

CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate Of Education Examination

0590 LOGIC 1

JUNE 2017

ORDINARY LEVEL

Centre Number	
Centre Name	
Candidate Identification No.	
Candidate Name	

Mobile phones are NOT allowed in the examination room.

MULTIPLE CHOICE QUESTION PAPER

One and a half hours

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION,
2. DO NOT OPEN THIS BOOKLET, UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins:

3. Check that this question booklet is headed "**0590 Logic 1 - Ordinary Level**"
4. Fill in the information required in the spaces above.
5. Fill in the information required in the spaces provided on the answer sheet using your HB pencil: Candidate Name, Exam Session, Subject Code and Candidate Identification Number.
Take care that you do not crease or fold the answer sheet or make any marks on it other than those asked for in these instructions.

How to answer the questions in this examination

6. Answer ALL the 50 questions in this Examination. All questions carry equal marks.
7. Each question has FOUR suggested answers: **A, B, C and D**. Decide on which answer is appropriate. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen.
For example, if C is your correct answer, mark C as shown below:
[A] [B] [C] [D]
8. Mark only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.
9. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to this question later.
10. Do all rough work in this booklet using the blank spaces in the question booklet.
11. At the end of the examination, the invigilator shall collect the answer sheet first and then the question booklet. **DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH ANY.**

Turn Over

1. Give one reason why we study Logic:
 - A To seek coherent knowledge.
 - B To seek for adequate truth.
 - C To identify propositions.
 - D To think with coherence;
2. To claim that the study of Logic enables one to "weigh the pros and cons of an argument", means that one should:
 - A Investigate and detect bad arguments.
 - B Attain the truth from formed judgments.
 - C Have a critical and mature mind.
 - D Become accurate and consistent.
3. Identify the type of reasoning used in the following argument: "Mary is beautiful. Jane is beautiful. ∴ All girls are beautiful":
 - A Deduction.
 - B Extrapolation.
 - C Analogy.
 - D Induction.
4. Which of the following is an adequate formula of the Principle of Identity?
 - A $A = \sim A$
 - B $A = A$
 - C $A = B$
 - D $A \neq \sim A$
5. Identify the Operation of the Mind that is being performed when a kid is able to identify a drawing and calls it 'a ball':
 - A Judging.
 - B Reasoning.
 - C Simple Apprehension.
 - D Inference.
6. In what way is Mathematics related to Logic?
 - A It provides signs and symbols for Logic.
 - B It offers basic formula to logical problems.
 - C It gives the numbers and tables in Logic.
 - D Deals with establishing truth values in Logic.
7. In the statement: "Wonderful is the mind of a philosopher", the subject term is:
 - A Philosopher.
 - B Wonderful.
 - C The mind.
 - D The mind of the philosopher.

The contradictory of "wise" is:

 - A Foolish.
 - B Intelligent.
 - C Unwise.
 - D Not wise.

Which of the following can be considered as reason for studying terms?

 - A It enables one to construct ideas.
 - B It guarantees the knowledge of more words.
 - C It permits one to express sound judgments.
 - D It illustrates the relationship between propositions.
10. Which of this is False on the use of emotive language?
 - A Statements are accepted without arguments.
 - B Connections between truth and falsehood are clear.
 - C Relevant critical questions are not asked.
 - D Evidences about facts are destroyed.
11. To state the meaning of a term as given by an expert is considered as:
 - A Intension.
 - B Extension.
 - C Denotation.
 - D Connotation.
12. Which of the following designates the word which is to be defined?
 - A Definiendum.
 - B Totum Divisum.
 - C Definiens.
 - D Fundamentum Divisionis.
13. One of the purposes of definition below is False. Identify it:
 - A To improve vocabulary.
 - B To criticize attitudes.
 - C To avoid ambiguity.
 - D To make meanings clear.
14. When the definiens adequately expresses the definiendum, it is best considered as a:
 - A Stimulative Definition.
 - B Precising Definition
 - C Lexical Definition.
 - D Persuasive Definition.
15. Which of these is an adequate Rule of Definition?
 - A It must be Figurative.
 - B It must be Adequate.
 - C It must be Incongruous.
 - D It must be Affirmative.

