



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
(BIOLOGICAL SCIENCES)
3rd YEAR 1st SEMESTER 2016/2017 ACADEMIC YEAR
MAIN CAMPUS - REGULAR

COURSE CODE: SBI 3316

COURSE TITLE: HISTOLOGY

EXAM VENUE: CHEM LAB

STREAM: (BIO)

DATE: 21/04/16

EXAM SESSION: 9.00 – 11.00 AM

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and Any two questions in Section B**
- 2. Candidates are advised not to write on question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A: ANSWER ALL QUESTIONS (30 MARKS).

1. Outline the principle involved in cell fractionation by differential centrifugation. (3 marks)
2. Giving sample location, compare the structure of stratified squamous keratinized epithelium and pseudo-stratified epithelium. (3 marks)
3. Mention and give the distinguishing characteristics of the three types of cartilage. (3 marks)
4. List and briefly describe any three types of synapses. (3 marks)
5. Name and give the functions of any three (3) components of blood plasma. (3 marks)
6. Briefly describe the morphology and function of brown adipose tissue. (3 marks)
7. Explain the three modes of secretion by exocrine glands. (3 marks)
8. Briefly describe three (3) extracellular membrane components of the basal lamina. (3 marks)
9. Describe the inorganic constituents of bones. (3 marks)
10. Outline the differences between scanning and transmission electron microscopes. (3 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

11. Describe the structure and function of connective tissue fibers. (20 marks)
12. Discuss types of the muscle tissue of the human body. (20 marks)
13. Describe the steps involved in preparation of tissue slides for light microscopy. (20 marks)
14. Give an account of the cells of the nervous system. (20 marks)