

Department of philosophy

Paper-C. C-II

Logic & Scientific Method

Question Bank

Unit-1

Q. 1. Fill up the blanks

1. The term 'Logic's is derived from the Greek word _____.
2. _____ has defined Logic as the science of laws of thought.
3. _____ has defined Logic as the science of argumentation.
4. _____ has defined Logic as an art of reasoning.
5. _____ has defined Logic as a science and also an art.
6. Inference is a _____ phenomena
7. An inference expressed in language is called as _____.
8. Logic is directly concerned with _____ and indirectly with _____.
9. An argument is _____ if the conclusion logically follows from the premises.
10. An argument is _____ if the conclusion does not logically follow from the premises.
11. An argument consists of _____ -.
12. A proposition is either _____ or _____ while an argument is either _____ or _____.
13. If an argument is valid and both the premises are true then the conclusion is _____.
14. Logic deals with _____.
15. _____ is a conclusion indicator.
16. _____ is a premise indicator.
17. _____ argument is a descending process.
18. _____ argument is a ascending process.
19. All the premises of a sound argument are _____.
20. The conclusion of deduction is _____
21. The conclusion of induction is _____.
22. Aristotle formulated _____ laws of thought.
23. Hamilton names law of contradicton as _____.
24. The Law of identity expressed by the formula _____
25. The law of contradiction expressed by the formula _____.
26. The law of excluded middle expressed by the formula _____.
27. Formal logic also called as _____ Logic.
28. Material logic is also called as _____ Logic.
29. Logic aims at the establishment of both _____ and _____ truth.
30. Logic is a _____ science.
31. _____ states that A is A.
32. _____ law states that A cannot be both B and not-B at the same time.
33. _____ law states that A is either B or not -B.
34. _____ has formulated the tree fundamental laws of thought.
35. Tree is Tree is an example of _____.
36. The propositions which imply the conclusion are called as _____
37. The proposition which implied by the premises are called as _____.

38. Deductive logic establishes the _____ truth.
39. Inductive logic establishes the _____ truth.
40. Logic is least concerned with the _____ of reasoning.

Q. 2. Short type of questions (one or two sentences only)

- a) What is inference?
- b) What is called Logic?
- c) What is called Argument?
- d) What is proposition?
- e) What is premise?
- f) What is conclusion?
- g) What is valid argument?
- h) What is invalid argument?
- i) Give one example of invalid argument
- j) Give one example of valid argument .
- k) What is deductive argument?
- l) What is inductive argument?

Q. 3. Short type questions (75words)

- a) Distinguish between inference and argument
- b) Distinguish between sound and unsound argument
- c) What is valid argument? Give an example
- d) What is the law of Identity?
- e) What is the law of excluded middle?
- f) What is the law of contradiction?
- g) What is formal truth?
- h) What is material truth?
- i) Distinguish between truth and validity

Q. 4. Long type questions (300 words)

- a) Is logic a science or an art? Discuss.
- b) Distinguish between truth and validity. Is logically concerned with truth or validity?
- c) Explain the nature of sound and unsound arguments with examples
- d) Explain nature and scope of logic.
- e) What is an argument? Point out the distinction between deductive and inductive arguments.
- f) State and explain the fundamental principles of logic

Unit-2

Q.1 fill up the blanks.

- 1. Proposition is an expression of _____
- 2. A proposition is a _____ unit
- 3. A proposition may either be _____ or _____
- 4. All propositions are _____
- 5. Only _____ sentences are propositions
- 6. The connecting link between the subject and predicate of a proposition is called as _____

7. The copula should always be in the _____ tense.
8. The negative element in a proposition should belong to the _____
9. The sign of modality in a proposition must belong to the _____
10. According to quality, the propositions are classified into _____ and _____.
11. According to quantity, propositions are classified into _____ and _____.
12. A term which is stated in its entire denotation is said to be _____.
13. Only the _____ propositions distribute their subject terms.
14. The _____ propositions always distribute their predicate term.
15. Both the subject and the predicate terms are distributed in _____ type of propositions
16. In _____ type of proposition, neither the subject nor the predicate is distributed
17. If the truth or the falsity of one proposition does not imply the truth or the falsity of another proposition then such proposition are said to be _____
18. The two propositions which are both true or both false are _____ propositions
19. _____ type of proposition is a superaltern of I-type of proposition.
20. The two propositions are said to be _____ to one another if the truth of one implies the falsity of other and not conversely.
21. A and O type of propositions are _____ to each other.
22. From the standpoint of both quality and quantity, there are _____ types of propositions
23. The relation between E and A propositions is _____
24. The relation between E and I proposition is _____.

Q. 2 Short type of questions (one or word sentences)

1. What is called proposition?
2. What is copula?
3. What is term?
4. What is universal proposition?
5. Give an example of particular proposition
6. Give an example of universal proposition
7. What is singular proposition?
8. Give an example of affirmative proposition
9. What is universal Negative proposition?

