

**True or False** True = A, False = B

1. Assuming a conditional claim is true, if the sufficient condition is present, then the necessary condition, necessarily follows.
2. The terms hypothesis, theory, and law all mean the same thing in terms of logical structure.
3. Even if the premises of an inductive argument are known to be true, it is always possible that the conclusion is false.
4. The inclusive "or" means "A or B or both A and B."
5. An invalid deductive argument could have all true statements in it.
6. "You may kiss me only if you're engaged to me" is the same as "If you may kiss me, then you're engaged to me."
7. The simplest scientific explanation is necessarily the best.
8. Two competing hypotheses cannot *both* be confirmed.
9. The contrapositive of "If Fido is breathing, then Fido is alive" is, "If Fido is not breathing, then Fido is not alive."
10. When one sees an "or" in an argument, it's safe to assume it's a false dilemma.
11. It's easy to spot a chain argument because they always have more than one "if," or a variant like when.
12. It is possible for an invalid argument to have a true conclusion.
13. The following is a categorical proposition?  
"Those who have the courage to dare will succeed."
14. The quality of the statement, "All S are P" is universal.
15. The quantity of the statement, "Some S are P" is particular.
16. The following is a categorical proposition: "A dog is a mammal, if it has hair."
17. When the conclusion of a deductive argument is true, the argument must be sound.
18. A valid syllogism cannot have two negative premises.
19. In a categorical argument, if one premise is affirmative and the other is negative, then an affirmative conclusion can be valid.

20. Modus Ponens and Modus Tollens are always sound.
21. Affirming the Consequent and Denying the Antecedent are always invalid.
22. "If, then" statements are also called conditional statements.
23. "If it is a dog, then it is a mammal" is in standard form.
24. If a term is distributed in the conclusion, then it must be distributed in the premises.
25. The term "hypothetical claim" describes the conclusion of a hypothesis.
26. All scientific claims must at least be *testable in principle*.

**Multiple Choice** Select the best available answer.

27. In terms of logical structure, a hypothesis can be...
- A. proven true or proven false
  - B. proven true, or but not proven false.
  - C. never be proven true, but can be proven false.
  - D. never be proven true, nor proven false.
28. Which of the following is the best definition of deduction?
- A. An argument that proceeds from the general to the particular.
  - B. An argument in which the premises make the conclusion probably true.
  - C. An argument where the conclusion is true.
  - D. An argument where the premises are true.
  - E. An argument in which true premises would guarantee a true conclusion.
29. Either she ordered the eggplant, or she ordered the calamari, though possibly she might have ordered both. Well, she ordered the eggplant. So, she didn't order the calamari.
- A. Valid
  - B. Invalid
30. "Entities are not to be multiplied beyond necessity." This is:
- A. The fallacy of oversimplification.
  - B. A false dilemma.
  - C. Ockham's Razor.
  - D. The Ontological Principle.
  - E. The law of non-contradiction.
31. Using Dr. Ruggieo's suggestions in Chapter 16, which of the following will make the best issue to write about?
- A. Drugs
  - B. Are drugs harmful?
  - C. Should drugs be made legal?
  - D. Why marijuana should be legalized.
  - E. Should the use of marijuana be allowed for certain medical applications?
32. Identify the correct relationship between these clauses;  
(1) it contains several assertions  
(2) it is an argument
- A. (1) is sufficient, (2) is necessary.
  - B. (2) is sufficient, (1) is necessary.
  - C. Neither is sufficient or necessary.
  - D. They are biconditional.
  - E. None of the above.

