GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate of Education Examination

0590 LOGIC 1

JUNE 2023 **ORDINARY LEVEL**

Centre Number	
Centre Name	
Candidate Identification Number	
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** "ORDINARY LEVEL – **0590 LOGIC 1**"
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 fc 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 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 your 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 IT.**

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1. Aristotle considered Logic as:
   A An Organon.
   B Principles.
   C Propositions.
   D Arguments.

2. One reason for the study of Logic in school is:
   A To enable us to reason.
   B To validate Propositions.
   C Construct True Arguments.
   D Acquire critical thinking skill.

3. When that which is true of individual members of a class is also true of a whole class, we term it:
   A Inductive reasoning.
   B Analogical reasoning.
   C Deductive reasoning.
   D Certain reasoning.

4. Which Logical principle of Deduction is symbolized as: $A = A \vee \sim A$?
   A Contradiction.
   B Sufficient Reason.
   C Identity.
   D Excluded middle.

5. The activity of the Mind which involves comparing two Ideas is known as:
   A Simple Apprehension.
   B Reasoning.
   C Judging.
   D Division.

6. Which of the following fields both deal with Principles?
   A Logic and History.
   B Logic and Law.
   C Logic and Philosophy.
   D Logic and Psychology.

7. A word which can stand as the Subject or Predicate of a Proposition is known as:
   A An Idea.
   B A Term.
   C An Attribute.
   D A Concept.

8. In the expression, *The Senior Discipline Master convoked the students to the assembly at midday for an announcement*, the term **assembly** is considered as:
   A Common Term.
   B Corelative Term.
   C General Term.
   D Collective Term.

9. The most appropriate reason why the study of Terms is important in Logic is that it:
   A Permits us to express what we have in the mind.
   B Helps us construct Propositions.
   C Helps us to argue well.
   D Helps us to explain theoretically.

10. When Language is used to pass across a message, its basic function is known as:
    A Expressive Function.
    B Performatory Function.
    C Emotive Function.
    D Informative Function.

11. Which of the following is False of the relationship between language and Thought?
    A Language permits one to express ideas.
    B Thought contextualize language.
    C Language clarifies vagueness in the mind.
    D Language communicates feelings in the mind.

12. Given the Definition: *Man is a rational animal*. Identify the Definiens:
    A Man.
    B Rational.
    C Animal.
    D Rational animal.

13. When a Definition helps to give a specific meaning to a word so as to avoid confusion, it serves the purpose of:
    A Clarifying meaning.
    B Eliminating ambiguity.
    C Explaining theoretically.
    D Increasing vocabulary.

14. The kind of Definition that states the meaning of a word by breaking it down into parts is:
    A Stipulative Definition.
    B Ostensive Definition.
    C Lexical Definition.
    D Nominal Definition.

15. Criticize this Definition: *A girl is not a boy.*
    A Negative.
    B Incongruous.
    C Extraneous.
    D Obscure.

16. In the Logical Division of House into *parlor, kitchen and room,* the Totum Division is:
    A Parlor.
    B Room.
    C House.
    D kitchen.

17. Which of the Rule below belongs to Logical Division ?
    A Must be Distinct.
    B Must be Clear.
    C Must be Precise.
    D Must be per Genus.

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18. A Proposition can aptly be defined as:
A A Statement which is Valid or Invalid.
B A Statement with a True Truth-Value.
C A Statement with a False Truth-Value.
D A Statement which is True or False.

19. Identify this type of Proposition, *if Hilda rejects Eric, then Mary will marry Hans* below:
A Hypothetical Proposition.
B Categorical Proposition.
C Modal Proposition.
D Disjunctive Proposition.

20. Which type of Categorical Proposition is *All logicians are intelligent persons?*
A Universal Affirmative.
B Particular Affirmative.
C Universal Negative.
D Particular Negative.

21. The statement, *A large number of students make noise,* can be optimally translated as:
A All students are noise makers.
B Some students are not noise makers.
C Some students are noise-makers.
D Some students make noise.

22. The Proposition whose Predicate Term is Distributed and Subject term Undistributed is known as:
A Universal Affirmative.
B Particular Negative.
C Particular Affirmative.
D Universal Negative.

23. Using *S* as teachers and *P* as intelligent persons, express this symbol, *SP=O* into a Standard form Categorical Proposition:
A All teachers are intelligent persons.
B No teachers are intelligent persons.
C Some teachers are not intelligent persons.
D Some teachers are intelligent persons.

24. Immediate Inference is when one draws a Conclusion from?
A Two Premises.
B One premise.
C Two Propositions.
D Three Propositions.

