



**ELIZADE UNIVERSITY, ILARA-
MOKIN
ONDO STATE**

FACULTY: BASIC AND APPLIED SCIENCES

**DEPARTMENT: PHYSICAL AND CHEMICAL
SCIENCES**

FIRST SEMESTER EXAMINATIONS

2015/2016 ACADEMIC SESSION

COURSE CODE: BCH 315
COURSE TITLE: MOLECULAR BIOLOGY OF THE GENE
DURATION: 2 hours

HOD's SIGNATURE

mbleelo

TOTAL MARKS: 60

INSTRUCTIONS: ANSWER ANY 7 QUESTIONS

1. What is the role of a promoter in gene expression? Where are the promoters for prokaryotic polymerase located?
2. Why are the tRNAs referred to as adaptor molecules? What aspects of their structure do tRNAs have in common?
3. Describe the nature of the interaction between tRNAs and the aminoacyl-tRNAs and mRNAs
4. What is the role and possible significances of introns in eukaryotic genome
5. List 5 enzymes involved in DNA replication and what are their specific functions?
6. In semi conservation replication of DNA, what prompted the formation of the Okazaki fragment?
7. Describe the role of Telomeres in DNA in eukaryotic DNA structure
8. Distinguish between DNA polymerase and RNA polymerase
9. Discuss how mutagens can cause mutation
10. What are physiological advantages of semi conservation replication over other possible types of replication both in prokaryotes and eukaryotes