

06/05/2015

S.Y.B.Sc. Zoology- Paper II USZO-402 Date: Semester IV Max. Marks:75  
 Duration:2.1/2 hrs.

- Note: 1) All questions are compulsory.  
 2) Figures to the right indicate full marks.  
 3) draw a neat labeled diagram wherever necessary

- Q.1 Answer the Following Questions: (any two) 20
- Give an account of Culture media used in Tissue Culture techniques 10
  - Describe various types of Streaking methods 10
  - Give an account of 3'end labeling and 5'end labeling 10
  - Give an account of gene Library 10
- Q.2 Answer the following Questions: (any two) 20
- What is Nitrogen Fixation? Explain production of genetically engineered plants for nitrogen fixation 10
  - Describe the Methods of production of Golden rice 10
  - Describe Di-deoxy Method of DNA Sequencing 10
  - Give an account of Protein Conformation and structure 10
- Q.3 Answer the following: 20
- Give an account of different type of Chromosomal Mutations 10  
Or
  - Describe different types of Post-mating Isolating Mechanisms 10
  - Describe Mega Evolution 10  
Or
  - Describe Hardy- Weinberg Equilibrium 10
- Q.4 Write short note on: (any three) 15
- Indicator media for tissue culture 05
  - Classical method of obtaining cDNA 05
  - Bt. toxin 05
  - NCBI 05
  - Sympatric Speciation 05
  - Gene flow 05

\*\*\*\*\* The End \*\*\*\*\*