25. Select a pair of Opposition relationship below:
A Obversion and Contrariety.
B Conversion and Contradiction.
C Subcontrariety and Sub alternation.
D Sub alternation and Contraposition.

26. On the Square of Opposition, the relationship between the Propositions, *Some cats are wild creatures* and *All cats are wild creatures* is:
A Contrary.
B Sub alternation.
C Sub-contrary.
D Contradiction.

27. Which mode of Eduction is possible only with the Universal Proposition?
A Conversion.
B Inversion.
C Contraposition.
D Obversion.

28. A False definition of Syllogism is that, it is:
A Made up of three Propositions.
B A triad of connected Propositions.
C A form of Immediate Inference.
D A form of Mediate Inference.

29. Identify the most important value of the Syllogism below:
A It is vital tool for clarity in reasoning.
B It helps to determine the truth in Arguments.
C It helps to identify ambiguity in the Arguments.
D It helps us to promote hasty conclusion.

30. The role of the Middle Term in the Categorical Syllogism is to link the:
A Major and Minor Term in the Premises.
B Two Terms in the Conclusion.
C Major and Minor Premises in the Conclusion.
D Subject Term and Predicate Term.

31. The Fallacy committed when the Conclusion follows from two Negative Premises is known as:
A Undistributed Middle.
B Illicit Major.
C Illicit Minor.
D Exclusive premises.

32. What determines the Figure of a Categorical Syllogism?
A The position of the Subject Term.
B The position of the Middle Term.
C The position of the Major Term.
D The position of the Minor Term.

33. Determine a Conclusion indicator below:
A For.
B Because.
C But.
D Therefore.

34. How many circles are needed when representing a Categorical Syllogism on a Venn Diagram?
A Two.
B Four.
C Three.
D One.

35. The Second Order of an Enthymeme is when the:
A Major Premise is omitted.
B Major Term is omitted.
C Minor Premise is omitted.
D Minor Term is omitted.

36. A Sorites can also be referred to as:
A Episyllogism.
B Prosyllogism.
C Monosyllogism.
D Polysyllogism.

37. When the Minor Premise affirms the Antecedent of the Hypothetical Major Premise and the Conclusion affirms the Consequent, it is known as:
A Modus Ponendo Tollens.
B Modus Tollens.
C Modus Ponens.
D Modus Tollendo Ponens

38. In a Modus Ponendo Tollens, the Minor Premise:
A Affirms one of the alternatives of the Major Premises.
B Denies one of the alternatives of the Major Premise.
C Affirms both alternatives of the Major Premise.
D Denies both alternatives of the Major Premise.

39. The Major Premise of a Dilemma is a:
A Disjunctive Proposition.
B Categorical Proposition.
C Hypothetical Proposition.
D Modal Proposition.

40. The form of Dilemma derived from a Hypothetical Proposition with one Antecedent and two Consequents is:
A Simple constructive.
B Complex constructive.
C Simple destructive.
D Complex destructive.

41. A Dilemma is destructive when the conclusion is:
A Disjunctive.
B Hypothetical.
C Negative.
D Categorical.

42. A Fallacy can aptly be defined as a mistake in:
A Thinking.
B Reasoning.
C Thought.
D Action.

43. The importance of the study of Fallacies is seen in:
A Detecting errors in reasoning.
B Convincing people in Arguments.
C Knowing good from bad judgments.
D Misleading people in reasoning.

44. When one appeals to sympathy rather than right reasoning, it is known as:
A Fallacy of Ad Baculum.
B Fallacy of Ad Hominen.
C Fallacy of Ad Populum.
D Fallacy of Ad Misericordiam.

45. What Fallacy is committed in the following Argument: *Since each player of the team is very good, so the team is a good team*?
A Amphiboly.
B Composition.
C Accent.
D Division.

46. The study of Symbolic Logic is important because:
A It enables one to gain in thinking.
B It permits the use of symbols which is tedious.
C It enables one to gain in space and time.
D It expresses the logical structure of reasoning.

47. Identify the logician who viewed Logic and Mathematics as one?
A Leibniz.
B Aristotle.
C Boole.
D Russell.

48. Identify this punctuation mark ( ) :
A Brackets
B Braces.
C Commas.
D Parentheses.

49. The Logical Connective "$\vee$" denotes:
A Biconditional.
B Conjunction.
C Disjunction.
D Implication.

50. A Disjunction is considered to be False when:
A Both disjuncts are true.
B Both disjuncts are false.
C One disjunct is true.
D One disjunct is false.

STOP GO BACK AND CHECK YOUR WORK