33. Which of the following is in "standard form"?
- A. I'm in trouble if the police are after me.
  - B. If the police are looking for me, then I'm unhappy.
  - C. Whenever the police come, I'm in trouble.
  - D. I take off when the police show up.
  - E. If the police show up, it's time to get out of town.
34.  $p \text{ or } q$   
 $\begin{array}{c} p \\ \therefore \neg q \end{array}$
- A. valid
  - B. invalid
35. What kind of proposition is the following?  
Every general is fighting the previous war.
- A. universal affirmative (A)
  - B. universal negative (E)
  - C. particular affirmative (I)
  - D. particular negative (O)
36. What kind of proposition is the following?  
Some liars can fool all of the people.
- A. universal affirmative (A)
  - B. universal negative (E)
  - C. particular affirmative (I)
  - D. particular negative (O)
37. In a universal affirmative proposition, the subject is
- A. distributed
  - B. undistributed
38. In a universal negative proposition, the subject is
- A. distributed
  - B. undistributed
39. In a particular negative proposition, the subject is
- A. distributed
  - B. undistributed
40. The figure of a categorical syllogism is determined by the position of which term?
- A. the major term
  - B. the minor term
  - C. the middle term

41. In which figure of a categorical syllogism is the middle term the subject of both the major and the minor premises?

- A. first figure
- B. second figure
- C. third figure
- D. fourth figure

42. What is the figure of the following categorical syllogism?

No horned animal is a predator  
All moose are horned animals  
Therefore, No moose is a predator

- A. first figure
- B. second figure
- C. third figure
- D. fourth figure

43. The letters that identify the forms of a proposition (mood) in a categorical syllogism are arranged in what order?

- A. conclusion, major premise, minor premise
- B. major premise, conclusion, minor premise
- C. minor premise, major premise, conclusion
- D. major premise, minor premise, conclusion

44. What is the mood of the following categorical syllogism?

No horned animal is a predator  
All moose are horned animals  
Therefore, No moose is a predator

- A. AAE
- B. EAE
- C. AEE
- D. AEO
- E. none of the above

45. Every animal is mortal.

Every dog is an animal.

Therefore, every dog is mortal.

This syllogism illustrates...

- A. Principle of Reciprocal Identity
- B. Principle of Reciprocal Non-Identity
- C. Dictum de Omni
- D. Dictum de Nullo

46. In third figure...

- A. The middle term is the subject of the major premise and the predicate of the minor premise.
- B. The middle term is the predicate of both premises.
- C. The middle term is the subject of both premises.
- D. The middle term is the predicate of the major premise and the subject of the minor premise.

47. All wildebeasts are mammals.

All lions are felines.

Therefore, all felines are mammals.

- A. Valid
- B. Invalid

48. All banks contain money.

All rivers have banks.

Therefore, all rivers contain money.

The fallacy in this argument is:

- A. Missing the point
- B. False cause
- C. Equivocation
- D. Complex question

49. All O are S.

No H are O.

Therefore, no H are S.

- A. Valid
- B. Invalid

50. Some early Christians were rationalists.

All early Gnostics were rationalists.

So, some early Gnostics were Christians.

- A. Valid
- B. Invalid

51. All men are mortal

Socrates is a man

Therefore, Socrates is mortal

In this argument the major term is:

- A. All
- B. men
- C. mortal
- D. Socrates
- E. None of the above

52. The quality of a categorical proposition has to do with:
- A. whether the proposition is true or false
  - B. whether it is affirmative or negative
  - C. whether it is well supported
  - D. whether it is universal or particular
53. "If there is life there is hope." The standard form is:
- A. If there is life there is hope.
  - B. If there is life, then there is hope.
  - C. There is hope when there is life.
  - D. If there is hope, then there is life.
54. "You'll be set free on condition that you post bond." The antecedent in this example is:
- A. you'll be set free
  - B. if you'll be set free
  - C. you post bond
  - D. if you post bond
  - E. then you post bond
55. "Any argument that goes from the general to the specific." This defines:
- A. deduction
  - B. induction
  - C. both deduction and induction
  - D. disjunctive syllogism
  - E. This doesn't define anything at all.
56. "People do well in school only if they study. So, Casey must be studying."
- A. A deductive argument
  - B. A cogent fallacy
  - C. An inductive argument
  - D. An explanation
57. Taking a speaker's statements in the most rational, and strongest possible way, when we could assume they meant something weaker. In other words, if we could hear it as an invalid argument or valid argument, we pick the valid way. This is called...
- A. the principle of charitable interpretation.
  - B. a good way to lose an argument.
  - C. the invocation of irrationality law.
  - D. induction
58. If today is Monday, then I'll go to Phil. 10. Today is not Monday, so I won't go to Phil. 10.
- A. Valid
  - B. Invalid

59. If my car is out of gas, then it will not run. It is out of gas. Therefore, it will not run.

- A. Valid
- B. Invalid

60. If George is elected then Dick is elected. George is not elected. So, Dick is not elected.

- A. Valid
- B. Invalid

61. p or q

$\sim p$

$\therefore q$

- A. Valid
- B. Invalid

62. All cats are felines.

All dogs are canines.

