

# Verbal Logic - 1



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- Fundamentals of Logical Consistency

# VA - 03

CEX-V-0239/18

Number of Questions : **45**

## Test Drive

Time Limit

10 Minutes

Can you name me?

**Directions for questions 1 to 5:** Read and answer the following questions.

1. I treat new born babies. I am called a NEO \_\_\_\_\_.  
(TISSNET, 2017)
2. I am a speech or piece of writing that praises someone or something highly. I am called an EN \_\_\_\_\_.  
(IIFT, 2016)
3. I create dictionaries. I am a/an \_\_\_\_\_.  
(TISSNET, 2017)
4. I am an old person who behaves in a confused manner. I am SE \_\_\_\_\_.  
(TISSNET, 2017)
5. I pretend to be someone I am not. I am a CHA \_\_\_\_\_.  
(TISSNET, 2017)
6. I can speak many languages fluently. I am a PO \_\_\_\_\_.  
(TISSNET, 2017)

7. I despise human beings. I am a MIS \_\_\_\_\_.  
(TISSNET, 2017)
8. I can never be reformed or corrected. I am IN \_\_\_\_\_ BLE.  
(TISSNET, 2017)
9. I create maps. I am a/an \_\_\_\_\_.  
(TISSNET, 2017)
10. I refer to a gathering of devotees. I am a CON \_\_\_\_\_.  
(TISSNET, 2017)

## Deductive Logic

Deductive Logic plays an important role in understanding the fundamentals of Critical Reasoning. It also helps us in answering inference based questions in Reading Comprehension. Logic also plays an important role in solving questions on Para Jumble and Para Completion. CAT has not asked direct Deductive Logic based questions for a long time. However, other examinations like NMAT, IIFT etc. regularly ask such questions. One also needs to develop a strong logical thinking ability in order to perform well in the Writing Ability Test which has become a staple feature in the Interview process for all major B-Schools.

This exercise will help you:

- a. Understand the fundamentals of Deductive Logic
- b. Have an orientation to Logical Consistency
- c. Grasp the techniques involved in solving questions based on Deductive Logic and Logical Consistency

### Fundamentals of Deductive Logic

Deductive Reasoning was developed by Aristotle, Thales, and Pythagoras who were renowned philosophers of the classical period. Deductive reasoning uses deductive arguments to move from premises (given statements), which are assumed to be true, to conclusions which are necessarily true under the given condition. Deductive reasoning applies general principles to arrive at specific conclusions. Let's solve a few questions to understand the types of questions that have appeared in various management entrance examinations.

### Syllogism : Type A

**Directions for questions 11 to 20:** In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

**Give answer as:**

- (1) If only conclusion I follows
- (2) If only conclusion II follows
- (3) If neither conclusion I nor II follows
- (4) If both conclusions I and II follow

11. **Statements:** All flowers are rooms. Some rooms are windows. All cards are windows.  
  
**Conclusions:**  
I. Some rooms are cards.  
II. At least some windows are flowers.
12. **Statements:** Some inputs are outputs. All outputs are necessary. No necessary is a result.  
  
**Conclusions:**  
I. No output is a result.  
II. Some necessary are not outputs.
13. **Statements:** Some benches are trees. Some trees are flowers. All flowers are fruits.  
  
**Conclusions:**  
I. All fruits can never be trees.  
II. All flowers being benches is a possibility.
14. **Statements:** All elections are dramas. All elections are stories. Some dramas are not films.  
  
**Conclusions:**  
I. No film is a story.  
II. Some films which are dramas are also stories.
15. **Statements:** No toffee is coffee. No sweet is toffee.  
  
**Conclusions:**  
I. No coffee is sweet  
II. All sweets are coffee

16. **Statements:** Some forests are dark and horrible. Dark and horrible places are filled with Freudian imagery.

**Conclusions:**

- I. At least some horrible places are forests.
- II. All horrible forests being dark is a possibility.

17. **Statements:** All fruits are tasty. No tasty is good. All goods are yummy.

**Conclusions:**

- I. All yummy things being tasty is a possibility.
- II. All fruits being yummy is a possibility.

