

Invertebrate Zoology
First Exam
Outline

Organic Evolution

Oparin
Fox
Miller

Natural Selection

Darwin
Fossil Record
Biogeography
Comparative Anatomy
Molecular
Population

Other Views

Exobiology
Panspermia
Directed Panspermia
“Picnic” Hypothesis
Zoo Hypothesis
Equation of Life

Big Bang

Molecular evidence

PROTOZA

Includes Multicellular heterotrophs
Unicellular heterotrophs and autotrophs

Separated into 4 groups

Flagellated
Amoeboid
Ciliated
Sporozoa

Complete organism

Mostly unicellular

Bounded only by membrane

Ectoplasm

Endoplasm

Shells (Lorica)

Contractile vacuoles

Asexual Reproduction

Fission

Budding

Schizogamy

Sexual Reproduction

Synogamy

Isogamy

Heterogamy

Oogamy

Encystment

MASTIGOPHORA

posses flagella at some stage

Phytoflagellates

Holophytic

Zooflagellates

Holozoic

Structure of Flagella

Nutrition

Life Cycle

Binary Fission Symmetrogenic

Dinotflagellates

Kinetoplastida

Leishmania

Trypanosoma

SARCODINA

Psuedopodia

Amoebas

Foraminiferans

Heliozoans

Radiolarians

Amoebas

Lobopodia

Filopodia

Shells

Foraminiferans

Reticulopodia

Shells

Unilocular

Multilocular

Proloculum

Heliozoans

Axopodia

Body Parts

Cortex

Medulla

Radiolarians

Central Capsule

Calymma

Colonial

Locomotion

SPOROZOA and CNIDOSPORA

Nutrition

Life Cycles

Sexual reproduction

Sporozoite

Merozoite

Trophozoite

Gamogony

Plasmodium

Human host

Ciliaophora

Cilia

Infraciliary structures

Macronucleus

Micronucleus

Transverse Fission

Alveoli

Tricocysts

Toxicysts

Mucigenic Bodies

Locomotion

Pedicile

Nutrition

Cytostome

Cytopharynx

Cytoproct

Sexual Reproduction

Transverse Fission

Synkaryon

Macro-and Micronucleus

Water Balance

Contractile Vacuole