

    (d) Only III follows

    (e) None of these.

14. *Statements*: (A) Most architects are writers.

    (B) No writer is a driver.

    (C) All drivers are architects.

    Conclusions: **I.** Some writers are architects.

    II. All architects are drivers.

    III. No driver is a writer.

    IV. Some drivers are writers.

    (a) Only I follows.

    (b) Only II and III follow.

    (c) Only I and III follow

    (d) Either III or IV follows.

    (e) None of these

15. *Statements*: (A) All registers are books.

    (B) All books are written materials.

    (C) All written materials are novels.

    Conclusions: **I.** All books are novels.

    II. All written materials are registers.

    III. All registers are novels.

    IV. All novels are books.

    (a) Only I and II follow

    (b) Only II and III follow

    (c) Only I and III follow

    (d) All follow

    (e) None of these.

16. *Statements*:   (A) Some cats are animals.

               (B) Some animals are mammals.

               (C) Some mammals are earthlings.

    Conclusions: I. Some earthlings are cats.

               II. Some mammals are cats.

               III. Some earthlings are animals.

               IV. Some cats are earthlings.

    (a) None follow.

    (b) All follow

    (c) Only I and II follow

    (d) Only II and IV follow

    (e) Only III and IV follow

17. *Statements*:   (A) No apple is mango.

               (B) All mangoes are fruits.

               (C) All fruits are vegetarian.

    Conclusions: I. No fruit is apple.

               II. No vegetarian is apple.

               III. Some vegetarians are mango.

               IV. Some vegetarians are apples.

    (a) None follows

    (b) All follow

    (c) Either II or IV and III follow

    (d) Either II or III and I follow

    (e) None of these.

18. *Statements*:   (A) All pens are pencils.

               (B) Some pencils are markers.

               (C) All markers are ball points.

    Conclusions: I. Some markers are pens.

               II. Some ball points are pencils.

               III. Some ball points are pens.

               IV. Some pencils are pens.

    (a) None follows

    (b) Only I and III follows

    (c) All follows

    (d) Only II and IV follows

    (e) None of these.

19. *Statements*:   (A) Some dogs are cats.

               (B) Some cats are hounds.

               (C) Some hounds are animals.

    Conclusions: I. Some animals are dogs.

               II. Some hounds are dogs.

               III. Some animals are cats.

               IV. No animals are cats.

    (a) None follows

    (b) Only III follows

    (c) Only either I or IV and III follows

    (d) Only either I or IV and II follows

    (e) None of these.

20. *Statements*:   (A) All leaves are fruits.

               (B) No fruit is vegetable.

               (C) All vegetables are panthers.

    Conclusions: I. Some fruits are leaves.

               II. All fruits are leaves.

               III. Some panthers are vegetables.

               IV. All panthers are vegetables.

    (a) Only II and IV follow

    (b) Only either I or II follow

    (c) Only either III or IV follows

    (d) All follows

    (e) None of these.

21. *Statements*:   (A) Some panthers are cats.

               (B) All cats are mammals.

               (C) Some mammals are not panthers.

    Conclusions: I. Some mammals are panthers.

               II. All panthers are mammals.

               III. All cats are panthers.

               IV. All mammals are panthers.

    (a) None follows

    (b) Only I follows

    (c) Only I and II follows

    (d) Only II and III follows

    (e) All follows.

22. *Statements*:   (A) Some young are boys.

               (B) All boys are actors.

               (C) Some actors are cars.

    Conclusions: I. Some actors are young.

               II. Some cars are young.

               III. Some cars are boys.

               IV. Some boys are young.

    (a) None follows

    (b) Only IV follows

    (c) Only I follows

(d) Both I and IV follows

(e) None of these.

23. *Statements*:   (A) All actors are males.

  (B) Some artists are males.

  (C) All singers are artists.

  Conclusions: I. Some artists are actors.

