# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

# FACULTY OF MEDICINE

# BACHELOR OF MEDICINE AND BACHELOR OF SURGERY DEGREE PART 1 SUPPLEMENTARY EXAMINATIONS

- MBM 1101 : ANATOMY PAPER 1 (100 MARKS)
- DATE : JULY 2013
- TIME : 2 HOURS

Instructions to Candidates

- i Answer all questions.
- ii Answers should be written on the provided answer sheet(s)
- iii Try to spend proportional times in each section.

## SECTION A (40 MARKS)

1.	Briefly, describe the Lumbar plexus of nerves.	(20)
2.	Briefly, describe the anatomy of the shoulder joint and its function.	(20)

## SECTION B (60 MARKS)

1.	Briefly, describe the boundaries of the Femoral Triangle and its contents.	(5)
----	--	-----

- A 10 year old boy was struck by a cricket ball on the side of his knee and woke up the following morning with a foot drop. What structures could have been injured. Briefly explain why this ended with a foot drop (4)
- 3. Briefly, describe movement of the scapula and muscles/factors producing them.

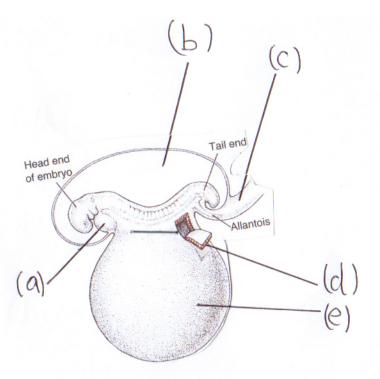
(10)

(1)

 Why is a gluteal injection always given in the upper-outer most quadrant/ or triangle.

Page 1 of 3

- 5. List the structures innervated by the radial nerve in the 'forearm'. (12)
- 6. Figure 1 below shows an embryo at the end of the third week of development.



#### Figure 1

- a. List the parts **a-e**. (In your answer sheet). (5)
- b. Where are the cells shown in **d** going to end? (1)
- 7. Complete the following statement: (copied in your answer sheet).

Traits of an individual human are determined by specific \_\_\_\_\_ on chromosomes inherited from the father and \_\_\_\_\_. In somatic cells, chromosomes appear as \_\_\_\_\_ homologous pairs to form the \_\_\_\_\_ number of 46. Additionally there is one pair of \_\_\_\_\_ chromosomes. (5)

8. In histological tissue preparation, what does the stage of 'fixation' achieve? (4)

9. Figure 2 shows histological section of a specimen of large bowel obtained during Surgery.

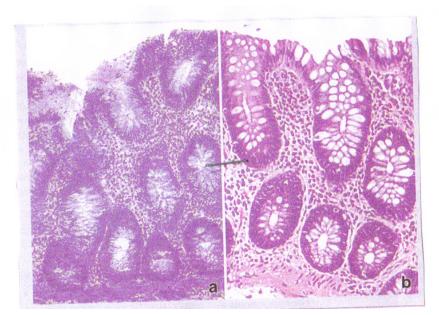


Figure 2

- a. The slide in figure (**2a**) was prepared using the frozen-section technique, what are the stages involved in preparing such a section? (6)
- b. How does a frozen-section examination help the surgeon? (2)

(5)

10. Describe the boundaries of the popliteal fossa. Name one important content of the fossa.

#### **END OF EXAMINATION**

Page 3 of 3

