



KUVEMPU UNIVERSITY
OFFICE OF THE DIRECTOR
DIRECTORATE OF DISTANCE EDUCATION



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TOPICS FOR INTERNAL ASSESSMENT ASSIGNMENTS (2009-10)

Course: M.Sc. ZOOLOGY (Previous)

Note: Students are advised to read the separate enclosed instructions before beginning the writing of assignments.

Out of 15 Internal Assignment marks per paper, 5 marks will be awarded for regularity (attendance) to Counseling/ Contact Programme/ Practical classes pertaining to the paper. Therefore, the topics given below are only for 10 marks each paper.

Paper I: Animal Forms and Functions and Ecobiology

1. Write an essay on Origin of Metazoa. **05 Marks**
OR
Briefly explain the evolution of heart.
2. Write an essay on Human population control measures in India. **05 Marks**
OR
What is Gause Principle? Explain with experimental evidences.

Paper II: Physiology and Biological Chemistry

1. What are respiratory pigments? Briefly write about the chemistry and functions of respiratory pigments. **05 Marks**
OR
Discuss the physiological properties of Cardiac Muscles. Describe the origin and conduction of heart beat.
2. Write an account of diabetes mellitus, lactic acidosis and glycosuria. **05 Marks**
OR
Describe the synthesis of purines and pyrimidines and explain the metabolism of the nucleic acids.

Paper III: Parasitology and Animal Behavior

1. Write the habitat and life history of pathogens transmitted by any vector. **05 Marks**
OR
Write a note on life cycle of plasmodium.
2. Explain the genetic basis of swarming behaviour in honey bees. **05 Marks**
OR
Give a detail account on social organization in insects and primates.

P.T.O

Paper IV: Cytogenetics and Developmental Biology

1. Give a detailed account on the Chromosome movements during Metaphase and Anaphase and their mechanism.

OR

05 Marks

What are linkage and crossing over? Explain the construction of linkage maps and theories of crossing over.

2. Explain the role of maternal genes during development and differentiation.

OR

05 Marks

Explain how nuclear transplantation experiments in *Acetabularia*, Prove interaction between nucleus and cytoplasm in morphogenesis
