DEPARTMENT OF ZOOLOGY Distribution of Syllabus for FYGUP (SEM- 1 : Session 2024-25)

Dr. Shashi Prabha

Major Paper-1

UNIT 1 : Introduction to Animalia

General Characteristics of Kingdom Animalia and basis of Classification

UNIT II : Protista

Protista : General characteristics and classification up to classes; Locomotion and Reproduction in Protista

UNIT III : Porifera

Porifera : Introduction to Parazoa; General characteristics and classification up to classes; Canal system in sponges

DEPARTMENT OF ZOOLOGY Distribution of Syllabus for FYGUP (SEM- 2 : Session 2024-25)

Dr. Shashi Prabha

Major Paper- 2

UNIT I : Introduction to chordates

General characteristics and outline classification of chordates.

UNIT- II: PROTOCHORDATEA

Specific characteristics of Hemichordate, Urochordata and Cephalochordate. Retrogressive metamorphosis in Urochordata.

UNIT- III: ORIGIN OF CHORDATES

Dipleurula concept and the Echinoderm theory of origin of chordates.

DEPARTMENT OF ZOOLOGY Distribution of Syllabus for FYGUP (SEM- 2 : Session 2024-25)

Dr. Shashi Prabha

Major Paper- 3

UNI I : Integumentary system

Structure and derivatives of integument, functions of skin.

UNIT V: circulatory system

General plan of circulation, Evolution of heart and aortic arches.

UNIT VI: urinogenital system

Succession of kidney, Evolution of urinogenital ducts, types of mammalian uteri

DEPARTMENT OF ZOOLOGY Distribution of Syllabus for FYGUP (SEM- 3 : Session 2024-25)

Dr. Shashi Prabha

Major Paper- 5

UNIT I : Overview of Cells

Prokaryotic and Eukaryotic cells , virus , viroids , Mycoplasm , Prioms

UNIT- II: Plasma Membrane

Various models of Plasma Membrane structures , Transport across membranes : Active and passive transport, facilitated transport ; Cell – cell junctions , Structures and functions : Tight junctions, Adherence junctions , Gap junctions

UNIT- III: Endomembrane System

Structure and functions: Endoplasmic Reticulum, Signal hypothesis, Vesicular transport from ER to Golgi apparatus ; Protein sorting and transport from Golgi apparatus; Golgi apparatus, Vesicular transport: Coated vesicles ; Lysosomes; peroxisomes

UNIT- IV : Mitochondria

Structure , Semiautonomous Nature , Endo-symbiotic hypothesis; Respiratory chain, Chemiosmotic hypothesis, and ATP Synthase

DEPARTMENT OF ZOOLOGY Distribution of Syllabus for FYGUP (SEM- 2 : Session 2024-25)

Dr. Shashi Prabha

Minor Paper-2A : Sericulture

UNIT IV : Pests and Diseases

Pests of silkworm: Uzi fly , dermestid beetles and vertebrates: Pathogenesis of silkworm diseases : Protozoan, viral , fungal and bacterial ; Control and prevention of pests and diseases

DEPARTMENT OF ZOOLOGY Distribution of Syllabus for FYGUP (SEM- 3 : Session 2024-25)

Dr. Shashi Prabha

Minor Paper-1B : Apiculture

UNIT III : Diseases and Enemies

Bee diseases , Control and Preventive measures , Enemies of bees and and their control