INTERNATIONAL UNIVERSITY OF EAST AFRICA

'Learning to Succeed'

HIGHER EDUCATION CERTIFICATE

END OF SEMESTER EXAMINATIONS - AUGUST 2025

PROGRAMME: HEC
YEAR/SEM: YEAR 1/SEMESTER 1
COURSE CODE: FDN 1101
NAME: FONDATION MATHEMATICS ONE

DATE:
TIME:

INSTRUCTIONS TO CANDIDATES:

SECTION A

Attempt ALL Questions (Each question carries 4 marks)

Question 1:

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Question 2:

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Question 3:

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Question 4:

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Question 5:

Find the equation of the line passing through (1, 3) and parallel to the line joining the points (7, 13) and (3, 5).

Question 6:

Find the solution to the equation $4(x - 2) - 2(x - 6) = 3(x + 1)$

Question 7:

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Question 8:

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Question 9:

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Question 10:

The first term of a GP is 15 and the last term is 240 and the common ratio is 2. Find the sum of this GP

Question 11:

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Question 12:

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Question 13:

In each of the following, make x the subject of the formulae

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Question 14:

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Question 15:

A super market sells apples and bananas. The cost of 3 apples and 4 bananas is Ugx3000. The cost of 7 apples and 3 bananas is Ugx 2000. Find the cost of each item

Question 16:

If the first term of an AP is 5 and the 9^{th} term is 25. Find the common difference

Question 17:

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Question 18:

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Question 19:

In a GP, the sum of the first and the third term equals to 90 and the sum of the second and the fourth term equals to 30. Find the sum of the first 8 term.

Question 20:

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SECTION B

Attempt any three question (Each question carries 20 marks)

Question 1:

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Question 2:

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Question 3:

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Question 4:

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Question 5:

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Question 6:

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Question 7:

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Question 8:

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Question 9:

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Question 10:

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