

CHUKA



UNIVERSITY

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EXAMINATION FOR THE AWARD OF DIPLOMA IN ANIMAL HEALTH
AND PRODUCTION

ANHE 0112: EMBRYOLOGY AND HISTOLOGY

STREAMS: DIP. ANHE

TIME: 2 HOURS

DAY/DATE: MONDAY 09/12/2019

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

SECTION A: ATTEMPT ALL QUESTIONS (30 MARKS)

1. Illustrate the structure of the female gamete by use of a simple well labeled diagram.

[5

marks]

2. Describe the following terms

[5 marks]

- (a) Embryology
- (b) Ontogenesis
- (c) Teratogenesis
- (d) Conceptus
- (e) Implantation

3. Outline the three germ layers of a developing embryo and state the main body systems that develop from them.

[5 marks]

4. Write short notes summarizing formation of the cardiovascular system in an embryo.

[5

marks]

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5. Describe embryonic malformations of the digestive system [5 marks]
6. Describe different type of stains used in histology giving examples. [5 marks]

SECTION B: ATTEMPT ANY 4 QUESTIONS (40 MARKS)

7. Describe the processes involved in cleavage stage till the blastula is formed [10 marks]
8. Briefly describe the processes involved when processing a tissue to make a slide for examination [10 marks]

9. Describe the following:
(a) Process of muscle formation from somites [5 marks]
(b) Process of bone formation by endochondral bone ossification [5 marks]

10. Describe the following:
(a) Steps involved for implantation to occur in domestic animals [4 marks]
(b) Define placentation and state/illustrate different types of placentation for the differ domestic animals [6 marks]

11. Describe the following:
(a) How are tissues stored for histopathological examination? [4 marks]
(b) During microscopic examination, how would tissues of the lungs, liver and muscles appear? [6 marks]
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