18. **Statements:** Some jobs are occupations. All jobs are vacancies. No vacancy is an unemployment.

**Conclusions:**

- I. Some vacancies are occupations.
- II. No job is an unemployment.

19. **Statements:** Some tables are chairs. All chairs are pens. All pens are copies.

**Conclusions:**

- I. Some pens are tables.
- II. All copies being chairs is a possibility.

20. **Statements:** All furniture are jungles. No jungle is a road. Some roads are hills.

**Conclusions:**

- I. Some hills are definitely not jungles.
- II. No hill is a jungle.

## Syllogism: Type B

**Directions for questions 21 to 25:** Each question has a set of four statements. Each statement has three segments. Choose the alternative where the third segment can be logically deduced from the preceding two statements.

21. A. All cells are phones. MI is a phone. MI is a cell.  
B. No kidnapping is murder. Kidnapping is illegal. No murder is illegal.  
C. Every state in India has a capital. Bihar is a state. Bihar has a capital.  
D. Students are ambitious. Only ambitious people are successful. Students are successful.

- (1) C and D                      (2) A, B, and C
- (3) B and D                    (4) None of the above

22. A. Some disciples are not obedient. All sons are obedient. Some sons are not disciples.  
B. Some ministers are not content. No miser is content. Some misers are ministers.  
C. No Tejas is a tank. Brahmos is not a Tejas. Brahmos is a tank.  
D. The Northerners don't forget. Theon never forgets. Theon is from the North.

- (1) Only A                      (2) A and B
- (3) B, C and D                (4) None of the above

23. A. Some history is controversial. Some history is difficult. Some controversial is difficult.  
B. All fathers love their sons. Tyrion is a son. Tyrion is loved by his father.  
C. Friends is an entertaining show. Rohit has not watched Friends. Rohit watches boring shows.  
D. Tasty food is not healthy. Pasta is not healthy. Pasta is tasty.

- (1) A and D                      (2) A, B and C
- (3) C and D                    (4) None of these

24. A. Ross speaks Japanese well. Ross speaks only Japanese. Only Ross can speak Japanese well.  
 B. Kramer goes to Mass. Kramer's friend Jerry goes to Mass. Jerry goes to Kramer.  
 C. Bernie is pretty. Pretty girls are decent. Bernie is decent.  
 D. No star is a celebrity. Only celebrities are famous. No star is famous.

(1) A and B                      (2) B and C  
 (3) C and D                      (4) Only D

25. A. Castiel has a birthmark on his wrist. Angels have birthmarks. Castiel is an angel.  
 B. All emoticons are funny. All funny are facetious. All emoticons are facetious.  
 C. Robin is popular. Patrice is not popular. Robin knows Patrice.  
 D. No artificial is intelligent. Samaritan is intelligent. Samaritan may be artificial.

(1) Only A                      (2) C and D  
 (3) A and B                      (4) Only B

### Syllogism: Type C

**Directions for questions 26 to 30:** Each question consists of six statement followed by five sets of combinations of three. Choose the alternative where the third statement can be logically deduced from the preceding two.

26. A. Some pals are enemies.  
 B. Some pals are foes.  
 C. All pals are foes.  
 D. All enemies are hostile.  
 E. Some enemies are foes.  
 F. All foes are hostile.

(1) DEF    (2) FDE    (3) CAE  
 (4) CEA    (5) BAE

27. A. Only fools fall in love.  
 B. Andy is a fool.  
 C. Andy falls in love.  
 D. Some fools don't fall in love.  
 E. Andy doesn't fall in love.  
 F. Some fools don't believe in love.

(1) ABC    (2) EDB    (3) BFE  
 (4) EBD    (5) CFA

28. A. No yellow is red.  
 B. Red is green.  
 C. No yellow is green.  
 D. Some yellow is green.  
 E. Greens are not violets.  
 F. Some red may be violet.

(1) EBF    (2) BAC    (3) CBA  
 (4) ADB    (5) CDE

29. A. Robotics is physics.  
 B. Some robotics is not physics.  
 C. Physics is tough.  
 D. All tough is robotics.  
 E. Some tough is not robotics.  
 F. Robotics is tough.