  II. Some singers are males.

  III. Some males are actors.

  IV. No singers are male.

(a) Only either II or IV and III follow

(b) Only either II or IV and I follow

(c) Only either I or II and IV follow

(d) None follows

(e) None of these.

24. *Statements*:   (A) All cats are drakes.

  (B) No drake is a mare.

  (C) All mares are animals.

  Conclusions: I. No cat is a mare.

  II. Some animals are mares.

  III. Some drakes are cats.

  IV. Some cats are mares.

(a) All follow

(b) Only either I or II and both III and IV follow

(c) Only either I or IV and both II and III follow

(d) Only either I or IV and II follow

(e) None of these.

25. *Statements*:   (A) Some cars are vehicles.

  (B) Some vehicles are machines.

  (C) Some machines are mechanics.

  Conclusions: I. Some mechanics are machines.

  II. Some vehicles are cars.

  III. Some machines are cars.

  IV. Some mechanics are vehicles.

(a) All follow

(b) Only I and II follow

(c) Only III and IV follow

(d) Only I and IV follow

(e) None follows.

26. *Statements*:   (A) All desks are boards.

  (B) All boards are flat.

  (C) All flat are white.

  Conclusions: I. All white are desks.

  II. All boards are white.

  III. Some white are flat.

  IV. Some flat are desks.

(a) All follows

(b) Only I, II and IV follow

(c) Only III and IV follow

(d) II, III and IV follow

(e) None of these.

27. *Statements*:   (A) Some opels are televisions.

  (B) Some televisions are bulbs.

  (C) All tubes are bulbs.

  Conclusions: I. Some opels are tubes.

  II. Some opels are bulbs.

  III. No tube is opel.

  IV. All bulbs are tubes.

(a) None follows

(b) Both III and II follow

(c) Only either II or III follows

(d) Only either I or III follows

(e) Only either I or IV follows

28. *Statements*:   (A) Some trains are cars.

  (B) All cars are rivers.

  (C) Some roads are rivers.

  Conclusions: I. Some rivers are trains.

  II. Some roads are trains.

  III. Some roads are cars.

  IV. Some rivers are roads.

(a) IV follows

(b) Only I and II follow

(c) Only either I or III follows

(d) Only either II or III follows

(e) Only either I or IV follows.

29. *Statements*:   (A) All Cats are Lions.

  (B) Some Lions are mice.

  (C) All mice are giraffes.

  Conclusions: I. Some mice are cats.

  II. Some giraffes are lions.

  III. Some giraffes are cats.

  IV. Some giraffes are mice.

(a) Only I and II follow

(b) Only I and III follow

(c) Only II and III follow

(d) Only III and IV follow

(e) None of these.

30. *Statements*: (A) All pencils are pens.

(B) No pens are markers.

(C) All markers are drawings.

Conclusions: I. No pencil is a marker.

II. No pencil is a drawing.

III. Some drawings are pens.

IV. Some markers are pencils.

(a) Only I follows

(b) Only I and II follow

(c) Only II and III follow

(d) Only III and IV follow

(e) None of these.

31. *Statements*: (A) Some apples are flowers.

(B) No flower is a papaya.

(C) All papayas are baskets.

Conclusions: I. Some apples are baskets.

II. Some baskets are papayas.

III. Some baskets are apples.

IV. Some flowers are apples.

(a) All follow

(b) None follows

(c) Only II and IV follow

(d) Only II and III follow

(e) None of these.

32. *Statements*: (A) Some cars are horses.

(B) All horses are guns.

(C) All guns are cows.

Conclusions: I. Some cows are cars.

II. Some cows are horses.

III. Some cows are guns.

IV. Some cars are guns.

(a) None follows

(b) Only I and II follow

(c) Only II and III follow

(d) Only III and IV follow

(e) All follow.

33. *Statements*: (A) Some desks are apartments.

(B) All apartments are cars.

(C) Some cars are trucks.

Conclusions: I. Some desks are trucks.

