



**UNIVERSITY OF SWAZILAND**

**2<sup>nd</sup> SEM. 2015/2016**

**SPECIAL EXAMINATION PAPER**

**PROGRAMME:** All B.Sc. YEAR I

**COURSE CODE:** ASC 104

**TITLE OF PAPER:** ZOOLOGY

**TIME ALLOWED:** TWO (2) HOURS

**INSTRUCTIONS:** ANSWER ANY FOUR QUESTIONS

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED  
BY THE CHIEF INVIGILATOR**

**QUESTION 1**

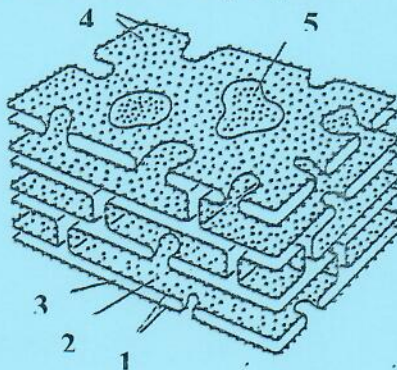
- a) List the differences between ovulation and fertilization. (8.0 Marks)
- b) List all the parts of the spermatozoa. State what would happen if the tail part was missing in the spermatozoa. State what would happen if the head part of the spermatozoa was missing. (10.0 Marks)
- c) Explain and illustrate duplication? (7.0 Marks)

**QUESTION 2**

- a) Write short notes about convergent evolution. (5.0 Marks)
- b) Explain the characteristics used by man to select animals for domestication. (8.0 Marks)
- c) List all the types of Epithelial Tissues found in animals, for each class give an example of its location in the animal body. (8.0 Marks)
- d) Define cilia, name two(2) organs that contain cilia in animals. (4.0 Marks)

**QUESTION 3**

- a) Explain active transport. (6.0 Marks)
- b) List the organic bases found in nucleic acids. (5.0 Marks)
- c) List the types of ribonucleic acids. (5.0 Marks)
- d) Explain the 'One Gene One polypeptide hypothesis'. (4.0 Marks)
- e) Name and label the Figure 3. (5.0 Marks)



**Figure 3:**



**QUESTION 4**

- a) Define Applied Zoology? Give examples to illustrate your answer. (5.0 Marks)
- b) Explain why it is important to study zoology. (5.0 Marks)
- c) Explain why the study of evolution is important. (5.0 Marks)
- d) List three differences between exocrine and endocrine glands. (6.0 Marks)
- e) Explain the difference between Transcription and Translation. (4.0 Marks)

**QUESTION 5**

Copy this table onto your answer book and complete it by filling your answers in the empty boxes (each box carries 1.0 marks). (25.0 Marks)

Animal	Cattle	Brown Ear Tick	Ostrich	Crocodile	Roundworm
Phylum					
Class					
Order					
Family					
Genus					