

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF DOCTORATE ON
PHILOSOPHY OF**

BOTA 912: SUSTAINABLE BIODIVERSITY

STREAMS: PhD BOTANY

TIME: 3 HOURS

DAY/DATE: MONDAY 12/08/2019

2.30 P.M. – 5.30 P.M.

INSTRUCTIONS:

- Answer any **THREE** questions

1. Discuss the impacts of climate change to sustainability of the following ecosystems:
 - (a) Agricultural ecosystems (5 marks)
 - (b) Forest ecosystems (5 marks)
 - (c) Lakes and rivers (5 marks)
 - (d) Mountain ecosystems (5 marks)
 2.
 - (a) Discuss the different levels of biodiversity. (5 marks)
 - (b) Discuss the major causes of biodiversity loss worldwide. (15 marks)
 3. Discuss the contribution of biodiversity to the following SDGs:
 - (a) Achievement of food security and improved nutrition. (10 marks)
 - (b) Combat land degradation and desertification. (10 marks)
 4. Discuss the role of biotechnology in the conservation of biodiversity. (20 marks)
 5. Discuss strategies of biodiversity conservation applied in Kenya. (20 marks)
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