



West Bengal State University

(Barasat, North 24 Parganas)

বঙ্গবন্ধু বিশ্ববিদ্যালয়

Following is the syllabus finalized by the Under Graduate Board of Studies in Zoology, Fishery and Industrial fisheries, Sericulture of the W.B.S.U. for the 3-year B. Sc. Honours Course in Zoology. The Part I syllabus has been given in details here which is to be followed from the academic session of 2010-2011. A detailed curriculum on the Part I syllabus is also available now. The details of the Part II and Part III syllabus will follow.

Zoology Hons.

Full marks-800

PART-I (200 Marks)

Paper-01: Diversity of Animals and Animal behaviours Theory (Full Marks 100)

Module ZH101 (10) : Living kingdoms and protozoans

- ✓ Introduction to the modern classification of living organisms into Kingdoms, magnitude of diversity of living organisms: estimated species richness
- ✓ Introduction to the Kingdom Protozoa: Classifications (up to Phylum only) and examples; Special topics (brief outlines only): contractile vacuoles, structures of cilia, reproduction in *Paramecium*.

Module ZH102: Non-Chordates (35)

1. Species diversity and classifications of non-chordate phyla (upto the levels as mentioned below) with salient features and prominent examples of the animal groups:
Poriferans, Cnidarians, Ctenophorans, Platyhelminths, Aeschelminthes, Annelids, Molluscs, Echinoderms, Arthropods (upto subclass), Rotifera, Bryozoa, Hemichordata (only salient features of the Phyla)
2. Special topics to understand the diversity of non-chordate structures and functions:
 - ✓ 2.1 Body planes and symmetries, coelom, deuterostome vs protostome (only preliminary conceptual outlines)
 - ✓ 2.2 Polymorphisms in Cnidaria
 - ✓ 2.3 Coral reef: types, formation, distribution, conservation significance
 - ✓ 2.4 Torsions in Gastropods
 - ✓ 2.5 Cyclomorphosis in Rotifers
 - ✓ 2.6 Excretion in invertebrates with special reference to flame cells, nephridia, coelomoducts and malpighian tubules
 - ✓ 2.7 Gas exchange by gills and trachea in Arthropods
 - ✓ 2.8 Water vascular system and haemal system in Echinoderms
 - ✓ 2.9 Brief overview of invertebrate larval forms