

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA
MATRICULATION EXAMINATION
INTERMEDIATE LEVEL
MAY 2016

SUBJECT:	PHILOSOPHY
DATE:	28 th April 2016
TIME:	4:00 p.m. to 7:05 p.m.

This examination paper has two Sections. Answer both Section A and Section B. Follow instructions given in each Section.

Section A: LOGIC and REASONING (30 marks)

Answer any three questions from Section A. Each question carries 10 marks.

1. (a) Identify the fallacy in this passage and explain briefly the error in reasoning:

The atheist says, "There is no evidence for God." You might reply, "Why do you say there's no evidence for God?" The atheist has the answer: "Because there is no God!" (4 marks)

- (b) Translate symbolically the following propositions:

- i. Christine and Bob went to the beach. (1 mark)
- ii. Either Christine or Bob went to the beach. (1 mark)
- iii. Christine went to the beach, unless Bob did. (1 mark)
- iv. If Christine did not go to the beach, Bob did. (1 mark)

- (c) Write down the truth-table of the formula:

- i. Either a or b (but not both) (1 mark)
- ii. a if and only if b (1 mark)

2. (a) Explain what is meant by saying $A < B$ is valid. (1 mark)

- (b) Check whether the following implications are valid:

- i. $a \vee b \text{ ,, } c < b \vee c$ (3 marks)
- ii. $\neg(a \rightarrow b) \text{ ,, } \neg c < \neg a \wedge \neg c$ (3 marks)
- iii. $\neg(a \wedge b) < a \rightarrow b$ (3 marks)

3. (a) $A*B$ is defined as $(A \vee B) \wedge (B \vee A)$.

- i. Work out its truth-table (1 mark)
- ii. Name the junctor (1 mark)

- (b) i. Translate the following argument and check whether the implication involved is valid. Give a reason for your answer.

"If Augustine went out for a walk in the woods, then he was not at home. Augustine was at home. Therefore he did not go out for a walk in the woods." (3 marks)

- ii. What is the name of the above implication? (2 marks)

(c) With reference to the following statement:

"If Michael and Connie are having dinner together, they are either at home or at a restaurant."

Identify:

- i. a nominator (1mark)
- ii. an elementary proposition (1 mark)
- iii. a complex proposition (1 mark)

4. (a) For each of the following formulae, write down ONE **interpretation** which is a **model**.

- i. $(a \wedge b) \rightarrow c$ (1 mark)
- ii. $\neg(a \vee b) \wedge \neg c$ (1 mark)
- iii. $(a \leftrightarrow b) \rightarrow c$ (1 mark)

(b) The truth-tables of A, B, C and D are given below:

a	b	c	A	B	C	D
T	T	T	F	T	T	T
T	T	F	F	T	F	F
T	F	T	F	T	F	F
T	F	F	F	T	T	F
F	T	T	F	T	T	T
F	T	F	F	T	F	F
F	F	T	F	T	F	F
F	F	F	F	T	T	F

Arrange the four formulae in a sequence such that every formula implies any formula on its left. (4 marks)

(c) A formula which implies 'Either a or b (but not both)' has one of four truth-tables. Write down these four truth tables. (3 marks)

Section B: ETHICS AND SOCIETY (70 marks)

Answer Question 5 and any other question from this Section. Each question carries 35 marks.

- 5. The Utility Principle states that "actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness" (Mill, 1871). What consequences could this principle entail? Discuss with reference to an example.
- 6. According to Sartre "man is condemned to be free". How does Sartre's concept of radical freedom lead to the creation of value?
- 7. What is the relation between privacy and one's freedom of action?
- 8. The Socratic Method involves dialogue. Discuss how this method leads Socrates to attain knowledge of the Truth.