

**HIGHER SECONDARY (SECOND YEAR)**  
**UNIT TEST-III**

TIME: 1.30 Hrs.

MAX.MARKS:

50

**ZOOLOGY**

**PART-I**

ANSWER ALL THE QUESTIONS

10X1=10

- 1 Meselson and Stahl's experiment proved  
**a)Transduction      b)Transformation      c)DNA is the genetic material**  
**d)Semi-Conservative nature of DNA replication**
- 2 When Lactose is present in the culture medium  
**a)Transcription of lac y,z,a genes occurs**  
**b)Repressor is unable to bind with operator**  
**c)Repressor is able to bind with operator**  
**d)Both (a) and (b) are correct**
- 3 Protein chain formation occur by  
**a)Replication      b)Transcription      c)Duplication      d)Translation**
- 4 Which of the following is the correct sequence of event with reference to central dogma?  
**a)Transcription,translation,replication**  
**b)Transcription,replication,translation**  
**c)Duplication,translation,transcription**  
**d)Replication,transcription,Translation**
- 5 An operon is a  
**a)Protein that suppresses gene expression**  
**b)Protein that accelerates gene expression**  
**c)Cluster of structural gene with related function**  
**d)Gene that switched other genes on or off.**
- 6 The first life on earth originated  
**a)in air      b)on land      c)in water      d)on mountain**
- 7 The phenomenon of "Industrial Melanism" demonstrates  
**a)Natural selection      b)Induced mutuation      c)Reproduction isolation**  
**d)geographical isolation**
- 8 The golden age of reptiles was  
**a)Paleozoic era      b)Mesozoic era      c)Cenozoic era      d)All the above**
- 9 When Hardy Weinberg's not at equilibrium in a population  
**a)Organism select and mate together      b)No mutation**  
**c)Migration      d)Very large population size**
- 10 Who published the book ,Origin of Species by natural selection  
**a)Charles Darwin      b)Lamarck      c>Weismann      d)Hugo de Uries**

**PART-II**

**ANSWER ANY SIX QUESTIONS**

**6X2=12**

- 11 What is transformation?
- 12 Differentiate between nucleoside and nucleotide.
- 13 Define Ribozyme.
- 14 What is ORF?
- 15 State theory of biogenesis.
- 16 Mention Hardy Weinberg's assumptions.
- 17 How DNA fingerprinting is used in Pedigree analysis.

**PART-III**

**ANSWER ANY SIX QUESTIONS**

**6X3=18**

- 18 Write a short note of on RNA world.
- 19 Explain initiation of translation.
- 20 What are the main goals of Human genome project
- 21 Explain the origin of life in view of oparin and Haldine.
- 22 Give a note on Lamarck's theory with its objection.
- 23 Explain Hardy Weinberg principle.
- 24 Describe process of transcription in prokaryotes.

**PART-IV**

**ANSWER ANY TWO QUESTIONS**

**6X3=18**

- 25 Describe Hershey chase experiment on T2 bacteriophage.
- 26 Explain Lac operon model with suitable diagram.
- 27 Give an account on Darwin's theory of Natural selection.