

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 SEMESTER ONE EXAMINATIONS FOR LEVEL 300, 2021/2022

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.

In this section, each question is followed by four options lettered A to D. Read each question carefully and write down the letter that corresponds with the correct or best option in the booklet provided. Each question carries (1 mark).

1. What is the best interpretation for 4×5 ?
 - A. 4 groups of 5 objects
 - B. 4 groups and 5 objects
 - C. 5 groups of 4 objects
 - D. 5 groups and 4 objects

2. The assessment that helps students to take more responsibility for their own learning, learn about themselves as learners, and reflect on their work on a regular basis is
- A. Assessment as learning
 - B. Assessment for learning
 - C. Assessment in learning
 - D. Assessment of learning
3. Which one of the following statements is NOT true?
- A. The HCF of a set of numbers is greater than the LCM of the same numbers.
 - B. The HCF is the largest of the factors common to the numbers under consideration.
 - C. The LCM is the least of the multiples common to the numbers under consideration.
 - D. The product of LCM and HCF is equivalent to the product of the two given numbers.
4. Which one of the following is NOT a pre-number activity?
- A. Arranging
 - B. Matching
 - C. Ordering
 - D. Sorting
5. Which one of the following number sense can best be used to describe the position of student in a class?
- A. Cardinal numbers
 - B. Nominal numbers
 - C. Ordinal numbers
 - D. Ratio numbers
6. Which one of the following is a perfect number?
- A. 6
 - B. 12
 - C. 14
 - D. 28
7. Which one of the following is NOT a base ten material?
- A. Abacus
 - B. Bundles of sticks and loose ones
 - C. Cuisenaire rod
 - D. Multi- base block
8. A number which has only two factors is called _____ number.
- A. composite
 - B. even
 - C. odd
 - D. prime

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9. Which of the Dienes block piece will you use to represent 3 in the number 2375?
- A. Block
 - B. Flat
 - C. Longs
 - D. Units
10. Complete the sequence 21, 25, 33, 49, 81, 145, _____.
- A. 113
 - B. 132
 - C. 145
 - D. 273
11. Which one of the following base ten material is non-proportional in teaching addition and subtraction to class 2 pupils?
- A. Abacus
 - B. Bundles of ten sticks and loose ones
 - C. Dienes block
 - D. Strips of Cuisenaire rods
12. Which one of the following forms of assessment is summative in nature?
- A. Assessment as learning
 - B. Assessment for learning
 - C. Assessment in learning
 - D. Assessment of learning
13. Which one of the following statements is true?
- A. Multiplication and addition are inverse operations.
 - B. Multiplication is distributive over division.
 - C. The multiplicative identity is zero.
 - D. The multiplicative inverse of zero do not exist.
14. Fraction can be conceived to include the following EXCEPT a/an _____.
- A. exponent
 - B. operator
 - C. part-whole
 - D. ratio
15. A solid has how many dimensions?
- A. Two
 - B. Three
 - C. Four
 - D. Five

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16. Which one of the following is the most appropriate arbitrary unit for measuring the length of the classroom?
- A. Eye gaze
 - B. Handspan
 - C. Pencil
 - D. Strides
17. The probability that Araba will come to church today is $\frac{1}{4}$. What is the probability that she will not come to church?
- A. $\frac{1}{4}$
 - B. $\frac{2}{4}$
 - C. $\frac{3}{4}$
 - D. $\frac{4}{3}$
18. Which one of the following is NOT a solid shape?
- A. Cone
 - B. Prism
 - C. Pyramid
 - D. Trapezium
19. The assessment that teachers use to find out what their learners know and can do, and what confusions, preconceptions, or gaps they might have is called _____.
- A. Assessment as learning
 - B. Assessment for learning
 - C. Assessment in learning
 - D. Assessment of learning
20. Which one of the following is NOT a quadrilateral?
- A. Parallelogram
 - B. Pentagon
 - C. Rectangle
 - D. Square
21. Any straight line which divides a circle into parts and is terminated at each end by the circumference is known as a/an _____.
- A. arc
 - B. chord
 - C. diameter
 - D. segment

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22. What is the relationship between square and triangular numbers?
- A. Difference of any two triangular numbers gives one square number.
 - B. Difference of two consecutive triangular numbers gives one square number.
 - C. Sum of two consecutive square numbers gives one triangular number.
 - D. Sum of two consecutive triangular numbers gives one square number.
23. Which one of the following is irrelevant in the counting process?
- A. Associating a number name to a group of objects.
 - B. Knowing the numbers' names in their conventional order.
 - C. Knowing the order in which the objects in a group should be counted.
 - D. The last number name mentioned tells the number of objects in a group.
24. Division can be taught using all the following approaches EXCEPT _____.
- A. grouping
 - B. repeated addition
 - C. repeated subtraction
 - D. sharing
25. A branch of mathematics that involves study of plane and solid figures based on proofs, axioms and theorems is referred to as _____ geometry.
- A. Elliptical
 - B. Euclidean
 - C. Hyperbolic
 - D. Spherical

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SECTION B

[75 Marks]

Answer any THREE questions in this section.

- 1 A primary three pupil solves an addition as given below:
- $$\begin{array}{r} 68 \\ + 54 \\ \hline 1112 \end{array}$$
- Use the information to answer the following questions:
- (a) Identify the problem of this pupil. 4 Marks
 - (b) Using a named material, explain how you would help the pupil overcome his/her problem. 15 Marks
 - (c) Mention any Two other materials you could have used to teach the same concept. 6 Marks
- 2
- (a) Using the test for divisibility, determine whether 7168 is divisible by 2, 3, 4, 5, 6, 7, and 8. 21 Marks
 - (b) Briefly explain Two (2) characteristics of children who have developed number sense. 4 Marks
- 3
- (a) What is assessment? 2 Marks
 - (b) State Five (5) importance of the assessment that teachers use to find out what their learners know and can do, and what confusions, preconceptions, or gaps they might have. 5 Marks
 - (c) With relevant examples, explain five reasons why you assess your pupils in numeracy. 18 Marks
- 4
- (a) What is micro teaching? 4 Marks
 - (b) Explain how you would undertake a micro teaching in your classroom 15 Marks

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- (c) Mention any THREE (3) roles of technology in the teaching and learning of mathematics. 6 Marks

- 5 (a) Describe an activity you would use to help a primary three pupil determine which is greater between $\frac{3}{4}$ and $\frac{1}{3}$. 12 Marks

- (b) 8 Marks

Solids	No. of faces	No. of vertices	No. of edge (E)
Square pyramid	5		8
Triangular pyramid			6
Triangular prism	5	6	
Cube	6		
Cuboid		8	

- (c) What is the relationship between the faces, edges, and vertices? 5 Marks