

**Shri Govind Guru University, Godhara**

**B.Sc.Zoology Sem-I**

**BS23MN1ZO1 MINOR PAPER  
(THEORY)**

**BASIC ASPECTS OF ZOOLOGY**

**(Credit 02)**

**UNIT:1 Non-Chordate**

- Outline classification of non-chordates
- General characters of Phyla: Protozoa, Porifera, Coelenterata, Platyhelminthes, Nematoda, Annelida, Arthropoda, Mollusca and Echinodermata.

**UNIT:2 Cytology**

- Ultra structure of a typical Animal cell
- Ultra structure of Nucleus, Mitochondria, Endoplasmic reticulum, Eukaryotic Ribosome.

**UNIT:3 Genetics**

- Introduction to Genetics and gene
- Mendel's Law of Heredity
- Incomplete dominance (Gulbas plant-1:2:1), Co dominance (Coat color in Cattle - 1:2:1), Multiple alleles ABO Blood groups, Polygenic inheritance (Skin color in humans-1:4:6:4:1).

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**B.Sc.Zoology Sem-I**

**MINOR PAPER (PRACTICAL)**

**BASIC ASPECTS OF ZOOLOGY**

**(Credit 02)**

1. Classification of Non-chordate animals up to class level giving reasons:

- (i) Protozoa – Amoeba
- (ii) Porifera – Leucosolenia
- (iii) Coelenterata – Sea Anemone
- (iv) Platyhelminthes – Tapeworm
- (v) Nematoda – Ascaris
- (vi) Annelida – Nereis
- (vii) Arthropoda – Butterfly
- (viii) Mollusca – Octopus
- (ix) Echinodermata – Starfish

2. Study of Cytology

- (i) Typical Animal cell
- (ii) Nucleus
- (iii) Mitochondria
- (iv) Endoplasmic Reticulum
- (v) Eukaryotic Ribosomes

3. Study of Genetics.

- (i) Monohybrid Ratio 3 : 1
- (ii) Dihybrid Ratio 9 : 3 : 3 : 1
- (iii) In complete dominance 1 : 2 : 1
- (iv) Codominance (1:2:1)
- (v) Multiple Alleles - ABO Blood groups
- (vi) Polygenic inheritance 1 : 4 : 6 : 4 : 1 (skin color in man)