

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER 2007

- COURSE CODE : B202
- TITLE OF PAPER : PLANT MORPHOLOGY
- TIME ALLOWED : THREE (3) HOURS
- INSTRUCTIONS :
1. ANSWER ANY FOUR (4) QUESTIONS
  2. EACH QUESTION CARRIES 25 MARKS.
  3. ILLUSTRATE YOUR ANSWERS WITH LARGE AND CLEARLY LABELLED DIAGRAMS WHERE APPROPRIATE
- SPECIAL REQUIREMENTS : NONE

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR(S).

QUESTION 1.

Describe the morphology of the reproductive structures in five selected and named Gynosperms.

[25 Marks]

QUESTION 2.

Describe the Angiosperm corolla, noting aestivation patterns and corolla types.

[25 Marks]

QUESTION 3.

Write a descriptive essay on 'aggregate fruits and multiple fruits'; provide examples.

[25 Marks]

QUESTION 4.

Give the botanical descriptions and illustrations of the flowers whose floral formulae are given below:-

[a].  $K_5 C_{(5)} A_{(5)+(5)} \underline{G}_{(5)} Z$  [9 Marks]

[b].  $K_{(6)} C_{(6)} A_{12} G_0$  [8 Marks]

[c].  $K_{10} C_5 A_{(100)} G_{(5)}$  [8 Marks]

[Total 25 Marks]

QUESTION 5.

[a]. Describe the characteristic morphological features of the roots of Angiosperms.

[11 Marks]

[b]. Describe the possible root systems of Angiosperms.

[14 Marks]

[Total 25 Marks]

QUESTION 6.

With reference to Angiosperm leaf morphology, describe and illustrate:-

[a]. the stipules and their modifications. [15 Marks]

[b]. the pinnately compound leaf. [10 Marks] OR

[c]. the palmately compound leaf. [10 Marks]

[Total 25 Marks]

[TOTAL MARKS: 100 ]