UNIVERSITY OF FORT HARE

ENT506

DEGREE EXAMINATIONS

NOVEMBER 2018

Time: 3 HOURS
Subject: ENT 506
Marks: 120

This paper consists of 2 pages including the cover page

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INSTRUCTIONS
1. Answer ALL questions
2. Number your answers correctly using the same numbers as on the question paper.
3. Also, insert a note stating number of pages including cover
QUESTION 1 [30 Marks]

1.1 Briefly explain enemy release hypothesis (ERH) and state its predictions. (10)

1.2 Discuss the effects of seasonality and light intensity on plant quality. Explain how seasonal and light-mediated changes in the foliage quality of host plants can influence the performance of insect herbivores. (20)

QUESTION 2 [30 Marks]

2.1. Integration of pest management tactics is an interdisciplinary approach, which requires extensive knowledge about the pest, its management strategies, tactics and compatibility between the tactics. Discuss how the various tactics are selected and integrated for preventive and curative management of insect pest. (15)

2.2. Application of insecticides have detrimental effects on practice of beekeeping including poisoning of foraging worker bees which in turn may carry residual toxins back to the hive leading to colony poisoning. Briefly discuss the guidelines that beekeepers may follow to prevent poisoning. (15)

QUESTION 3 [30 Marks]

3.1 Using appropriate terminology, discuss the importance of chemical ecology and the functional role that chemicals play in insect behaviour and ecology. (15)

3.2 Discuss how knowledge from chemical ecology can be applied and integrated towards the management of insect pests of agriculture. (15)

QUESTION 4 [30 Marks]

4.1 Due to controversies surrounding the definition and recognition of species, taxonomist proposed different approaches of species concepts in modern science. Discuss any four modern species concepts and indicate their possible limitations. (30)