II. Some desks are cars.

III. Some cars are apartments.

IV. No truck is a desk.

(a) None follows

(b) Only II and III follow

(c) Either only I or II, III and IV follow

(d) Either only I or IV, and II and III follow

(e) All follow.

34. *Statements*: (A) All cats are cows.

(B) All horses are cows.

(C) Some cows are bulls.

Conclusions: I. Some cats are horses.

II. Some horses are bulls.

III. Some bulls are cats.

IV. All bulls are cows.

(a) None follows

(b) Only I follows

(c) Only I and III follow

(d) Only II and IV follow

(e) All follow.

35. *Statements*: (A) Some cats are elephants.

(B) No elephant is river.

(C) All rivers are roads.

Conclusions: I. No cat is river.

II. Some roads are rivers.

III. Some elephants are cat.

IV. Some cats are rivers.

(a) Only I and II follow

(b) Only II, III and IV follow

(c) Only either I or IV and III follow

(d) Only I, II and III follow.

(e) None of these.

36. *Statements*: (A) All mirrors are phones.

(B) Some phones are gadgets.

(C) All gadgets are mirrors.

Conclusions: I. Some gadgets are phones.

II. Some gadgets are mirrors.

III. Some gadgets are not mirrors.

IV. Some mirrors are phones.

(a) None follows

(b) Only I and II follow

(c) Only II and III follow

(d) Either II or IV follow

(e) None of these.

37. *Statements*: (A) No proud is animal.

(B) Some sheeps are animals.

(C) All cats are sheeps.

Conclusions: I. No cat is proud.

II. Some cats are animals.

III. No animal is cat.

IV. Some prouds are sheeps.

(a) Only III follows

(b) Only either II or III follows

(c) Only I follows

(d) Only I and either II or III follow

(e) None of these.

38. *Statements*: (A) All grapes are apples.

(B) All papayas are apples.

(C) Some apples are mangoes.

Conclusions: I. No grape is mango.

II. Some papayas are not mangoes.

III. Some grapes are papayas.

IV. All mangoes are grapes.

(a) Only I follows

(b) Either I or III follows

(c) Only II and III follow

(d) Only I, II and III follow

(e) None of these.

39. *Statements*: (A) Some bats are rackets.

(B) Some rackets are bats.

(C) Some bats are balls.

Conclusions: I. Some balls are bats.

II. Some balls are not bats.

III. No racket is ball.

IV. No bat is ball.

(a) Only I and IV follow

(b) Only II follows

(c) Only I and III follow

(d) Only I or IV follows

(e) None of these.

40. *Statements*: (A) All stereos are cds.

(B) Some stereos are cassettes.

(C) Some cds are pens.

Conclusions: I. Some pens are stereos.

II. Some cds are cassettes.

III. Some pens are cassettes.

IV. All stereos are pens.

(a) Either I or IV follows

(b) Only II and III follow

(c) Either I or IV and II follow

(d) Only II follows

(e) None of these.

41. *Statements*: (A) Some sacks are backs.

(B) All backs are bones.

(C) No bone is muscle.

Conclusions: I. Some sacks are not muscles.

II. Some sacks are not bones.

III. All sacks are bones.

IV. No sack is muscle.

(a) Only I follows

(b) None follows

(c) Only IV follows

(d) I and either II or III follow

(e) None of these.

42. *Statements*: (A) All rackets are jackets.

(B) No cow is cat.

(C) Only cats are dogs.

Conclusions: I. Some rackets are not cats.

II. Some cats are jackets.

III. Some rackets are cats.

IV. No dog is a cow.

(a) Only either I or II and IV follow

(b) Only II and IV follow

(c) Only III and IV follow

(d) Only I and IV follow

(e) None of these.

43. *Statements*: (A) All stairs are lifts.

(B) No lift is an escalator.

(C) Some escalators are helicopters.

(D) Some lifts are planes.

Conclusions: I. No stairs is an escalator.