(1) DCF    (2) CAF    (3) CFA  
 (4) CBD    (5) DEB

30. A. Banks are valuable.  
 B. Gringotts is a respected bank.  
 C. Selence is a bank.  
 D. Gringotts is the leader in Hogwarts.  
 E. Selence is valuable.  
 F. Hogwarts is a leading market for banks.

(1) CAE    (2) BAF    (3) BAD  
 (4) DCE    (5) DBA

## Logical Consistency

Logical Consistency refers to the semantic principle in Aristotelian logic where two or more propositions are simultaneously true under some interpretation. Let us solve some questions based on the fundamentals of logical consistency.

### Let's solve now!

**Directions for questions 31 to 45:** Each question has a main statement followed by four statements. Choose the alternative (ordered pair of the statements) where the first statement implies the second and the two statements are logically consistent with the main statement.

- |   |   |
|---|---|
| <p>31. Either he pays me back or I sue him.<br/>A. I sue him.<br/>B. He pays me back.<br/>C. I don't sue him.<br/>D. He doesn't pay me back.<br/><br/>(1) AD    (2) BC    (3) CB    (4) DC</p> <p>32. White walkers are dead or alive.<br/>A. White walkers are dead.<br/>B. White walkers are alive.<br/>C. White walkers are not dead.<br/>D. White walkers are not alive.<br/><br/>(1) CB    (2) CD    (3) AB    (4) AD</p> <p>33. Aunt Eleanor either reads or travels.<br/>A. Aunt Eleanor doesn't travel.<br/>B. Aunt Eleanor doesn't read.<br/>C. Aunt Eleanor reads.<br/>D. Aunt Eleanor travels.<br/><br/>(1) CA    (2) DB    (3) AC    (4) AB</p> | <p>34. Whenever I watch <i>On the Golden Pond</i>, I cry like a baby.<br/>A. I do not cry like a baby.<br/>B. I watch <i>On the Golden Pond</i>.<br/>C. I don't watch <i>On the Golden Pond</i>.<br/>D. I cry like a baby.<br/><br/>(1) DB    (2) CA    (3) AC    (4) BA</p> <p>35. Every actor is vain.<br/>A. Marlon is an actor.<br/>B. Marlon is vain.<br/>C. Marlon is an engineer.<br/>D. Marlon is not vain.<br/><br/>(1) CD    (2) DC    (3) AB    (4) AC</p> <p>36. He fractures his knee every time he plays football.<br/>A. He did not play football.<br/>B. He fractured his knee.<br/>C. He did not fracture his knee.<br/>D. He played football.<br/><br/>(1) CA    (2) BD    (3) AC    (4) BA</p> <p>37. Khushi goes for shopping along with her best friend Cheryl.<br/>A. Cheryl doesn't go for shopping.<br/>B. Khushi doesn't go for shopping.<br/>C. Khushi goes for shopping.<br/>D. Cheryl goes for shopping.<br/><br/>(1) BA    (2) AB    (3) CD    (4) BD</p> <p>38. Jon Snow dies anytime Sir Davos is around.<br/>A. Jon Snow dies.<br/>B. Sir Davos is not around.<br/>C. Sir Davos is around.<br/>D. Jon Snow doesn't die.<br/><br/>(1) AC    (2) CA    (3) DC    (4) AB</p> |
|---|---|

