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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2019/2020 ACADEMIC YEAR THREE**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF PURE AND APPLIED SCIENCES**

**FOR THE DEGREE OF BACHELOR OF EDUCATION**

**COURSE CODE: ZOO 300e**

**COURSE TITLE: ANIMAL PHYSIOLOGY**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 17/02/2020 TIME: 2.00-4.00 PM**

**INSTRUCTION TO CANDIDATES**

* **The examination has FIVE (5) questions**
* **Question ONE (1) is COMPULSORY**
* **Choose any other TWO (2) questions from the remaining FOUR (4) questions**
* **Use sketch diagrams to illustrate your answer whenever necessary**
* **Do not carry mobile phones or any other written materials in examination room**
* **Do not write on this paper**

**This paper consists of TWO (2) printed pages *please turn over***

**QUESTION ONE (COMPULSORY)**

1. Define the following terms:
2. Heterothermy
3. Hibernation
4. Aestivation **[6 marks]**
5. Differentiate between filter feeders and liquid feeders **[5 marks]**
6. State three purposes of digestion **[6 marks]**
7. Examine retinal convergence in mammalian ayes **[5 marks]**
8. Describe three different types of hearts **[6 marks]**
9. State two differences between oviparity and viviparity **[2 marks]**

**QUESTION TWO**

1. Discuss the role of saliva in different animals **[10 marks]**
2. Discuss five factors that affect blood pressure **[10 marks]**

**QUESTION THREE**

1. Identify different types of mechanoreceptors in invertebrates and vertebrates **[5 marks]**
2. Discuss Chemoreception in vertebrates **[15 marks]**

**QUESTION FOUR**

1. Write a short essay on respiratory surfaces found in amphibians **[5 marks]**
2. Discuss the adaptations of a mammalian eye to its function **[15 marks]**

**QUESTION FIVE**

Write an essay on asexual reproductive mechanisms in animals **[20 marks]**