Q.3. Short type questions (75words)

- a) What is universal affirmative proposition?
- b) What is universal negative proposition?
- c) What is particular affirmative proposition?
- d) What is the structure of proposition?
- e) What is particular negative proposition?
- f) What do you mean by distribution of terms?
- g) What is the relation of sub-alternation? Give an example.
- h) What is square of opposition?
- i) Why should copulation always be in the form of the verb "to be"?
- j) What is contrary opposition?
- k) What is contradictory opposition?
- l) What is sub-altern opposition?

- m) What is the relation of super-alternation ?
- n) What is contradictory relation of proposition?

Q. 4. Long type questions (300 words)

1. What is a proposition? How does it differ from a sentence?
2. What is copula? Discuss in detail its nature.
3. Discuss the classification of proposition according to quality and quantity?
4. Illustrate the square of opposition.

Unit-3

Q. 1 fill up the blanks.

1. An inference in which the conclusion is derived from a single proposition taken as the premises is called as _____
2. Conversion, obversion, contraposition, etc. are forms of _____ inference.
3. In _____ there is a legitimate transposition of the subject and the predicate of a proposition.
4. There is no change in _____ in conversion.
5. The proposition which undergoes conversion is called as _____ and the conclusion of conversion is called as _____.
6. The converse of an E-proposition is _____.
7. The converse of an I-proposition is _____ proposition.
8. The conversion of an A type of proposition to an I type of proposition is called as _____
9. _____ type of proposition cannot be converted.
10. Simple conversion is possible in _____ and _____ propositions
11. In obversion, the predicate of the conclusion is _____ to the predicate of the premise.
12. The premise of obversion is called as _____ and its conclusion is called as _____.
13. The subject of the obverse is _____ as the subject of the obvertend
14. There is a change in _____ in obversion.
15. There is no change in _____ in obversion.
16. The obverse of an A type of proposition is _____ type of proposition.
17. The obverse of an E-type of proposition is _____ type of proposition.
18. The obverse of an I-type of proposition is _____ type of proposition.
19. The obverse of an O- type of proposition is _____ type of proposition.
20. A term which is not distributed in the premise _____ in the conclusion.
21. The kind of obversion based on the fact of experience is called as _____.
22. In _____ the quality and quantity remain unchanged.
23. A mediate inference involving two premises and a conclusion is called as a _____.
24. A syllogism consists of _____ propositions involving _____ terms.
25. The conclusion of a syllogism cannot be more _____ than the premises.
26. The three terms in a syllogism occur _____ each in it.
27. The term which occur twice in the premises is called as the _____ terms
28. The predicate of the conclusion is _____ terms
29. The premise in which the major term occurs is the _____ premise
30. The premise in which the minor term occurs is the _____ premise.
31. The denotation of the major term is _____ than the denotation of the minor term.
32. The denotation of the middle term is _____ to the denotation of minor and major terms.

33. Syllogism are of two kinds namely _____ and _____.
34. There are _____ numbers of figures.
35. Figure is determined by the position of the _____ term in the premises.
36. The middle term takes the position of the subject in the major premise and predicate in the minor premise in the _____ figure.
37. The middle term takes the position of the predicate in both the premises in the _____ figure.
38. The middle term takes the position of the subject in both the premises in the _____ figure.
39. The middle term takes the position of the predicate in major premise and the position of the subject in the minor premise in the _____ premise.
40. Mood is a form of syllogism as determined by the _____ and _____ of the premises or both the premises and the conclusion.
41. The middle term must be distributed atleast _____ in the premises.
42. From two negative premises _____ conclusion can be drawn.
43. If one of the premises in a syllogism is negative then the conclusion must be _____.
44. If both the premises in a syllogism are particular then _____ conclusion can be drawn.
45. If one of the premises is particular then the conclusion must be _____.
46. If both the premises in a syllogism are affirmative then the conclusion must be _____.
47. If the Major premise is particular and the minor premise is negative then _____ conclusion can be drawn.
48. If one premise in a syllogism is particular and the other is negative then the conclusion must be a _____ proposition.
49. The weakened or the sub-altern moods in Figure -1 are _____ and _____.
50. The sub-altern mood in Figure-2 are _____ and _____.
51. There is no sub-altern mood in _____ figure.
52. Darapti is a valid mood in the _____ figure.
53. Bramantip is a valid mood in the _____ figure.
54. In all the four figures, there are _____ number of weakened moods in total.
55. In all the four figures, there are _____ number of valid moods in total.
56. Baroco is renamed as _____
57. Bocardo is renamed as _____
58. Baroco is directly reduced to _____
59. Bocardo is directly reduced to _____
60. In the first figure, the major premise must be _____ and the minor premise must be _____
61. In the second figure, the major premise must be _____ and one of the two premises must be _____
62. In the third figure, the minor premise must be _____ and the conclusion must be _____
63. For Aristotle _____ figure is the perfect figure.

Q. 2. Short type of questions (one or two sentences only)

- a) What is mediate inference?
- b) What is syllogism?
- c) What is figure?
- d) What is mood?

- e) What is the third general syllogistic rule?
- f) Name the fifth general syllogistic rule
- g) Name the second general syllogistic rule.
- h) What do you mean by term?
- i) What is major premise?
- j) What is minor premise?

