



“Investing in Africa’s Future”

FACULTY OF HEALTH SCIENCES

2015/2016 SECOND SEMESTER FINAL EXAMINATIONS

COURSE CODE: SLS 210
COURSE TITLE: Histology practical
DATE: November 2015
TIME: 3 hours

INSTRUCTIONS

Answer **all** questions

The mark allocation for each question is indicated at the end of the question

Credit will be given for logical, systematic and neat presentations.

HISTOLOGY

Section A (one hour)

- 1a. Using the method provided demonstrate acid alcohol fast bacteria on the two slides provided then answer the following questions (15)
- b. State the principle of this test (5)
- c. State the results obtained using this method (5)

Holds 25 marks

Section B (one hour 30 minutes)

1. The projected image shows the demonstration of iron and hemosiderin
 - a. give the full name of the special stain (5)
 - b. state the principle of the reaction (5)
2. The projected image shows a section stained by Hematoxylin and eosin indicate which of the two is
 - a. a basic stain (2 ½)
 - b. an acidic stain (2 ½)
 - c. state the principle of the reaction (5)
3. The projected image shows a stained section where melanin is demonstrated as black or brown
 - a. give the full name of the special stain (2 ½)
 - b. state the principle of the reaction (5)
4. The projected image shows a stained section where carbohydrates are stain magenta
 - a. give the full name of the special stain (2 ½)
 - b. state the principle of the reaction (5)

5. Taking into consideration the above reaction state the diastase digestion principle
(5)
6. The projected image demonstrates lipid
 - a. what is the principle of lipid stains (5)
 - b. give three examples of lipid stains (2 ½)
7. What is projected and where is it used? (2 ½)
8. What is projected and where is it used? (2 ½)
9. What is projected and where is it used? (2 ½)
10. What is projected and where is it used? (2 ½)
11. What is projected and in which disease state is it seen?
(2 ½)
12. What is projected and in which disease state is it seen?
(2 ½)
13. What is projected and in which disease state is it seen?
(2 ½)

Holds 65 marks

Section C (30 minutes)

Spots on microscope

1. Identify organisms on given slide and state the type of stain used (2 ½)
2. Identify organisms on given slide and state the type of stain used (2 ½)
3. What type of tissue is shown on slide and justify your answer (2 ½)
4. What type of stain is indicated on slide and justify your answer (2 ½)

Holds 10 marks

Procedure for section A

1. Take sections to water
2. Place carbol fuschin solution in a clean coplin jar and pre-heat in a water bath for 10 minutes

NOTE: steps 1 and 2 have already been done for you

3. Place the slides in the warmed vessel containing carbol fuschin and cover the coplin jar for at least 30 minutes at 58-60°C
4. Remove slide from coplin jar and wash in tap water
5. Decolorize in 1% acid alcohol for 3 minutes or until the smear is sufficiently decolorized.
6. Rinse in water
7. Counter stain in methylene blue
8. Blot dry and mount in DPX