UNIVERSITY OF THE PUNJAB

Roll No. ....

First Semester   2017
Examination: B.S. 4 Years Programme

PAPER: Logic and Critical Thinking   TIME ALLOWED: 30 mins.
Course Code: SOC-102   MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.
(Objective Type)

Q. # 1: Encircle the correct answer, overwriting/ cutting is not allowed: (10)

a) _____ can both be true at the same time but can never be false simultaneously.

   i) Contradictories   ii) Sub-Contraries   iii) Contraries   iv) Contingents

b) A _____ argument is either valid or invalid.

   i) Deductive   ii) Inductive   iii) Correct   iv) Probable

c) In _____ argument, we always move from general premises to particular conclusion.

   i) Inductive   ii) Deductive   iii) Correct   iv) Invalid

d) _____ can never come in the premises of any syllogistic argument.

   i)   Minor Term   ii) Major Term   iii) Middle Term   iv)   Predicate
        Term

e) The contrapositive of _____ proposition is always valid.

   i) E   ii) O   iii) I   iv) A

f) _____ can never make any valid syllogistic argument because of committing fallacy of exclusive premises.

   i) AAA   ii) EAE   iii) OOO   iv) IAI

g) If A proposition is given as false, then E is:

   i) True   ii) False   iii) Undetermined   iv) Probable

h) "Do not beat your brother" is _____ use of language.

   i) Informative   ii) Expressive   iii) Directive   iv) Ceremonial

i) Inference from a single premise is called:

   i) Mediate   ii) Intermediate   iii) Indirect   iv) Immediate

j) A syllogistic argument must contain exactly _____ premises.

   i) Mediate   ii) Intermediate   iii) Indirect   iv) Immediate

UNIVERSITY OF THE PUNJAB

Attempt this Paper on Separate Answer Sheet provided.
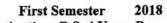
Subjective Part (Short Questions)

Answer the following questions, each question carries equal marks.   **(20 Marks)**

1. Explain the difference between universal proposition and Particular Proposition?
2. What are Contraries?
3. Define mood and figure of Syllogism.
4. Define Middle term.
5. Define an Immediate Inference with example.
6. Define the directive use of language.
7. What is Quality?
8. Define the role of Contraries.
9. Define major premise with example.
10. What is the Fallacy of Exclusive Premises?

Subjective Part (Long Questions)

Answer the following questions, each question carries equal marks.   **(30 Marks)**

1. What is the role of Logical Reasoning in our life? Discuss in detail
2. Use Venn Diagram to test the validity of the following.
       a) AAA-1   b) EAE-4
3. What is the difference between Induction and Deduction? Discuss with examples.

UNIVERSITY OF THE PUNJAB

First Semester   2018
Examination: B.S. 4 Years Programme

PAPER: Logic and Critical Thinking
Course Code: SOC-102

TIME ALLOWED: 2 hrs. & 30 mins.
MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Questions (with Short Answers)

Question No:2

a) Write short answers of the following questions.   (20 marks)

1) What is the difference between Major Premise and Minor premise?

2) State the "quality" of Four standard forms of Categorical Propositions.

3) Draw the Venn Diagram for 'I' Proposition.

4) Define Major, Minor and Middle terms of a Syllogism.

5) Define the 'Fallacy of Exclusive Premises' and offer an example.

6) Why AAI-4 is not a valid syllogistic argument?

b) Translate the following sentences into symbolic logic. Use the first letter of the underlined words.

1) Qasim and Parvez went to shopping.

2) Either Shabana will go to the picnic or Maryam will attend the party.

3) Pakistan will win the match if all players will be playing well.

4) Aslam is a doctor but Zahid is not a teacher.

Questions (Brief Answers)

Question No:3 Check the validity of the following argument with the help of truth table. 5,5

1	A ⊃ B	2	P · Q
	B ⊃ C ∴ A ⊃ C		Q v P ∴ Q v Q

Question No:4 Explain the six rules and formal fallacies of Syllogism. 10

Question No:5 Write a comprehensive note on the uses of language and offer appropriate examples to explain each. 10

UNIVERSITY OF THE PUNJAB

First Semester – 2019
Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Logic and Critical Thinking
Course Code: SOC-102-N   Part – II

MAX. TIME: 2 Hrs. 45 Min.
MAX. MARKS: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2.(a) Answer the following short questions.   (5x2=10)

1. What is the difference between Universal and Particular Propositions?
2. Define "middle term and Major term" with example.
3. What are "Coversion" and "Obversion"?
4. What is "Distribution"?
5. What is Quantity?

