



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

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.