

2<sup>nd</sup> SEM 2013/2014



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UNIVERSITY OF SWAZILAND  
FINAL EXAMINATION PAPER

PROGRAMME: ALL B.Sc. YEAR I

COURSE CODE: AS 101

TITLE OF PAPER: ZOOLOGY

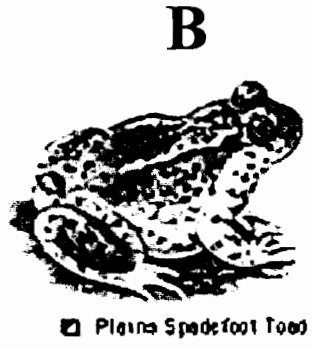
TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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THE CHIEF INVIGILATOR

**QUESTION 1**

Observe the pictures below and answer:



- a) To which Phylum and Class do the above animals belongs? Briefly describe each Class? (20.0 Marks)
- b) Explain **heterotrophic nutrition**. (5.0 Marks)

**QUESTION 2**

- a) Briefly explain **convergent evolution**. (15 Marks)
- b) List the **organic bases of RNA**. (4 Marks)
- c) Define **non-essential amino acids**. (6 Marks)

**QUESTION 3**

- a) List the types of **ribonucleic acids**. (6 Marks)
- b) What are the results of **meiosis**? (5 Marks)
- c) Draw and label the structure of **simple cuboidal epithelium** and **cartilage tissue**. (14 Marks)

**QUESTION 4**

- a) Write short notes about **Prolactin**. (7 Marks)
- b) What are the functions of **leucocytes**. (8 Marks)
- c) List the steps involved in the **preparation for fertilization** and indicate the duration of the last step in a **cow**? (10 Marks)

**QUESTION 5**

- a) Describe **egg formation in the domestic fowl**. (23 Marks)
- b) How long do **spermatozoa remain viable** in the ruminant reproductive tract? (2 Marks)