Q.2.(b) Translate the following into symbolic logic.
Use first letter of the underlined words.   (5x2=10)

a) Iran will raise the price of oil and Jordan will buy five hundred more warplanes.

b) Neither Panama nor Indonesia will join the meeting.

c) Saima will cook food if Yusra will help.

d) Either John is a political or he is not a politician.

e) If Iran raises the price of oil and Jordan requests more U.S aid, then Egypt will call for a meeting.

Q.3.   Answer the following Long questions.   (3x10=30)

1. Discuss the uses of language with examples. 10

2. Use Venn Diagram to test the validity of the following.   (5+5=10)
   a) AEA-4   **b) EAE-2**

3. Check the validity of the following arguments with the help of truth tables.   (5+5=10)

a)	b)
$(A \cdot B) \vee (B \vee \sim A)$ $\sim A \vee (B \quad A) \therefore (A \vee B)$	$(M \vee P) \supset (P \vee M)$ $(M \vee \sim P) \therefore \sim P \vee \sim M$

UNIVERSITY OF THE PUNJAB

First Semester – 2019
Examination: B.S. 4 Years Program

PAPER: Logic and Critical Thinking
Course Code: SOC-102-N   Part–I (Compulsory)

MAX. TIME: 15 Min.
MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.
Please encircle the correct option. Division of marks is given in front of each question.
This Paper will be collected back after expiry of time limit mentioned above.

Q.1.   Encircle the right answer, cutting and overwriting is not allowed.   (1x10=10)

1) An inductive argument is either _____

   i) Valid or Invalid   ii) True or False   iii) Correct or incorrect   iv) More or Less Probable

2) _____ cannot both be false at the same time but can be true simultaneously.

   i) Contraries   ii) Sub-Contraries   iii) Contradictories   iv) Contingents

3) In _____ argument, reasoning always starts from general premises to particular conclusion.

   i) Deductive   ii) Inductive   iii) Correct   iv) Invalid

4) Major term never appears in the _____ of any syllogistic argument.

   i) Mood   ii) Minor Premise   iii) Figure   iv) Conclusion

5) The converse of A proposition is _____.

   i) E   ii) O   iii) I   iv) not- A

6) _____ is a valid standard form of categorical syllogism.

   i) AAA-4   ii) EAE-1   iii) OOO-1   iv) III-1

7) If O proposition is given as false, then E is:

   i) True   ii) False   iii) Undetermined   iv) Probable

8) " Happy Birthday to you" is _____ use of language.

   i) Informative   ii) Expressive   iii) Directive   iv) Ceremonial

9) Inference from a single premise is called:

   i) Mediate   ii) Indirect   iii) Intermediate   iv) Immediate

10) _____ is a universal negative proposition.

   i) A   ii) I   iii) E   iv) O

Q.1.　Write short answers of the following questions.　　　　(10x3=30)

i)　　Define *Critical Thinking*.

ii)　　What is the difference between immediate and mediate inference?

iii)　　Define contradiction with reference to the traditional square of opposition.

iv)　　What is the Universal Negative Proposition..

v)　　Reconstruct the Venn Diagram for 'E' Proposition.

vi)　　Define 'obversion' and give an example.

vii)　　Define Major, Minor and Middle terms of a Syllogism.

viii)　　Define the 'Existential Fallacy' and explain with an example .

ix)　　Why the mood III remains invalid in any figure?

x)　　What is verbal dispute/disagreement?

Q.2.　Answer the following questions.　　　　(3x10=30)

i)　　-　　Define the following with examples to explain each:

　　　　a) Fallacy of Exclusive Premises
　　　　b) Fallacy of Four Terms

ii)　　-　　What are the benefits of studying "Logic"?

iii)　　-　　Write a comprehensive note on the uses of language with examples to explain each.

UNIVERSITY OF THE PUNJAB

Attempt this Paper on Separate Answer Sheet provided.

