



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

FIRST YEAR FIRST SEMESTR EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN MEDICAL
BIOTECHNOLOGY, BACHELOR OF SCIENCE IN
PHARMACEUTICAL SCIENCE AND BACHELOR OF SCIENCE IN
MEDICAL LABORATORY SCIENCE WITH INFORMATION
TECHNOLOGY
(MAIN CAMPUS)

PMT 121: MEDICAL EMBRYOLOGY

Date: 26th November, 2013

Time: 11.00 a.m. - 1.00 p.m.

PMT 121: MEDICAL EMBRYOLOGY

BSc. MEDICAL BIOTECHNOLOGY, BSc PHARMACEUTICAL SCIENCE AND BSc
MEDICAL LABORATORY SCIENCE

Section A; Attempt all questions; (40 Marks)

1. Outline the basic cell theory. (4 Marks).
2. List in subsequent order the cell mitotic stages. (4 Marks).
3. Illustrate the common features of a blastula. (4 Marks).
4. Outline the thermotactic and chemotactic gradients in mammalian fertilization. (4 Marks).
5. Differentiate Karyokinesis from Cytokinesis. (4 Marks).
6. What biological processes differentiate meiosis from mitosis. (4 Marks).
7. Outline the Cell types that form the structures of an Ovarian follicle. (4 Marks).
8. Differentiate eukaryotic Cells from Prokaryotic Cells. (4 Marks).
9. List the Cell Cycle Phases, within which there is the duplication of the Cell genetic materials. (4 Marks).
10. Highlight the major embryological processes involved in organogenesis. (4 Marks).

Section B; Answer Question 11 and any other one Question; (30 Marks)

11. Discuss five clinical applications of studying Embryology. (15 Marks).
12. Discuss the factors that influence sperm motility during copulation. (15 Marks).
13. Illustrate the Biological processes of germ layer formation. (15 Marks).