

### **TECHNICAL UNIVERSITY OF MOMBASA**

# FACULTY OF APPLIED AND HEALTH SCIENCES

## DEPARTMENT OF MEDICAL SCIENCES

# **UNIVERSITY EXAMINATION FOR:P1**

MSC

## AML5111: BIOINFORMATICS

#### END OF SEMESTER EXAMINATION

## SERIES: APRIL2016

# TIME:2HOURS

## DATE:16Apr2016

#### **Instructions to Candidates**

You should have the following for this examination -Answer Booklet, examination pass and student ID This paper consists of **FIVE** questions. Attemptany THREE questions. **Do not write on the question paper.** 

#### **Question ONE**

Describe the procedure for DNA extraction?

#### **Question TWO**

Define the following terms (20 marks)

- a) Genetic code
- b) Codon
- c) Gene
- d) Genomics
- e) Base pairs

#### **Question THREE**

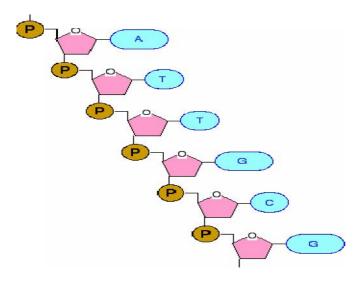
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a)With the aid of a clearly labeled diagram describe a replication fork (10 marks)

b) Explain sense and antisense (10 marks)

#### **Question FOUR**

Given the diagram shown below construct a polypeptide chain and explain each step



#### **Question FIVE**

Describe the formation of a transcript by use of exons and introns