II. Some helicopters are not escalators.

III. Some stairs are planes.

IV. Some helicopters are escalators.

(a) Only I and either II or IV follow

(b) Only I and IV follow

(c) Either II or IV follows

(d) Only I, III or IV follows

(e) None of these.

44. *Statements*: (A) All boxes are cartons.

(B) All cartons are packages.

(C) Some packages are letters.

(D) No box is a parcel.

Conclusions: I. All boxes are packages.

II. Some boxes are not cartons.

III. All packages are letters.

IV. Some packages are not letters.

(a) Only I and either III or IV follow

(b) Only I, II and either III or IV follow

(c) Only I and II follow

(d) Only I follows

(e) None of these.

45. *Statements:* (A) Most bulls are cows.

(B) No bull is horse.

(C) All horses are cows.

Conclusions: I. Some cows are not horses.

II. All cows are not horses.

III. Some bulls are cows.

IV. Some bulls are not horses.

(a) Only II, III and IV follow

(b) Either I or II and III and IV follow

(c) Only I, III and IV follow

(d) All follow

(e) None of these.

46. *Statements:* (A) Many perfumes are diamonds.

(B) All aspirins are powder.

(C) No perfume is powder.

Conclusions: I. Some diamonds are not pow-
ders.

II. Some diamonds are powders.

III. No aspirins are perfume.

IV. Some diamonds are not aspirins.

(a) Only I, III and IV follow

(b) Either I or II and III and IV follow

(c) Only III and IV follow

(d) Only I and IV follow

(e) None of these.

47. *Statements:* (A) All bulls are bells.

(B) Some bulls are cows.

(C) Some bells are chairs.

Conclusions: I. Some cows are chairs.

II. Some bells are bulls.

III. All bells are cow.

IV. All bells are bulls.

(a) All follow

(b) None follows

(c) Only II follows

(d) Only II and III follow

(e) None of these.

48. *Statements:* (A) Some cakes are bikes.

(B) Some bikes are hills.

(C) All laptops are bikes.

Conclusions: I. All laptops are hills.

II. Some laptops are cakes.

III. Some cakes are hills.

IV. Some laptops are not cakes.

(a) Only I follows

(b) Only either II or IV follows

(c) Only I or III follows

(d) Only I and IV follows

(e) None of these.

49. *Statements:* (A) Some pots are pans.

(B) Some pans are cookers.

(C) Some cookers are rafts.

Conclusions: I. Some rafts are pans.

II. Some cookers are pots.

III. Some rafts are pans.

IV. Some pots are cookers.

(a) All follow

(b) None follows

(c) Only I and III follow

(d) Only II and IV follow

(e) None of these.

50. *Statements:* (A) Most chairs are tables.

(B) No chairs are trolleys.

(C) All trolleys are tables.

Conclusions: I. Some tables are not trolleys.

II. All tables are not trolleys.

III. Some chairs are tables.

IV. Some chairs are not trolleys.

(a) Only II, III and IV follow

(b) Either I or II, III and IV follow

(c) On ly I, III and IV follow

(d) All follow

(e) None of these.

Type 3

Directions for Questions 51 to 70: *Each question contains six statements, followed by four options of combinations of any three of the given sentences. Choose the option in which the combinations are logically related.*

51. A) All Martians eat sausages.
    B) All those who eat sausages are not Martians.
    C) All those who eat sausages are herbivorous.
    D) All Martians are carnivorous.
    E) All those who eat sausages are carnivorous.
    F) Martians are herbivorous.
    (a) BCE   (b) ABE
    (c) ACD   (d) ACF

52. A) All lotuses have flowers.
    B) All lotuses have nectar.
    C) All plants with nectar have flowers.
    D) All shrubs have lotuses.
    E) All shrubs have nectar.
    F) Some lotuses have flowers.
    (a) BEF   (b) BCF
    (c) BDE   (d) ACF

53. A) No summer is a season.
    B) Some seasons are summers.
    C) Some seasons are winters.
    D) No seasons are winters.
    E) Some summers are not winters.
    F) All summers are winters.
    (a) DFA   (b) BEF
    (c) CEB   (d) DEB