Therefore, All cats are canines.

This argument breaks what rule?

- |                   |        |
|-------------------|--------|
| A. No rule broken | B. I   |
| C. II             | D. III |
| E. IV             | F. V   |

63. AOI-3 breaks which rule?

- |        |          |
|--------|----------|
| A. III | B. IV    |
| C. V   | D. VI    |
| E. VII | F. Valid |

64. If an A statement is true, then (where the S and P remain the same), which follows?

- A. E is true, I is true, and O is true.
- B. E is false, I is true, and O is false.
- C. E is false, I is undetermined, and O is false.
- D. E is undetermined, I is undetermined, and O is true.
- E. E is false, I is true, and O is false.

65. According to the **Principle of Charitable Interpretation**, one should

- A. always attribute to an arguer a stronger argument when they have failed to provide sufficient reasons in support of their conclusion.
- B. never attribute to an arguer a weaker argument when the evidence reasonably permits us to attribute to him or her a stronger one.
- C. attempt to fix the errors we find in the arguments of others in order to make them stronger.
- D. accept the arguments of others unless we have absolute proof that their conclusions are false.

66. Political advertising is NOT directed toward . . .

- A. low involvement viewers.
- B. those who do not seek political information.
- C. those who will carefully listen to the messages.
- D. people who do not have strong opinions.
- E. none of the above.

**Short Answer**

67. Put the following claims into standard form:

When I'm done with this test, I can go home.

Take out the trash and you can watch your favorite show.

Whenever I eat green golf balls I get sick.

I'll do well on this test if I studied.

68. Compare and contrast non-critical thinking, weak sense critical thinking, and strong sense critical thinking.

69. In light of our discussion of scientific hypotheses, explain what a paradigm shift is and the circumstances of the shift.

70. For the following identify the figure and mood. If it's invalid, write the number corresponding to the rule that is violated.

Some men are kings.  
All kings are powerful.  
Therefore, some kings are men.

71. For the following identify the figure and mood. If it's invalid, write the number corresponding to the rule that is violated.

All queens are good.  
All kings are good.  
Therefore, all kings are queens.

72. Identify the following: 1) The conclusion, and 2) The form.  
3) valid or invalid?

"I can't have anything more to do with the operation. If I did, I'd have to lie to the Ambassador. And I can't do that."

73. Identify the following: 1) The conclusion, and 2) The form.  
3) valid or invalid?

"The stranger is either a knave or a fool. The stanger is a knave. Therefore the stanger is no fool.

74. Put an **X** next to each of the independent clauses.

it represents a constant set of factors  
 there are no time breaks  
 let us summarize again that  
 then I'm happy  
 green golf balls

Answer Key for Test "COA\_Logic\_Final\_Practic#433EF50", 5/19/17

No. in Q-Bank	No. on Test	Correct Answer
2 14	1	T That's just how they work. If P, then Q.
2 286	2	T
2 204	3	T
2 83	4	T
20.1 115	5	True, the conclusion could just be true by coincidence. For example, "The sky is blue and grass is green, so you're working this problem now."
2 12	6	T "Only if" is a consequent indicator.
2 236	7	F
2 287	8	F Similar to 295
2 275	9	F
2 11	10	F It might be a false dilemma, but it could be a legitimate one or part of a disjunctive syllogism.
2 10	11	T Of the arguments studied in this course, only chain arguments have multiple conditional claims.
2 13	12	T Of course. All inductive arguments are deductively invalid. The conclusion might be true, but it isn't 100% certain.
20.1 46	13	T
20.1 50	14	F
20.1 51	15	T
20.1 54	16	F
20.1 110	17	It's false, since nothing is said about the truth of the premises or the validity of the argument.
20.1 140	18	T
20.1 141	19	F
12 3	20	F
12 4	21	T
12 5	22	T
12 9	23	T
8 32	24	T
2 217	25	F
2 171	26	T Lecture notes and website information on hypotheses.
2 285	27	Never be proven true, but can be proven false.
2 48	28	See Lessons/Lectures on the website
9 1	29	Invalid
2 85	30	Ockham's Razor
2 15	31	Should the use of marijuana be allowed for certain medical applications? Beyond Feelings: The most specific issue will easier to argue.
2 214	32	B
2 28	33	If the police are looking for me, then I'm unhappy. See Deduction in Lessons at the website

