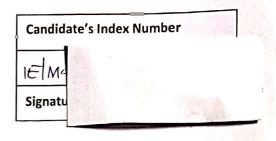
JANUARY 2024
EMA 406SW
ADVANCED STUDY OF TEACHING BASIC
SCHOOL MATHEMATICS
1 HOUR 30 MINUTES



## UNIVERSITY OF CAPE COAST COLLEGE OF EDUCATION STUDIES SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH INSTITUTE OF EDUCATION

FIVE-SEMESTER BACHELOR OF EDUCATION (SANDWICH) PROGRAMME LEVEL 400, END-OF FIRST SEMESTER EXAMINATION, JANUARY 2024

9<sup>TH</sup> JANUARY 2024

ADVANCED STUDY OF TEACHING BASIC SCHOOL MATHEMATICS

4:30 PM - 6:00 PM

SECTION B (40 MARKS)

Answer any TWO questions from this Section.

Please, note that if you answer more than two questions, only the first two will be marked.

1.

a. Explain each of the following:

i. Instrumental understanding

[2 marks]

ii. Relational understandingiii. Functional understanding

[2 marks]

iv. Schema

[2 marks]

b. Explain four implications of the behaviourist learning theory to the mathematics teacher.

[12 marks]

2.

a. Explain with an example in each case the main difference between assimilation and accommodation. [6 marks]

b.

Define learning style in mathematics education.

[2 marks]

ii. Explain four factors that influence the learning styles of students at the basic level.

[12 marks]

b. Explain with an example each of the following school-based assessments:

•	Assessment for learning (AfL)	[4 marks]
ii.	Assessment as learning (AaL)	[4 marks]
iii.	Assessment of learning (AoL)	[4 marks]

4.

- a. With specific examples in each case, explain **four** problem-solving strategies used in enacting the subject matter in mathematics. [16 marks]
- Explain two ways of improving classroom questioning skills as a prospective mathematics teacher.