Q. 3. Short type questions (75 words)

- a) What do you mean by syllogism
- b) Give an example of valid syllogistic argument
- c) Name the 19 valid moods of syllogism
- d) What is figure?
- e) What do you mean by mood?
- f) Give three characteristics of syllogism
- g) What is fallacy?
- h) What is the fallacy of undistributed middle?
- i) What is the fallacy of four terms?
- j) What is the fallacy of illicit major?
- k) What is the fallacy of illicit minor?
- l) Give an example of the fallacy of Ambiguous middle
- m) What is the fallacy of ambiguous major?
- n) What is the fallacy of ambiguous minor?
- o) What is called Aristotle Dictum?
- p) What do you mean by Dictum de omni et nullo

Q.4. Long type questions (300 words)

1. Discuss the characteristics and structure of syllogism.
2. Explain briefly the third and fifth general syllogistic rules.
3. State and prove the special syllogistic rules of Figure-II
4. State and prove the special syllogistic rules of figure-4
5. State and explain Aristotle's Dictum
6. What is a mood? Determine the valid moods in Figure-1/ Figure-2/ Figure-3 and Figure-4.
7. State the General syllogistic Rules and prove any two of these rules.

Unit-4

Q. 1. Fill up the Blanks

1. The common sense view of causation is also called as _____ view of causation
2. Scientifically, cause is an invariable, unconditional and _____ of the effect.
3. Quantitatively cause is _____ to the effect.
4. According to the law of _____ the total amount of matter in the universe remains constant.
5. For Aristotle, there are _____ number of causes.
6. The form or the shape that a thing takes on being produced is called as the _____ cause.
7. The purpose for which the effect is produced is called as the _____ cause.
8. According to the plurality of causes,, the effect is produced by _____ causes under different times and circumstances

9. In conjunction of causes, an effect is produced by _____
10. Cause and effect are _____ terms
11. Cause is the sum total of _____ and _____ conditions
12. Scientifically, cause is the necessary and _____ condition of the effect.
13. The nearby cause of an effect is called as _____ cause.
14. The distant cause of an effect is called as _____ cause.
15. Mill's experimental methods help us to ascertain the _____ connection between two events.
16. The principles of _____ help us to eliminate the irrelevant circumstances.
17. There are _____ number of experimental methods.
18. The method of agreement is also called as the method of _____ agreement.
19. The method of agreement is a method of _____
20. The method of agreement is a method of _____ rather than proof.
21. The method of difference is also called as the method of _____
22. The method of difference is a method of _____
23. The method of difference requires only _____ number of instances.
24. The joint method of agreement and difference requires _____ and _____ set of instances.
25. The joint method of agreement and difference is a method of _____ agreement.
26. The method of _____ is based on the quantitative aspect of causation.
27. The method of _____ is either the modification of the method of agreement or the method of difference.
28. The method of _____ is applicable only when we have some prior knowledge of the Causes.
29. The method of _____ is liable to commit the fallacy of non-observation .
30. The method of _____ is liable to commit the fallacy of post hoc ergo propter hoc.
31. The method of concomitant variation is not applicable in the case of _____ changes.
32. The method of residues fails if the complex effect is _____.
33. The method of _____ is said to be a method of deduction.

Q. 2. Short type questions (one or two sentences only)

- a) What is material cause?
- b) What is efficient cause?
- c) What is formal cause?
- d) What is final cause?
- e) What is common sense view of causation?
- f) What is scientific view of causation?
- g) What is qualitative view of causation?
- h) What is quantitative view of causation?
- i) What is popular view of causation?
- j) What do you mean by plurality of causes?
- k) What do you mean by the conjunction of cause ?
- l) What is plurality of condition?
- m) Why is the method of agreement called as the method of single agreement ?
- n) What is the first principle of elimination?
- o) What is the second principle of elimination?
- p) What is the third principle of elimination?
- q) Write two merits of method of residues

Q. 3.Short type questions (75words)

1. What is final cause?
2. What is common sense view of causation?
3. What is scientific view of causation?
4. What is qualitative view of causation?
5. What is quantitative view of causation?
6. What is popular view of causation?
7. What do you mean by plurality of causes?
8. What do you mean by the conjunction of cause ?
9. What is plurality of condition?
10. Why is the method of agreement I called as the method of single agreement ?
11. State any three demerits of the method of concomitant variation
12. State any three demerits of the method of difference
13. What is principles of elimination?

Q. 4.Long type questions (300words)

1. State and explain the method of agreement
2. What are the characteristics of method of agreement? State it's advantages and disadvantages
3. State and explain the method of difference
4. State and explain the joint method of agreement and difference
5. State and explain the method of concomitant variation
6. State and explain the method of residues
7. Cause is an immediate unconditional invariable antecedent of the effect. Discuss.
8. Discuss Aristotle's view of causation. Give examples
9. State and explain the doctrine of plurality of causes
10. What is conjunction of causes? Give an example. How does it differ from plurality of causes?