54. A) All falcons fly high.
    B) All falcons are blind.
    C) All falcons are birds.
    D) All birds are yellow.
    E) All birds are thirsty.
    F) All falcons are yellow.
    (a) ABC   (b) CDF
    (c) DEF   (d) BCA

55. A) No nails are wires.
    B) Some hooks are wires.
    C) All hooks are nails.
    D) Some wires are not nails.
    E) No wire is a hook. F. All nails are hooks.
    (a) AED   (b) BCF
    (c) BEF   (d) ACE

56. A) Some dabba are cobra.
    B) All dabba are Chabi.
    C) All cobra are dabba.
    D) All cobra are not dabba.
    E) Some chabi are dabba.
    F) Some chabi are cobra.
    (a) AEF   (b) BCF
    (c) ABD   (d) BCE

57. A) No train is a claim.
    B) All heads are claims.
    C) No head is a train.
    D) Some heads are not trains.
    E) Some trains are heads.
    F) Some claims are not trains.
    (a) ACD   (b) ADF
    (c) ABC   (d) CDF

58. A) All balls are Barbie.
    B) All bats are Barbie.
    C) All bats are balls.
    D) Some bats are Barbie.
    E) Some Barbie are balls.
    F) No ball is Barbie.
    (a) CDE   (b) CEF
    (c) ACD   (d) BEF

59. A) Some apartments are not multistories.
    B) Some multistories are not apartments.
    C) No house is a skyscraper.
    D) All multistories are houses.
    E) Some multistories are apartments.
    F) Some houses are not apartments.
    (a) ACE   (b) BDF
    (c) FDA   (d) ACF

60. A) All bows are arrows.
    B) No arrow is a casket.
    C) No bow is a casket.
    D) Some caskets are arrows.
    E) Some bows are caskets.
    F) No casket is a bow.
    (a) BDE   (b) ACB
    (c) CDF   (d) ABF

61. A) Some soaps are not shampoos.
    B) Some shampoos are not soaps.
    C) No oil is shampoo.

D) All shampoos are oils.

E) Some shampoos are soaps.

F) Some who are oils are not soaps.

    (a) ACF   (b) DEF

    (c) ABC   (d) BDF

62. A) Some humans are late.

B) All humans are bad.

C) All late things are humans.

D) All late things are bad.

E) Some bad things are humans. F. Some bad things are late.

    (a) AFE   (b) BCF

    (c) BCA   (d) BCE

63. A) All Shomes are bright.

B) No bright Shomes are Bands.

C) Some Shomes are Bands.

D) Some Bands are bright.

E) No Tom is a Band.

F) No Band is a Shome.

    (a) ABC   (b) BEF

    (c) ABF   (d) CDA

64. A) All sorcerors are hasty.

B) Some daredevils are hasty.

C) All sorcerors are daredevils.

D) All daredevils are hasty.

E) Some hasty are daredevils.

F) No sorceror is pasty.

    (a) BCD   (b) CDA

    (c) DEC   (d) FEC

65. A) No mango is a lingo.

B) All tangos are lingos.

C) No tango is a mango.

D) Some tangos are not mangoes.

E) Some mangoes are tangos.

F) Some lingos are not mangoes.

    (a) ABC   (b) ACB

    (c) DFA   (d) BDA

66. A) Some irons are made of steel.

B) All steel is made of copper.

C) All copper is used for making irons.

D) Some steel is copper.

E) Some irons are used for steel.

F) Some copper is used for steel.

    (a) ABC   (b) CEF

    (c) CDA   (d) ABE

67. A) No tiger is carnivorous.

B) All animals are carnivorous.

C) Cats are carnivorous.

D) No cat is a tiger.

E) No tiger is an animal.

F) All cats are animals.

    (a) ADC   (b) ABE

    (c) FBA   (d) AFC

68. A) No brother is a pro.

B) Some pros like to work.