Identify a Rule of Logical Division in the following:

 - A It must be adequate and exact.
 - B It must be precise and clear.
 - C It must be complete and adequate.
 - D It must be very clear and complete.

The statement: "Birds fly" lacks the optimum logical form because of the absence of:

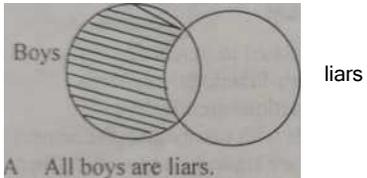
 - A Quantifier and Copula.
 - B Quantifier and Predicate.
 - C Copula and Subject.
 - D Copula and Predicate.
18. A proposition which states alternatives is known as:
 - A Modal.
 - B Categorical.
 - C Disjunctive.
 - D Hypothetical.

19. The statements: "Some students are adults" and "All students are adults", are propositions which are respectively:
 A E and O
 B A and I
 C O and E
 D I and A

20. The statement: "Only dishonest persons are thieves", can be adequately translated into its standard form as:
 A All dishonest persons are thieves.
 B All thieves are not dishonest persons.
 C All thieves are dishonest persons.
 D All honest persons are not thieves.

21. In which type of categorical proposition is the Subject term distributed and the predicate term undistributed?
 A E
 B O
 C I
 D A

22. The Venn Diagram below can be read off as:



- A All boys are liars
 B No boys are liars.
 C Some boys are liars.
 D Some boys are not liars.

23. Which of the following is the best expression of Immediate Inference?
 A Conclusion is derived from only one premise.
 B Premise is derived from only one conclusion.
 C Conclusion provides evidence for the premise.
 D Premise must be related to the conclusion.

29. Which of the following Opposition Inferences have as rule: "From the truth of one, we can infer the falsity of the other"?
 A Contrariety, Contradiction.
 B Subalternation, Contrariety.
 C Contradiction, Subcontrariety.
 D Subcontrariety, Subalternation.

30. Given the E Proposition as True, what can be inferred of I and A propositions respectively?
 A False and True.
 B True and True.
 C True and False.
 D False and False.

31. The obverse of the converse of: "Some lawyers are honest people" is:
 A Some honest people are lawyers.
 B Some honest people are not non-lawyers.
 C Some lawyers are dishonest people.
 D Some non-lawyers are dishonest people.

24. Which of these is False of a syllogistic argument?
 A It contains three propositions.
 B It has three terms appearing twice.
 C The premises are found in the conclusion.
 D The middle term appears in the premises.

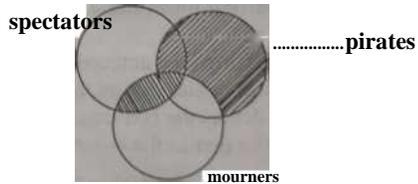
25. Identify one false reason for studying the Syllogism:
 A An excellent tool for clarity.
 B A test for consistency.
 C It curbs hasty reasoning.
 D It corrects fallacies.

26. When the structure of a syllogism is violated, it commits the Fallacy of:
 A Illicit Minor.
 B Four Terms.
 C Undistributed Middle.
 D Illicit Process.

27. The Fallacy of Exclusive Premises is committed when the:
 A Two premises are negative.
 B Middle term is not distributed.
 C Two premises are particular.
 D Three terms do not appear twice.

28. Identify which of the following are valid moods in all the Figures of the Categorical Syllogism:
 A OAO
 B All
 C EIO
 D EAO

32. Read off this Venn diagram into a valid syllogism:



- A All mourners are pirates. No mourners are spectators. Therefore, no spectators are pirates.
 B No spectators are mourners. All pirates are mourners. Therefore, no spectators are pirates.
 C No mourners are spectators. All pirates are mourners. Therefore, no spectators are pirates.
 D All pirates are mourners. No mourners are spectators. Therefore, no spectators are pirates.

32. In reading off the Venn Diagram for arguments, which of the following is False?
 A The P and S circles form the minor premise.
 B The M and P circles form the major premise.
 C The M and S circles form the minor premise.
 D The P and M circles form the major premise.

