

**Higher Secondary Examination, 2008**  
**Education (New Syllabus)**  
(English version)  
Group-A

1. Answer the following questions (Alternatives are to be noted): 1x10=10

Fill in the blanks :

- a) In a valid deductive argument if the premises are true, conclusion cannot be \_\_\_\_\_.

OR, A deductive argument is not concerned with \_\_\_\_\_ truth of its premises.

- b) A universal affirmative proposition distributes \_\_\_\_\_ term.
- c) If the conclusion of an analogical argument is drawn from irrelevant points of resemblance, the argument is called \_\_\_\_\_ analogy.

Determine whether the following sentences are true or false:

- d) Two contrary propositions having same subject and predicate terms cannot be true together.

OR, In sub-altern opposition if the universal proposition is true, then the particular proposition is doubtful.

- e) In a valid deductive argument conclusion goes beyond the premises.

Choose the correct answer:

- f) In the first figure of a categorical syllogism the number of valid moods is — four / five / six / seven.

**OR,** If the middle term of a valid categorical syllogism is the predicate of both the premises, then the figure would be — first / second / third / fourth.

Write yes or no :

- g) If we affirm the antecedent of a hypothetical-categorical syllogism by affirming the consequent, the argument is valid.

**OR,** Saratchandra is a poet or he is a novelist — it is a disjunctive proposition.

- h) The fallacy of Illicit Generalisation occurs if we arrive at a general conclusion only on the basis of uncontradicted experience.

Answer the following in one word :

- i) Is the conclusion of an inductive argument certain or probable?  
j) name the logician who considers the cause as sufficient condition.

### **Group - B**

2. Answer the following questions (Alternatives are to be noted):  
2x10=20

- a) Give one example of deductive argument and one example of inductive argument.

**OR,** Mention two characteristics of a deductive argument.

- b) Determine the quality and quantity of the following proposition : No man is honest  
c) Give the obverse of — Not all students are attentive.

**OR,** Give an example of simple conversion of A proposition.

- d) Define disjunctive-categorical syllogism.  
e) What is the truth-value of  $p \vee q$ . when p is true/ Explain.

**OR,** On what condition is a conjunctive proposition true?

- f) Symbolize the following sentence: Either Descartes is rationalist or he

is an empiricist.

- g) Determine the truth-value of  $p \vee q$ .
- h) 'A is the necessary condition of B' — what does it mean?
- i) Give an example of necessary-sufficient condition.

**OR,** 'Fire is the cause of smoke' — What is the meaning of the term 'cause' in this case?

- j) Give a symbolic illustration of the Method of Agreement.

**OR,** State the principle of elimination which forms the basis of Mill's Method of Difference.

### Group - C

3. Answer the following questions (Alternatives are to be noted):  
 $5 \times 6 = 30$

- a) Translate the following sentences into standard categorical proposition:  $1 \times 5 = 5$

- (i) Men seldom are happy,
- (ii) Only educated persons are progressive,
- (iii) Not all stories are true,
- (iv) Human beings are generally truthful,
- (v) Ostrich cannot fly.

**OR,** What is meant by distribution of terms? Explain with examples.  $2 + 3 = 5$

- b) Define contradictory opposition with examples. 5

**OR,** Determine the relation of opposition among the following pairs of propositions ; in each case, if the first one is true, determine truth-value of the second one :  $2^{1/2} +$   
 $2^{1/2} = 5$ .

- i) All soldiers are patriots. Some soldiers are not patriots.

- ii) No man is immortal. All men are immortal.
- c) Determine whether the following syllogism is valid and mention the fallacy,  
if any : Every man is not brilliant, all men are not doctors. Therefore, some brilliant men are not doctors. 5

**OR,** What is the Fallacy of Undistributed Middle? Explain with illustration.

- d) Reduce the following argument into logical form and determine whether the argument is valid : If it rains, then the ground is wet. It is not raining. Therefore, the ground is not wet. 5

- e) Define Induction by Simple Enumeration. Give an example.  
 $3+2=5$

**OR,** Write short note on : The nature of Induction. 5

- f) Distinguish between cause and condition. 5

**OR,** Discuss in brief the theory of plurality of cause. 5

### Group- D

4. Answer the following questions (Alternatives are to be noted):  
 $4 \times 10 = 40$

- a) What are the rules of conversion? Give the converse of (i) Birds are not quadruped (ii) Roses are fragrant (iii) Green birds exist.  
 $4+6=10$

**OR,** What is obversion? What are the rules of obversion? Give obverse of A E, I and O propositions.

$$2+4+4=10$$

- b) Prove that (i) O proposition can never be the major premise in the first figure, (ii) If both the premises be particular, no conclusion follows.

$$5+5=10$$

**OR**, Determine the validity of the following syllogism and state the fallacy, if

any :

$$5+5=10$$

i) Bats must be birds, since they can fly and all birds can fly. (ii) Amal is the friend of Bimal, since kamal is the friend of Bimal and Amal is the friend of Kamal.

c) Explain, with examples, Mill's Method of Difference.

10

**OR**, Explain, with examples, Mill's Joint Method of Agreement and Difference.

10

d) Write short notes on : (i) Fallacy of post hoc ergo propter hoc. (ii) Fallacy of mistaking a condition for the whole cause.

$$5+5=10$$

**OR**, Test following inductive arguments and name the fallacies, if there be any: (i) A nation, like a living body must pass through periods of birth, growth and decay. So, a nation is also a living body, (ii) Spring comes after winter. So winter is the cause of spring.

$$5+5=10$$