UNIVERSITY OF GHANA

DEPARTMENT OF TEACHER EDUCATION
SCHOOL OF EDUCATION AND LEADERSHIP
COLLEGES OF EDUCATION
END OF SEMESTER ONE EXAMINATIONS FOR LEVEL 300, 2022/2023
B.ED. PROGRAMME

COURSE CODE: **TEEG 309**
COURSE TITLE: **TEACHING AND ASSESSING NUMERACY II FOR EARLY GRADE**_____

Instruction: Answer all questions in Section A and any **three** questions in Section B.
Time: 2 hours

SECTION A
[25 Marks]
Answer all the questions in this section.

1. One reason why a teacher would engage children in sorting activities is to enable them to_____.
   A. add numbers.
   B. conserve numbers.
   C. identify numbers.
   D. subtract numbers.

2. Which of the following activities will help a primary three pupil to determine the total number of pupils in his/her class?
   A. Counting
   B. Grouping
   C. Matching
   D. Measurement

3. Which of the following represents a number in the nominal sense?
   A. Josephine came 3rd in the race.
   B. Kofi Manu is in house *3*.
   C. Osman scored 65% on the exam.
   D. The enrolment in Basic One is *25*.

4. Which of these is the most suitable order of activities designed to help children to understand early number concepts?
   A. Abstract, concrete and semi-concrete
   B. Concrete, Abstract, and semi-concrete
   C. Concrete semi-concrete and Abstract,
   D. semi-concrete, Abstract, Concrete

5. Fraction can be conceived to include the following EXCEPT as a/an_____
   A. group of groups
   B. operator
   C. part of a group
   D. ratio

6. All the following are appropriate materials for teaching three-digit numbers EXCEPT_____
   A. Abacus.
   B. Cuisenaire rods.
   C. Multibase Arithmetic Block.
   D. Bundle of sticks and lose ones.

7. Subtraction can be taught with the concept of all the following EXCEPT _____
   A. comparison.
   B. missing addend.
   C. repeated addition.
   D. take away.

8. 168 is divisible by 3 because_____
   A. The sum of the digits is divisible by 3.
   B. The difference between 8 and 6 plus 1 is 3.
   C. The last digit is an even number.
   D. Double the last digit minus 3 is 1.

9. Mr. Issah, An early grade teacher, intends to teach his pupils the addition of one digit with a sum up to nine. Which of the following materials do you think is the most appropriate material to use?
   A. Abacus.
   B. Bundles of sticks.
   C. Cuisenaire rods.
   D. Multi-Based Arithmetic Block.

10. Which of the following numbers has 2 as a tenth?
    A. 55.243
    B. 55.123
    C. 3521.34
    D. 2641.20

11. *Doubling and Halving* is a mental strategy best suited for teaching ......
   A. addition
   B. division
   C. multiplication
   D. subtraction

12. Addition and subtraction are _____ operations.
   A. complementary
   B. integrated
   C. inverse
   D. supplementary

13. Front End as a mental strategy for multiplying numbers uses which of the following properties of operations of numbers?
   A. Associative
   B. Closure
   C. Commutative
   D. Distributive

14. Fractions that look different but show exactly the same amount are _____ fractions.
   A. common
   B. decimal
   C. equivalent
   D. proper

15. Two bulbs blink every 12 seconds and 8 seconds, after how many seconds will they blink together?
   A. 24
   B. 28
   C. 32
   D. 48

16. X and Y are two numbers. If the product of the two numbers 168 and the Highest Common Factor is 6, find the Least Common Multiple of X and Y.
   A. 28
   B. 162
   C. 168
   D. 1008

17. When a primary two pupil multiply two numbers, the result obtained is called _____
   A. difference.
   B. product.
   C. quotient.
   D. sum.

18. Which of these 3-dimensional shapes has no vertices?
    A. Cone
    B. Cuboid
    C. Pyramid
    D. Sphere

19. How many squares would a net of a cube have?
    A. 4
    B. 6
    C. 8
    D. 10

20. Which of the following forms of assessment sees the child as a critical thinker?
    A. Assessment as learning
    B. Assessment for learning
    C. Assessment in learning
    D. Assessment of learning

21. Diagnostic assessment is done to _____
    A. award the best students.
    B. compare the performance of pupils.
    C. grade pupils on their performance.
    D. identify the strengths and weaknesses of the pupils.

22. Which of the following is NOT a characteristic of effective feedback? It should be
    _____
    A. immediate.
    B. precise.
    C. infuriative
    D. motivative.

23. Which of the following is the most appropriate arbitrary unit for measuring the length of the classroom?
    A. Eraser
    B. Handspan
    C. Pencil
    D. Strides

24. Mr. Awinyam, a primary three teacher, wants to teach the addition of fractions. As a resource person, which of the following materials will you NOT recommend for use?
    A. Abacus
    B. Cuisenaire rods
    C. Fraction chart
    D. Strips of paper

25. You are an early grade mathematics teacher and want to find out how nice your learners can draw a cuboid. Which of the following tools will you use to collect the data?
    A. Questionnaire
    B. Interview
    C. Observation
    D. Experiment

SECTION B
[75 Marks]
Answer any __three__ questions in this section.

1a   A primary three pupil says $\frac{1}{5}$ is greater than $\frac{1}{4}$ because 5 is   [12marks]
      greater than 4. Describe an activity you would use to help the
      pupil confirm or otherwise his/her conclusion.

1b.   Using a named concrete material, describe an activity you would   [8marks]
      use to help a primary three pupil determine the factors of 12

1c.   Explain any three reasons why pupils must be taught the concept   [5marks]
      of place value.

2a.   Explain how you would help a primary 3 pupil to solve $21 \div 3$ by   [12marks]
          i. sharing (5marks)

        ii. grouping (5marks

2b.   Describe an activity you would use to help primary three pupils   [13marks]
      compare the capacity of two unequal containers using:
      i. direct comparison
      ii. arbitrary unit

3a.   With relevant examples, explain the following as used in the   [9marks]
      early grade class.
      i. Assessment as learning
      ii. Assessment for learning

      iii. Assessment of learning

3b.   Explain any five reasons why early-grade teachers should   [16marks]
      assess their learners.

4a.   Using the test for divisibility, determine whether or not 162 is   [10marks]
      divisible by 18

4b.   With a relevant example each, identify and explain three ways   [15marks]
      of explaining fractions to your primary three pupils

5a.   Describe an activity you would use to help your learners to   [10marks]
      deduce that $6 \times 5 = 5 \times 6$

5b.   With an example each, explain any __THREE (3)__ mental   [15marks]
      strategies you would use to help your learners to multiply
      multi-digit efficiently.