

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DIPLOMA IN ANIMAL HEALTH AND PRODUCTION**

**ANHE 0112: EMBRYOLOGY AND HISTOLOGY**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 06/12/2018**

**2.30 P.M – 4.30 P.M**

**INSTRUCTIONS**

**SECTION A: ATTEMPT ALL QUESTIONS 40 MARKS**

1. Describe the structure of male and female gametes by use of a simple well labeled diagram. [ 5marks]
2. Describe the following terms; [5 marks]
  - (a) Embryology
  - (b) Ontogenesis
  - (c) Teratogenesis
  - (d) Conception
  - (e) Foetus
3. Describe how entry of multiple sperm into the egg is prevented. [5 marks]
4. Outline the tree germ layers and state the main body systems that develop from them. [ 5marks]
5. Describe the steps involved for implantation to occur. [ 5marks]
6. Define placentation and state different types of placentation. [5 marks]
7. Outline various causes of embryonic malformations. [5 marks]
8. Describe the importance of staining I histology and list some types of stains used.

[5 marks]

**SECTION B: ATTEMPT ANY 2 QUESTIONS (30 MARKS)**

9. Describe the following:
- (a) The process involved in cleavage stage till the blastula is formed. [10 marks]
  - (b) List derivatives of the forebrain, midbrain and hindbrain in the embryo. [5 marks]
10. Describe the following ;
- (a) How tissues are stored for histopathological examination. [5 marks]
  - (b) Describe the processes involved when processing a tissue to make a slide for examination. [10 marks]
11. Describe the following;
- (a) Describe formation of the cardiovascular system. [7 marks]
  - (b) Describe the endochondral bone formation. [8 marks]
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