



2nd SEMESTER 2010/2011

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**UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER**

PROGRAMME : ALL B.SC. YEAR I

COURSE CODE : AS 101

TITLE OF PAPER : ZOOLOGY

TIME ALLOWED : TWO HOURS

INSTRUCTIONS : ANSWER ANY FOUR QUESTIONS

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GRANTED BY THE CHIEF INVIGILATOR**

QUESTION ONE

Compare between:

- a) Mitosis and Meiosis (5 Marks)
- b) Autotrophic nutrition and Heterotrophic nutrition (5 Marks)
- c) Collagen fibres and Elastic fibres (5 Marks)
- d) Deletion and Translocation chromosome mutations (5 Marks)
- e) Red blood cells and White blood cells (5 Marks)

QUESTION TWO

Give an account of the following:

- a) Steps of Animal domestication (5 Marks)
- b) Classification of Chordata (5 Marks)
- c) Simple diffusion (5 Marks)
- d) Types of ribonucleic acid (RNA) (5 Marks)
- e) Phagocytosis (5 Marks)

QUESTION THREE

- a) Name and give the functions of each of any five (5) cytoplasmic organelles found in the cell of animals (15 Marks)
- b) Describe the structure of cartilage and bone tissues (10 Marks)

QUESTION FOUR

Indicates the function (s) of each of the following:

- a) Thyroid Stimulating Hormone (5 Marks)
- b) Luteinizing Hormone (LH) (5 Marks)
- c) Antidiuretic Hormone (ADH) (5 Marks)
- d) Cartilage tissue (5 Marks)
- e) Blood (5 Marks)

QUESTION FIVE

- a) Describe, with the aid of a labelled diagram, the structure of a typical tubular organ (15 Marks)
- b) Describe the mechanisms by which the hypothalamus regulates the production of hormones of the Anterior pituitary gland. (8 Marks)
- c) Define a gene (2 Marks)