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

Prof. Nuzhat Jahan

Major Paper -1

UNIT 4 : Cnidaria

Evolution of metazoa, Cnidaria :General General Characteristics and classification up to classes: Polymorphism in Cnidaria

UNIT 5: Ctenophora

Ctenophora : General characteristics and evolutionary significance

UNIT 6: Helminthes

Platyhelminthes and Nemathelminths: General characteristics and classification up to classes :Parasitic adaptation in Helminthes

UNIT 7: Annelida

Annelida: General characteristics and classification up to classes :Role of nephridia in excretion among Annelids

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

Prof. Nuzhat Jahan

Major Paper -2

UNIT -4 : Agnatha

Specific characteristics of Agnatha and classification up to class

UNIT -5 : Pisces

Specific characteristics of Pisces ,Classification up to class , Migration and Osmoregulation in Fish.

Comparative account of difference between classes should be discussed and emphasis also will be given to lateral line system.

UNIT -8 : Aves

Aves: Specific characteristics and classification up to order , Flight Adaptation and migration in birds.

UNIT -9 : Mammals

Mammals :Specific characters and classification up to order ,Adaptive radiation

With reference to locomotory Appandages

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

Prof. Nuzhat Jahan

Major Paper -3

UNIT -7 : Nervous System

Comparative account CNS ,PNS ,ANS with special emphasis on Brain (from Formation to partitioning) ; Cranial nerves in mammals

UNIT -8 : Sense Organs

Classification of receptors (organ of special senses); Brief account of visual and auditory receptors in man.

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

Prof. Nuzhat Jahan

Major Paper -4 (MJ-4) : Principles of Ecology

UNIT -1 : Introduction to Ecology

History and Scope of Ecology , Autecology and Synecology , Laws of limiting factors ,Study od physical factors : Temperature and light .

UNIT -2 : Population

Unitary and modular population ; Unique and group attributes of population :

Density ,Natality ,mortality ,life tables, Fecundity tables, Survivorship curves, Age ratio, Sex ratio, Dispersal and dispersion : Exponential and logistics Growth, equation and patterns ,r and k strategies ,population regulation : Density – dependent and independent factors ; population interactions; Gause's Principle with laboratory and field examples; Lotka – Volterra equation for competition and predation.

UNIT -3 : Community

Community characteristics : Species richness, dominance, diversity, Abundance, Guilds ,Ecotone and edge effects ; Ecological succession with examples and types ;Theories pertaining to climax Community.

UNIT -4 : Ecosystem

Types of Ecosystems with detailed study of any one: Forest Ecosystem , pond or lake ecosystem, mangrove and Coral reef ecosystem. Vertical Stratification in forest and aquatic ecosystem , Food chain : Detritus and grazing food chains, Linear and Y -shaped food chains, Food Web, Energy flow through ecosystem , Ecological pyramids and Ecological efficiencies , Nutrients and biogeochemical cycle with one example of Nitrogen cycle.

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

Prof. Nuzhat Jahan

Minor paper -1 A(MN-1A)

UNIT -3 : Health

Definition and Concept of health, major Nutritional Deficiency diseases – Kwashiorkor and marasmus, Deficiency disorders, their causes, symptoms, Treatment, Prevention and Government programmes, If any. life style related diseases- hypertension, Diabetes, mellitus, Obesity-their causes and prevention through dietary and lifestyle modifications.

UNIT -4 : Food Hygiene

Food and water borne infections : Bacterial infection : Cholera , Typhoid fever, dysentery ; Viral infection : Hepatitis ,Poliomyelitis; Protozoan infection ; Amoebiasis giardiasis; Parasitic infections : Taeniasis and Ascariasis their transmission , causative agents , sources of infection, Symptoms and Prevention.

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

Prof. Nuzhat Jahan

Minor paper -2 A(MN-1A)

UNIT -4 : Pests and Diseases

Pests of Silkworm : Uzi fly, dermestid beetles and vertebrates ; pathogenesis of silkworm's diseases : Protozoan ,Viral ,Fungal and Bacterial ;Control and prevention of pests and Diseases .

UNIT -5 Silk Industry and its importance

Silk Usages and application in Textile and Non – Textile industry , Sericulture Industry in India.

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

Prof. Nuzhat Jahan

Minor paper -1 B(MN-1B)

UNIT -4 : Bee Economy

Products of Apiculture industry (Honey, bees wax ,Propolis, Royal jelly, pollen etc) and their uses :Morden methods in employing artificial Beehives for crop pollination in horticultural gardens.

UNIT -5 : Entrepreneurship in Apiculture

Bee- keeping industries – Recent efforts, Employment opportunities, economics in small scale and large -scale Beekeeping, Scope for Women Entrepreneurship in Beekeeping sector.