- |  |   |
|--|---|
| <p>39. Each time Monica cleans the house, Chandler gets mad.<br/> A. Monica cleans the house.<br/> B. Chandler gets mad.<br/> C. Chandler doesn't get mad.<br/> D. Monica doesn't clean the house.</p> <p>(1) BA    (2) AB    (3) DC    (4) CA</p> <p>40. Arjun goes shopping with Salman on Thursday only if Kapoor is not with Khan.<br/> A. Arjun goes shopping with Salman on Wednesday.<br/> B. Kapoor is with Khan.<br/> C. Kapoor is not with Khan.<br/> D. Arjun did not go shopping with Salman on Thursday.</p> <p>(1) AC    (2) AB    (3) BD    (4) BA</p> <p>41. Arnav shouts only if Lekhi talks about politics.<br/> A. Lekhi doesn't talk about politics.<br/> B. Arnav shouts.<br/> C. Lekhi talks about politics.<br/> D. Arnav doesn't shout.</p> <p>(1) DA    (2) DB    (3) AB    (4) AD</p> <p>42. Mike gets scared only if Donnie tweets.<br/> A. Donnie tweets.<br/> B. Mike gets scared.<br/> C. Mike doesn't get scared.<br/> D. Donnie doesn't tweet.</p> <p>(1) AB    (2) BA    (3) CD    (4) AD</p> | <p>43. Only if I eat a pastry, I will go for a walk.<br/> A. I ate a pastry.<br/> B. I didn't go for a walk.<br/> C. I went for a walk.<br/> D. I didn't eat a pastry.</p> <p>(1) AB    (2) AC    (3) DB    (4) BD</p> <p>44. The mother shouts only when she is angry.<br/> A. The mother is not shouting.<br/> B. The mother is angry.<br/> C. The mother is shouting.<br/> D. The mother is not angry.</p> <p>(1) CB                      (2) DA<br/> (3) BC                      (4) Both (1) and (2)</p> <p>45. Joker smiles only when Bruce is not present.<br/> A. Bruce is present.<br/> B. Joker is smiling.<br/> C. Bruce is not present.<br/> D. Joker is not smiling.</p> <p>(1) CB    (2) BC    (3) BA    (4) DA</p> |
|--|---|

**Visit "Test Gym" for taking Topic Tests / Section Tests on a regular basis.**

*\* MB – Memory Based*

# VA - 03 : VL - 1

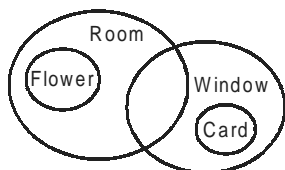
## Answers and Explanations

CEX-V-0239/18

1	–	2	–	3	–	4	–	5	–	6	–	7	–	8	–	9	–	10	–
11	3	12	1	13	2	14	3	15	3	16	4	17	2	18	4	19	4	20	1
21	4	22	4	23	4	24	4	25	4	26	3	27	4	28	3	29	2	30	1
31	3	32	1	33	3	34	3	35	3	36	1	37	1	38	2	39	2	40	3
41	4	42	2	43	3	44	4	45	2										

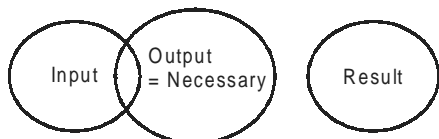
1. Neonatologist
2. Encomium
3. Lexicographer
4. Senile
5. Charlatan
6. Polyglot
7. Misanthrope
8. Incurable
9. Cartographer
10. Congregation

11. 3



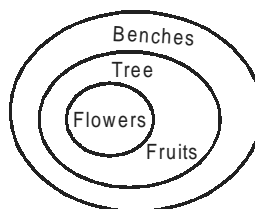
None of the conclusions follow.

12. 1



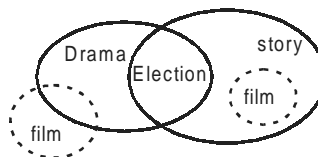
Only the first conclusion follows.

13. 2



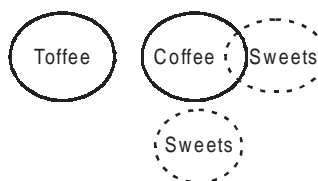
Only the second conclusion follows.

14. 3



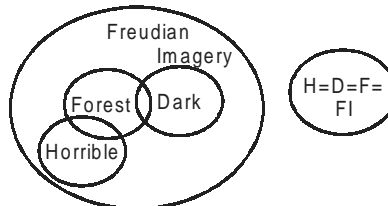
None of the conclusions follow.

15. 3



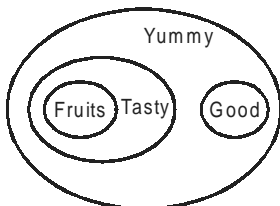
None of the conclusions follow.

