



1ST SEM. 2010/2011

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: B. Sc. AGRON.; B.Sc. ANIMAL
SCIENCE; B.Sc. HORT. & B.Sc.
FSNT II.

COURSE CODE: AS 202

TITLE OF PAPER: BIOCHEMISTRY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY 4 QUESTIONS.

**THIS PAPER SHOULD NOT BE OPENED UNTIL THE CHIEF
INVIGILATOR HAS GRANTED PERMISSION.**

QUESTION 1

Describe and illustrate the following:

- a. Transamination (13 Marks)
- b. Reverse transcription (12 Marks)

QUESTION 2

Giving an example in each case, describe and illustrate the following Biomolecules.

- a. Sugar alditols (6 Marks)
- b. Essential amino acids (8 Marks)
- c. Sterol steroid (6 Marks)
- d. Pyrimidines (5Marks)

QUESTION 3

Describe and illustrate the major differences between:

- a. Waxes and triacylglycerides (10 Marks)
- b. DNA and RNA (15 Marks)

QUESTION 4

Identify and describe the biomolecules shown in Figure 1 (25 Marks)

QUESTION 5

Describe and illustrate the energy producing steps in the citric acid cycle. (25 Marks)