



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**FIRST YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF MASTERS OF SCIENCE IN BOTANY (PLANT
ECOLOGY, PLANT PHYSIOLOGY AND BIOCHEMISTRY)**

MAIN CAMPUS

SBT 841: PALYNOLOGY

Date: 19th April, 2016

Time: 8.30 - 11.30am

INSTRUCTIONS:

- Answer ALL Questions in Section A and any other THREE from Section B.

SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. (i) Describe the P/E (3mks)
(ii) Describe the various applications of palynology (5mks)
(iii) Describe the pollen characteristics of the family gramineae (3mks)
(iv) Explain the use of palynology in taxonomic revision (2mks)
(v) State the limitations of melissopalynology (2mks)
2. (i) Explain briefly the various types of apertures found in pollen (5mks)
(ii) Describe characteristics of the pollen exine (5mks)
(iii) Suggest the direction of evolution in pollen characteristics (3mks)
(iv) State the importance of acetolysis in pollen analysis (2mks)

SECTION B: Essay questions (30 MKS)

Attempt 3 questions

3. Describe the process of pollen analysis in honey(10mks)
4. Describe the NPC system (10mks)
5. Describe the process of making pollen reference collections from herbarium specimens(10mks)
6. Describe the production, deposition and dispersal of pollen in the environment (10mks)
7. Describe three pollination syndromes (10mks)