B.Sc. Part I

ZOOLOGY PRACTICAL SYLLABUS

PROTOZOA

- (a) Amoeba: Examination of culture.
- (b) Euglena: Culture examination for Euglena.
- (c) Monocystis: Examination of contents of seminal vesicles of Pheretima or Eutyphoeus for different life- history stages and permanent preparation.
- (d) Plasmodium: Preparation of blood film (Leishmen's stain).
- (e) Paramecium-Culture examination.
- (f) Demonstration of ciliary movements in Paramecium.

Addition to mucilage to restrain active movement

Treatment with Methyl green for staining.

Feeding experiment with Congo Red and Yeast. Trichocysts (discharged),

PORIFERA

(a) Sycon

Spicules- glycerine preparation.

(b) Gemmule of Spongilla- permanent preparation.

PLATHYHELMINTHES:

- (d) Examination of tape worms of pigeon or fowl in situ
- (e) Permanent preparation of mature and gravid proglottids of Cotugnia and Raellietina.:

ANNELIDA

(a) Nereis

Parapodium-permanent preparation.

(b) Pheretima

Glycerine preparations of setae in situ and brain.

Permanent preparations of ovary and septal nephridia.

ARTHROPODA

Palaemon-External characters; Examination of appendages.

Glycerine preparation of hastate plate.

Permanent and glycerine preparations of statocysts.

Glycerine preparation of mouth appendages, salivary glands and trachea.

Permanent preparations of salivary glands, Malpighian tubules, ovaries and testes.

Anopheles and Cules-Glycerine preparation of mouth parts of male and female.

Musca-Glycerine preparation of proboscis

MOLLUSCA

(a) Lamellidens

Permanent preparations of gill lamella.

(b) Pila

Permanent preparations of gill lamella and osphradium.

CYTOLOGY

- (a) Cell-Structure Prepared slides
- (b) Cell Division Prepared slides
- (c) Preparation of giant chromosomes
- (d) Preparation of onion root tip for the stages of mitosis