33. A Second Order Enthymeme is one in which:
 A The minor premise is followed by the conclusion with "since".
 B The conclusion is followed by the major premise with "since".
 C The major premise is followed by the conclusion with "because".
 D The conclusion is followed by the minor premise with "because".
34. In the Sorites, the suppressed intermediate conclusion becomes the:
 A Major premise of the subsequent argument.
 B First Figure of the subsequent argument.
 C The conclusion of the subsequent argument.
 D Minor premise of the subsequent argument.
35. The antecedent of the conclusion of a pure Hypothetical Syllogism is the:
 A Antecedent of the major premise.
 B Consequent of the minor premise.
 C Consequent of the major premise.
 D Antecedent of the minor premise.
36. Identify the following argument: "John is either guilty or innocent. John is innocent. Therefore, he is not guilty."
 A Modus Tollens.
 B Modus Ponendo Tollens.
 C Modus Tollendo Ponens.
 D Modus Ponens.
37. Which of the following illustrates a valid Modus Tollens?
 A Conclusion affirms the antecedent.
 B Minor premise denies the antecedent.
 C Conclusion denies the consequent.
 D Minor premise denies the consequent.
38. Taking: "if people accept God, then they would avoid evil; and if the devil exists, then this world is sinful as the major premise, derive a Complex Constructive Dilemma:
 A Either people accept God or the devil exists. Therefore, either people avoid evil or this world is sinful.
 B Either people do not accept God or the devil exists. Therefore, people avoid evil or this world is sinful.
 C Either people accept God or the devil does not exist. Therefore, either people avoid evil or this world is not sinful.
 D People do not accept God and the devil exists. Therefore, people will avoid evil in this sinful world.
39. An Informal Fallacy can be aptly defined as:
 A Pseudo-reasoning in discourse.
 B Inexact use of words in propositions.
 C Explicit use of an invalid form.
 D Arguments which are invalid.
40. Which of these is False as the significance of the study of Informal Fallacies?
 A Identify and correct errors.
 B Avoid incorrect reasoning.
 C Improve on correct definitions.
 D Prevent illicit modes of reasoning.
41. identify the Fallacy most clearly committed in the following statement: "Jonas, have you ended your mischievous attitude":
 A Ad Hominem.
 B Complex Question.
 C Equivocation.
 D Ambiguity.
42. Which of these are all Fallacies of Ambiguity?
 A Ad Miserecordiam, Amphiboly.
 B Ad Hominem, Composition.
 C Equivocation, Division.
 D Converse Accident, Accent.
43. Identify the Fallacy most clearly committed in the following: "The Club has rich members such as Bill Gates, Fotso Victor and Croesus. Therefore, all members of the Club are rich":
 A Equivocation.
 B Division.
 C Amphiboly.
 D Composition.
- 45 How is Logic related to Science?
 A It uses truth-functional connectives.
 B The abstractions are bivalent.
 C It proceeds with clarity and distinctness.
 D The rules are rigorous and well-defined.
46. Who presented "an arithmetic view of the proposition and syllogism"?
 A De Morgan.
 B George Boole.
 C John Venn.
 D Alfred Whitehead.
47. That which connects the truth-value of a statement to another so as to form a truth- functional compound statement is called:
 A Logical Constant.
 B Logical Connective.
 C Truth Function.
 D Truth value.
48. Which of the following is correctly punctuated?
 A $\sim(\sim p \sim q)$
 B $(q =) r) \vee (p \cdot q) =5 r C (P Z5 \sim \sim r)$
 D $(\sim r \vee q) \mathbf{ZD} \sim (p \cdot q)$
49. Using the letters in brackets, the statement: "Students will be punished (S) if they don't come early (E)", can be correctly symbolized as:
 A $S \supset \sim E$
 B $\sim E \supset S$
 C $\sim E \equiv S$
 D $\sim S \equiv E$
50. What is the true function of this symbolic statement: $\sim q \vee p$:
 A T F T T
 B T T F T
 C T F F F
 D T f T F