



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION
SCIENCE WITH IT & BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES
1st YEAR 2nd SEMESTER 2018/2019 ACADEMIC YEAR
MAIN CAMPUS - REGULAR

COURSE CODE: SBT 102/SBI 3123
COURSE TITLE: SURVEY OF THE PLANT KINGDOM
EXAM VENUE: LR 1 **STREAM: (BED/BIO)**
DATE: 30/04/2019 **EXAM SESSION: 9.00-11.00AM**

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and Any two questions in Section B**
 - 2. Candidates are advised not to write on question paper**
 - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. Explain the evolutionary adaptations that enabled plants to overcome challenges of living on land (3 marks)
2. Using a diagram illustrate the transverse section of a pinus leaf (3 marks)
3. Outline the characteristics that distinguish Pteridophytes from flowering plants (3 marks)
4. Describe terrestrial adaptations of vascular plants (3 marks)
5. Explain how conifers are adapted to their ecological niche (3 marks)
6. Explain the three evolutionary innovations observed in the evolution of the plant kingdom (3 marks)
7. Using a diagram illustrate alternation of generations in Bryophytes (3 marks)
8. Explain three forms of gametic fusion in lower plants (3 marks)
9. Elucidate the structural characteristics of Spirogyra (3 marks)
10. Describe sexual reproduction in Fungi (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Discuss the characteristics of the main groups in Fungi (20 marks)
12. Discuss ecological adaptations of Algae (20 marks)
13. Discuss the taxonomic divisions in gymnosperms (20 marks)
14. Write an essay on the characteristics of Pgeridophytes (20 marks)