C) No Indian is rude.

D) Some rude are pros.

E) Some pro are Indians.

F) All Indians like to work.

    (a) ABE   (b) CED

    (c) FEB   (d) BEF

69. A) Apples are fruits.

B) All apples are pears.

C) Some fruits are pears.

D) Some apples are pears.

E) All fruits are sweet.

F) Some pears are sweet.

    (a) DAC   (b) CDA

    (c) BCA   (d) EFC

70. A) Santros are RIMs.

B) Santros are cars.

C) RIMs are cars.

D) Fords are cars.

E) RIMs are Fords.

F) Fords are stable.

    (a) ACB   (b) FED

    (c) CEA   (d) ABC

Type 4

Directions for Questions 71 to 75: *Each question contains four arguments of three sentences each. Choose the set in which the third statement is a logical conclusion of the first two.*

71.   I. Some Xs are Ps. Some Ps are Ys. Some Xs are Ys.

    II. All Chandis are beautiful. Some beautiful are crazy. Some Chandis are crazy.

III. No belief is strong. Only strong have muscles. No belief has muscles.

IV. All orangutans are men. Some men are strong. Some orangutans are strong.

(a) I and IV   (b) III only

(c) IV only   (d) None of these

72. I. Some bikes are mopeds. All mopeds are scooters. Some bikes are scooters.

II. All children are hairs. No hairs are red. No children are red.

III. No pencil is pen. Some pens are markers. Some pencils are markers.

IV. Every man has a wife. All wives are devoted. No devoted has a husband.

(a) I, II and III   (b) I and II

(c) III and II   (d) I, II and III and IV

73. I. No moon is not red. All stars are moon. All stars are red.

II. All doors are open. No open is outdoors. All doors are not outdoors.

III. No Japanese can fire. All Chinese are books. Japanese and Chinese can fight.

IV. No A is B. No B is C. No A is C.

(a) I only   (b) II only

(c) I & II only   (c) IV only

74. I. All envelopes are rectangles. All rectangles are rectangular. All envelopes are rectangular.

II. Some thin are smart. Some smart things are tiny. Some thin are tiny.

III. Learneds are well read. Well read know. Learneds know.

IV. Dieting is good for health. Health foods are rare. Dieting is rare.

(a) IV only   (b) III only

(c) Both I and III   (d) All of these

75. I. Shahrukh is an actor. Some actors are pretty. Shahrukh is pretty.

II. Some executives are soldiers. All soldiers are patriotic. Some executives are patriotic.

III. All cricketers are patriotic. Some executives are soldiers. Some executives are patriotic.

IV. All actors are pretty. Shahrukh is not an actor. Shahrukh is not pretty.

(a) IV only   (b) II only

(c) I only   (d) II and III

Answer Key

1. (a)	2. (d)	3. (c)	4. (d)	5. (c)
6. (b)	7. (d)	8. (d)	9. (a)	10. (a)
11. (a)	12. (b)	13. (d)	14. (c)	15. (c)
16. (a)	17. (c)	18. (d)	19. (a)	20. (e)
21. (b)	22. (d)	23. (e)	24. (e)	25. (e)
26. (d)	27. (a)	28. (a)	29. (d)	30. (a)
31 (c)	32. (e)	33. (d)	34. (a)	35. (d)
36. (b)	37. (b)	38. (e)	39. (d)	40. (d)
41. (d)	42. (a)	43. (b)	44. (a)	45. (c)
46. (a)	47. (c)	48. (b)	49. (b)	50. (d)
51. (d)	52. (c)	53. (a)	54. (b)	55. (d)
56. (b)	57. (c)	58. (a)	59. (b)	60. (d)
61. (d)	62. (b)	63. (c)	64. (b)	65. (a)
66. (c)	67. (b)	68. (c)	69. (a)	70. (a)
71. (b)	72. (b)	73. (c)	74. (c)	75. (b)