Q. 2. Write short answers of the following questions.   **(20 marks)**

  i.   Define *Logic*.
 ii.   Define analogy and give an example.
iii.   What is meant by the strength of an Inductive Argument?
 iv.   Make a difference between Cognitive and Emotive meanings of a statement.
  v.   Draw a Venn Diagram for the following proposition:
        "Some doctors are wise"
 vi.   Define *Obversion* and give an example.
vii.   State the two rules of 'Sub-alternation' according to the Traditional Square of Opposition.
viii.   Construct the syllogistic form and test the validity of **"AEE-1"** with the help of Venn Diagrams.
 ix.   Construct a truth table for a Conjunctive Proposition.
  x.   Determine the truth value of the following symbolized statement if "A" and 'B' is called true and "Z" is called false:
        $(A \supset B) \supset Z$

Q. 3 Write answers of the following questions.   **(30 marks)**

  i.   Define *Proposition* and explain the types of proposition according to *Quality* and *Quantity*.   10
 ii.   Explain the six Rules and Fallacies of Categorical Syllogism.   10
iii.   A) Define and differentiate between simple and compound statements along with examples.   5
        B) Determine whether the following symbolized argument is valid or Invalid by constructing a Truth Table:-   5
        ~E v F
        ~E   ∴ ~F

UNIVERSITY OF THE PUNJAB

Roll No. ....

First Semester   2015
Examination: B.S. 4 Years Programme

PAPER: Logic and Critical Thinking   TIME ALLOWED: 30 mins.
Course Code: SOC-102   MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.
(Objective Type)

Q. # 1: Encircle the correct answer, overwriting/ cutting is not allowed: **(10)**

i)	"Validity" is a characteristic of: **a)** Term **b)** Proposition **c)** Inductive Argument **d)** Deductive Argument
ii)	"Distribution" is an attribute of: a)Term b) Proposition c) conversion d) Syllogism
iii)	Which of the proposition is this **"Some politicians are wise".** **a)** A **b)** E **c)** I **d)** O
iv)	If "I" proposition is false then "E" Proposition will be true according to: **a)** Contrarity **b)** Sub-contrarity **c)** Subalternation **d)** Contradiction
v)	"No P is S" is a converse of: **a)** All S is P **b)** No S is P **c)** Some S is P **d)** Some S is not P
vi)	To draw a conclusion from more than one premise is called: **a)** Immediate Inference **b)** Contradiction **c)** Proposition **d)** Mediate Inference
vii)	The Subject of conclusion in a Syllogism is called: **a)** Major Term **b)** Minor Term **c)** Middle Term **d)** Proposition
viii)	Which figure of syllogism is this? $P \supset M$ $S \supset M$ $\therefore S \supset P$ **a)** First **b)** Second **c)** Third **d)** Fourth
ix)	The symbol ' $\sim$ ' means: A) Conjunction b) Negation c) Implication d) Equivalence
x)	Which of the compound proposition is this? "p ∨ q" **a)** Conjunctive **b)** Disjunctive **c)** Negative **d)** Implicative

PAPER: Logic and Critical Thinking **TIME ALLOWED: 30 mins.**
Course Code: SOC-102   **MAX. MARKS: 10**

Attempt this Paper on this Question Sheet only.
(Objective Type)

Q. # 1: Encircle the correct answer, overwriting/ cutting is not allowed: **(10)**

1) Validity is a characteristic of:

   a) Term   b) Proposition   c) Inductive Argument   d) Deductive Argument

2) Which of the proposition is this "some animals are intelligent":

   a) A   b) E   c) I   d) O

3) Inductive Argument is always:

   a) More or less probable   b) Invalid   c) Consistent   d) True

4) When an inference is based upon one premise only, it is called:

   a) Mediate Inference   b) Middle Term   c) Induction   d) immediate Inference

5) If "A" proposition is true then "E" Proposition will be false according to:

   a) Contrary   b) Sub-contrary   c) Sub-alternation   d) Contradiction

6) To draw a conclusion from more than 2 premises is called:

   a) Immediate Inference   b) Mediate Inference   c) Induction   d) Syllogism

7) The place of Minor Term in a Syllogism is:

   a) Major Premise   b) Minor Premise   c) Conclusion   d) Both Premise

8) Which figure of syllogism is this?

   P M

   S M

   ∴S P   a) First   b) Second   c) Third   d) Fourth

9) How many valid Moods of Syllogism are:
   a) 15   b) 19   c) 26   d) 32

10) Which of the compound proposition is this? "p ∨ q"

   a) Conjunctive   b) Disjunctive   c) Negative   d) Implicative