16. 4



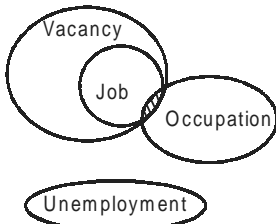
Both conclusions follow.

17. 2



Only the second conclusion follows.

18. 4



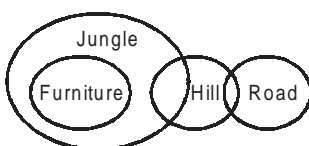
Both the conclusions follow.

19. 4



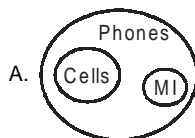
Both the conclusions follow.

20. 1

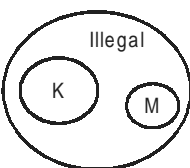


Only the first conclusion follows.

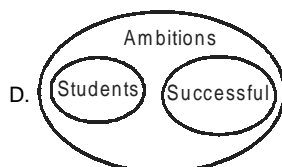
21. 4



B.

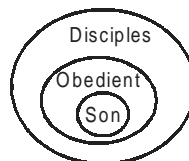


C. By direct deduction

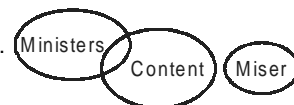


22. 4

A.



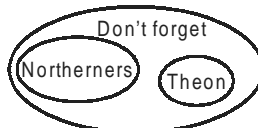
B.



C.



D.



23. 4

A.

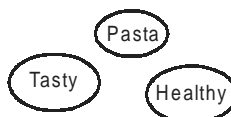


B.

By direct deduction

C. By direct deduction

D.



24. 4

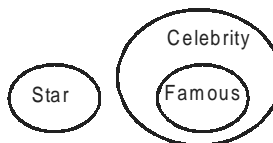
A.

By direct deduction

B. By direct deduction

C. It's not mentioned whether Bernie is a girl or not.

D.

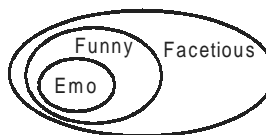


25. 4

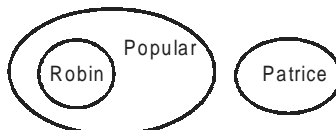
A.

By direct deduction

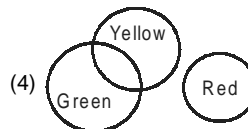
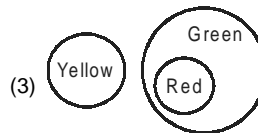
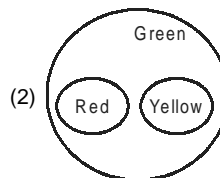
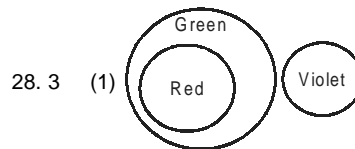
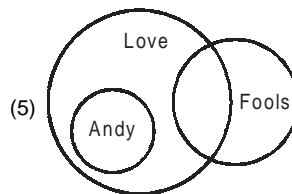
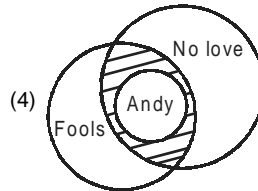
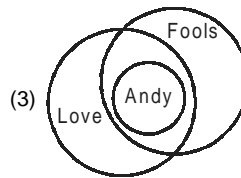
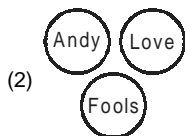
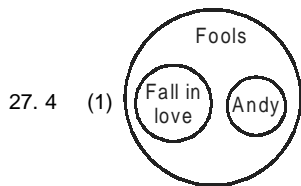
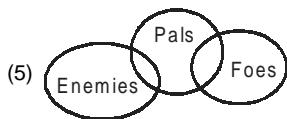
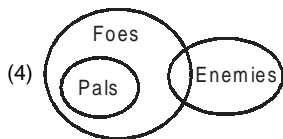
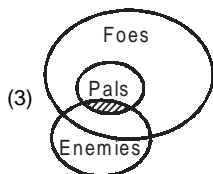
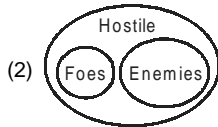
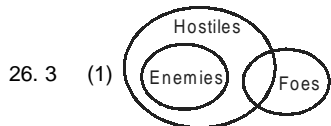
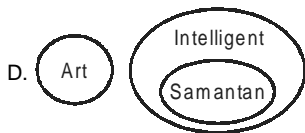
B.