Answer Key for Test "COA\_Logic\_Final\_Practic#433EF50", 5/19/17

No. in Q-Bank	No. on Test	Correct Answer
2 297	34	Invalid
20.1 33	35	A
20.1 34	36	Particular affirmative (I)
20.1 38	37	A
20.1 40	38	A
20.1 44	39	A
20.1 60	40	The middle term
20.1 62	41	Third figure
20.1 65	42	First figure
20.1 71	43	Major premise, minor premise, conclusion
20.1 72	44	EAE
20.1 133	45	A and C
20.1 142	46	The middle term is the subject of both premises.
20.1 155	47	Invalid Fallacy of four terms
20.1 156	48	Equivocation
8 21	49	Invalid AEE-1 No term can be distributed in the conclusion, which is not distributed in the premises.
8 22	50	Invalid IAI-2 Middle term must be distributed at least once.
2 246	51	Mortal
2 248	52	Whether it is affirmative or negative
2 212	53	If there is life, then there is hope.
2 213	54	Review the worksheet
2 199	55	This doesn't define anything at all.
2 191	56	Deductive
20.1 191	57	Principle of charitable interpretation.
20.1 192	58	Denying the antecedent; invalid
20.1 193	59	Modus ponens; valid
2 149	60	Invalid
2 147	61	Valid
20.1 204	62	I Fallacy of four terms Almost the same as 196
20.1 199	63	VII
20.1 205	64	E is false, I is true, and O is false.
2 95	65	Never attribute to an arguer a weaker argument when the evidence reasonably permits us to attribute to him or her a stronger one. Very similar to #237
2 167	66	Those who will carefully listen to the messages.
12 12	67	See worksheet
20.1 208	68	See class notes and the course website for the answer.
20.1 209	69	?
20.1 162	70	IAI-4 Valid
20.1 164	71	AAA-3 Rule 3
20.1 160	72	I can't have anything more to do with the operation. MP Valid
20.1 161	73	The stanger is no fool. DS invalid
12 11	74	1, 2, 3

**Practice Test Three**  
**Fall 2017**

Name \_\_\_\_\_

**True or False True = A, False = B**

1. T F
2. T F
3. T F
4. T F
5. T F
6. T F
7. T F
8. T F
9. T F
10. T F
11. T F
12. T F
13. T F
14. T F
15. T F
16. T F
17. T F
18. T F
19. T F
20. T F
21. T F
22. T F
23. T F
24. T F
25. T F
26. T F

**Multiple Choice** Select the best available answer.

27. A B C D  
28. A B C D E  
29. A B  
30. A B C D E  
31. A B C D E  
32. A B C D E  
33. A B C D E  
34. A B  
35. A B C D  
36. A B C D  
37. A B  
38. A B  
39. A B  
40. A B C  
41. A B C D  
42. A B C D  
43. A B C D  
44. A B C D E  
45. A B C D  
46. A B C D  
47. A B  
48. A B C D  
49. A B  
50. A B  
51. A B C D E  
52. A B C D  
53. A B C D  
54. A B C D E  
55. A B C D E  
56. A B C D  
57. A B C D  
58. A B  
59. A B  
60. A B  
61. A B  
62. A B C D E F  
63. A B C D E F  
64. A B C D E  
65. A B C D

66. A B C D E

**Short Answer**

67.

68.

69.

70.

71.

72.

73.

74.