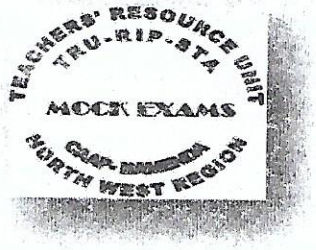
REPUBLIQUE DU CAMEROUN
Paix-Travail-Patrie

MINISTERE DES ENSEIGNEMENTS SECONDAIRES

CELLULE D'APPUI A L'ACTION PEDAGOGIQUE
ANTENNE RÉGIONALE DU NORD OUEST

BP 2183 MANKON BAMENDA
TEL 233 362 209
Email : trubamenda@yahoo.co.uk



REPUBLIC OF CAMEROON
Peace-Work-Fatherland

MINISTRY OF SECONDARY EDUCATION

TEACHERS' RESOURCE UNIT
REGIONAL BRANCH FOR THE NORTH WEST

P.O. BOX: 2183 MANKON BAMENDA
TEL 233 362 209
Email : trubamenda@yahoo.co.uk

MARCH 2020

The Teachers' Resource Unit and the Regional Inspectorate of Pedagogy, in collaboration with NOWEPHITA	SUBJECT CODE NUMBER **0590**	PAPER NUMBER **2**
GENERAL CERTIFICATE OF EDUCATION REGIONAL MOCK EXAMINATION	SUBJECT TITLE **LOGIC**	
ORDINARY LEVEL	**DATE Tuesday 24th March 2020 AFTERNOON**	

Time Allowed: **Two and a half hours**

INSTRUCTIONS TO CANDIDATES

Mobile phones are **NOT ALLOWED** in the examination room.

- Answer **FIVE** questions choosing at least **TWO** from each Section.
- Each question carries 20marks

SECTION ONE: STRUCTURAL

1. a) i) State two reasons why we study logic (2mks)
   ii) Differentiate between the fallacy of incongruous definition and extraneous definition (3mks)
   b) i) Define a hypothetical proposition and give an example (3mks)
   ii) How do we determine the quantity and quality of a proposition? (3mks)
   c) i) Give the contrapositive of "*Some girls are not fighters*" (3mks)
   ii) State the distribution of terms in: "*some children are vulnerable persons*" (2mks)
   d) i) Symbolize : '*either Sandra is tall or short*' (2mks)
   ii) Construct a truth table for p∘~q (2mks)

2. a) Using "*Terrorists*" as subject term and "*Killers*" as predicate term,
   (i) Construct an A-proposition (2mks)
   (ii) Obvert "*Some criminals are not thieves*" (2mks)
   b) Translate the following into optimum logical form:
   (i) The only terrorist is a killer
   (ii) Few girls are present
   (iii) Girls never cheat.
   (iv) Generally, criminals are wicked. (4mks)
   c) State the difference between:
   (i) A Modus Ponens and a Modus Tollens argument (2mks)
   (ii) Definiendum and fundamentum divisionis (2mks)
   (iii) Proposition and an argument (2mks)
   d) (i) State two reasons why we study symbolic Logic (4mks)
   (ii) State the rule of disjunction (2mks)

3. a) (i) If I is true, what will be the truth values of A and E? (2mks)
   (i) How is the principle of contradiction different from the principle of excluded middle? (2mks)
   b) (i) State the use of the copula in a standard form categorical proiposition (2mks)
   (ii) What is a modal proposition? (2mks)
   (iii) Write out an example of b)ii (2mks)
   c) Explain the following:
   (i) Cognitive function of language. (2mks)
   (ii) Argumentum Ad Verecundiam (2mks)
   (iii) A truth table (2mks)
   (iv) Logical connectives
   d) a) Match the terms in Column A to their examples in column B (4mks)

A-terms	B-examples
Privative	Boy
Negative	Jury
Common	Ugly
collective	barren

SECTION B: PROBLEM SOLVING

4. Read the passage below and answer the questions that follow.

Mr. Ayuk one of the logic teachers in my school shouted at the student, "if anyone fails this Logic test, then he is a yam" the class was silent for a while. Eta, the sanitation prefect impatiently complained that, not all the students were ready. The baldheaded teacher, with his shinny shoes, insisted that, if a student prepares for a test, success will come his way and if a student refuses to work hard, failure will await him. The class was silent as the teacher began distributing the test papers.

a) Identify the following in the passage
   i) Privative term ii) Positive term iii) Singular term iv) Common term (4x1mks)
   b) (i) Translate Eta's complaint into logical standard form. (2mks)
   (ii) State the distribution of terms in the derived proposition in b(i) above. (2mks)
   (iii) Translate "If anyone fails this Logic test, then he is a yam" into a disjunctive proposition. (2mks)
   c) i) Pick out a suitable major premise for a complex dilemma. (1mk)
   ii) Construct a complex constructive dilemma from the premise in c (i) above (3mks)
   d) i) State two importance of symbolic logic. (4mks)
   ii) Symbolize "Anita is either sick or pregnant" (2mks)

5. a) (i) Construct a particular affirmative proposition with "*journalists*" as subject term and "*informants*" as predicate term. (2mks)
(ii) State the distribution of terms in a (i) above (2mks)
b) (i) What can be inferred of O and I respectively, given that E is false? (2mks)
ii) Provide the contrapositive of "all politicians are propagandists" (2mks)
(iii) State the rule of contrariety (2mks)
c) Differentiate between the following
(i) Modus Ponendo Tollens and Modus Tollendo Ponens (2mks)
(ii) Definiendum and Definiens (2mks)
(iii) A proposition and an Argument (2mks)
d) (i) Symbolize "*Paul will marry Quinta, if and only if she is born again*" (2mks)
(ii) State the rule of disjunction. (2mks)

6. a) (i) Translate "*few Students are worshippers*" into standard form (2mks)
(ii) State the distribution of terms in a(i) above
(iii) Diagram and symbolize a(i) above (2mks)
b) State the difference between:
(i) Inductive and analogical reasoning (2mks)
(ii) Principle of non-contradiction and the principle of identity (2mks)
(iii) Simple apprehension and judging (2mks)
c) (i) Construct a Modus Tollens from: "*If I buy land, then I will build*" (2mks)
(ii) Using "*either he is a thief or a chief*" as a major premise, construct a Modus Tollendo Ponens argument. (2mks)
d) Construct truth tables for the following:
(i) p. ~ q (2mks)
(ii) p ⊃ q (2mks)

7. a) (i) Demonstrate that: "No liars are Christians" is false given that "All liars are Christians is true on the traditional square of opposition. (4mks)
(ii) State the subaltern and contrary pairs of the E proposition in a)i (2mks)
(iii) Represent the A proposition on the Venn Diagram and symbolize (3mks)
b) (i) What is the relationship between Logic and Language? (2mks)
(ii) State the main functions of language in logic (3mks)
c) Explain each of these terms
(i) Terms
(ii) Ideas
(iii) Logical division (6mks)

THE END