

STUDENT'S ID NO: _____

SIGNATURE: _____



UNIVERSITY OF GHANA

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DEPARTMENT OF TEACHER EDUCATION
SCHOOL OF EDUCATION AND LEADERSHIP
COLLEGES OF EDUCATION
END OF YEAR TWO SEMESTER TWO EXAMINATIONS, 2024/25
PROGRAMME

COURSE CODE: TEEG 212

COURSE TITLE: TEACHING AND ASSESSING MATHEMATICS FOR EARLY GRADE

Instruction: Answer all questions in Section A and any three in Section B.

Time: 2 hours

SECTION A
[25 Marks]

Answer all the questions in this section.

1. The NACCA standards-based curriculum emphasizes:
 - A. Teacher-centered instruction
 - B. Rote memorization
 - C. Learner-centered and competency-based teaching
 - D. Examination-focused learning

2. One key reason for teaching mathematics in early grades is to:
 - A. Prepare learners for calculus
 - B. Develop foundational numeracy and logical thinking
 - C. Introduce algebra early
 - D. Promote memorization of formulas

3. Which of the following best supports counting up to 9 objects?
 - A. Flashcards with letters
 - B. Number lines only
 - C. Fingers and number cards
 - D. Multiplication tables

4. Skip counting by 25s starting from 100 gives:
 - A. 100, 125, 150, 175
 - B. 100, 120, 140, 160
 - C. 100, 105, 110, 115
 - D. 100, 130, 160, 190
5. Which material best demonstrates place value?
 - A. Alphabet blocks
 - B. Base ten blocks
 - C. Storybooks
 - D. Flashcards with shapes
6. Addition as “counting on” is best demonstrated by:
 - A. Subtracting from a group
 - B. Grouping by 5s
 - C. Starting from one number and counting forward
 - D. Matching objects
7. Which strategy models subtraction effectively in early grades?
 - A. Counting all
 - B. Take-away or move strategy
 - C. Skip counting
 - D. Multiplication
8. Which of the following is a mental addition strategy?
 - A. Drawing number lines
 - B. Using fingers
 - C. Memorizing tables
 - D. Breaking numbers into tens and ones
9. What is the sum of $9 + 6$ using mental strategies?
 - A. 14
 - B. 15
 - C. 16
 - D. 17
10. Which of the following is NOT a form of assessment?
 - A. Assessment for learning
 - B. Assessment of learning
 - C. Assessment as punishment
 - D. Assessment as learning
11. Which tool is best for observing learners during math activities?
 - A. Questionnaire
 - B. Interview protocol
 - C. Observation guide
 - D. Multiple choice test

12. A good test must meet the following criteria EXCEPT:

- A. Validity
- B. Clarity
- C. Popularity
- D. Fairness

13. Which of the following is a non-standard unit of measurement?

- A. Centimeter
- B. Hand-span
- C. Meter
- D. Millimeter

14. Which attribute is common to all 2D shapes?

- A. Volume
- B. Flat surfaces
- C. Curved edges
- D. Thickness

15. Which activity supports sorting 3D shapes by attributes?

- A. Drawing shapes
- B. Naming shapes
- C. Grouping by color and size
- D. Measuring with rulers

16. Which of the following is a purpose of lesson planning?

- A. To reduce teaching time
- B. To entertain learners
- C. To ensure structured and effective teaching
- D. To avoid using TLMs

17. Which of the following is a feature of micro lesson planning?

- A. Annual syllabus
- B. Weekly scheme
- C. Focused teaching objectives
- D. Broad curriculum goals

18. Which base ten representation shows 243?

- A. 2 hundreds, 4 tens, 3 ones
- B. 2 tens, 4 hundreds, 3 ones
- C. 2 ones, 4 tens, 3 hundreds
- D. 2 hundreds, 3 tens, 4 ones

19. Which Ghanaian language strategy supports numeracy?

- A. Translating only English terms
- B. Using local counting songs and rhymes
- C. Avoiding local language use
- D. Teaching in English only

20. Which of the following is a performance assessment tool?

- A. Multiple choice test
- B. Observation guide**
- C. Interview protocol
- D. Focus group discussion

21. Which of the following is used in skip counting by 10s?

- A. 10, 15, 20, 25
- B. 10, 20, 30, 40**
- C. 10, 12, 14, 16
- D. 10, 11, 12, 13

22. Which of the following is a valid reason for using manipulatives?

- A. To decorate the classroom
- B. To confuse learners
- C. To support concrete understanding**
- D. To replace teaching

23. Which of the following best describes “assessment as learning”?

- A. Teacher evaluates learner
- B. Learner reflects and self-monitors**
- C. External examiners assess
- D. Parents assess learners

24. Which of the following is a step in test design?

- A. Guessing questions
- B. Skipping blueprint
- C. Defining purpose**
- D. Copying past questions

25. Which of the following is a valid critique of a math lesson?

- A. Based on teacher's handwriting
- B. Based on mathematical learning theory**
- C. Based on classroom noise
- D. Based on student uniform

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SECTION B – Answer any three questions

- 1.a.** Explain the difference between standards-based and objective-based curriculum.
- b. Discuss how the NACCA curriculum supports inclusive teaching in early grade mathematics.
- c. Identify two challenges teachers face when implementing the standards-based curriculum.
- 2.a.** Describe how to use fingers and number cards to teach counting up to 19.
- b. Demonstrate skip counting by 5s starting from 25 up to 100.
- c. Explain how base ten blocks can be used to represent the number 356.
- 3.a.** Differentiate between AfL, AoL, and AaL.
- b. List three tools used for assessing mathematics learning in early grades.
- c. Describe how to administer a one-on-one instructed response test.
- 4.a.** Outline the components of a micro lesson plan for teaching subtraction.
- b. Watch a video clip of a math lesson and critique it using mathematical learning theory.
- c. Suggest two ways technology can enhance numeracy instruction in early grades.
- 5.a.** Identify three 2D shapes and describe one attribute of each.
- b. Sort a collection of 3D shapes using two attributes and explain your sorting rule.
- c. Demonstrate how to measure the length of a desk using non-standard units.