C.

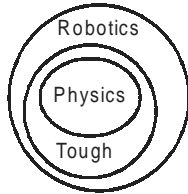




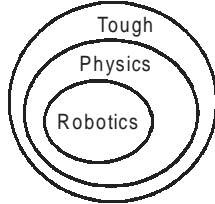


(5) Contradictory statements can't be validated

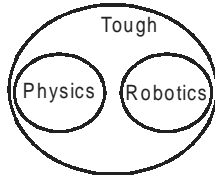
29. 2 (1)



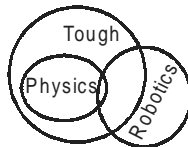
(2)



(3)



(4)



(5) Contradictory statements can't be validated

30. 1 By clear deduction.

31. 3 It is an *either or condition*. The negation of one condition implies the occurrence of the other condition. Hence, option 3 is the answer. Both the conditions can happen together.

32. 1 It is an *either or condition*. The negation of one condition implies the occurrence of the other condition. Hence, option 1 is the answer. Both the conditions may or may not happen together.

33. 3 By the logic of *either or condition*.

34. 3 It is an *if...then condition*. The occurrence of the cause implies the occurrence of the effect. And the negation of the effect implies the non-occurrence of the cause. No other inference is valid. Hence, option 3 is the answer.

35. 3 It can be interpreted as "If you are an actor, you are vain". It is an *if...then condition*. The occurrence of the cause implies the occurrence of the effect. And the negation of the effect implies the non-occurrence of the cause. No other inference is valid. And engineer may or may not be an actor. Hence, option 3 is the answer.

36. 1 It is an *if...then condition*. The occurrence of the cause implies the occurrence of the effect. And the negation of the effect implies the non-occurrence of the cause. No other inference is valid. Hence, option 1 is the answer.

37. 1 It can be interpreted as "If her best friend Cheryl goes for shopping, Khushi goes for shopping". It is an *if...then condition*. The occurrence of the cause implies the occurrence of the effect. And the negation of the effect implies the non-occurrence of the cause. No other inference is valid. Hence, option 3 is the answer.

38. 2 It is an *if...then condition*. The occurrence of the cause implies the occurrence of the effect. And the negation of the effect implies the non-occurrence of the cause. No other inference is valid. Hence, option 2 is the answer.

39. 2 It is an *if...then condition*. The occurrence of the cause implies the occurrence of the effect. And the negation of the effect implies the non-occurrence of the cause. No other inference is valid. Hence, option 2 is the answer.

40. 3 It is an *only if...then condition*. Here the negation of the cause results in the negation of the effect. And the occurrence of the effect implies the occurrence of the cause as it is a binding cause. Hence, option 3 is the answer.

41. 4 It is an *only if...then condition*. Here the negation of the cause results in the negation of the effect. And the occurrence of the effect implies the occurrence of the cause as it is a binding cause. Hence, option 4 is the answer.

42. 2 It is an *only if...then condition*. Here the negation of the cause results in the negation of the effect. And the occurrence of the effect implies the occurrence of the cause as it is a binding cause. Hence, option 2 is the answer.

43. 3 It is an *only if...then condition*. Here the negation of the cause results in the negation of the effect. And the occurrence of the effect implies the occurrence of the cause as it is a binding cause. Hence, option 3 is the answer.

44. 4 It is an *only if...then condition*. Here the negation of the cause results in the negation of the effect. And the occurrence of the effect implies the occurrence of the cause as it is a binding cause. Both 1 and 2 are, thus, valid. Hence, option 4 is the answer.

45. 2 It is an *only if...then condition*. Here the negation of the cause results in the negation of the effect. And the occurrence of the effect implies the occurrence of the cause as it is a binding cause. Hence, 2 is the answer.