

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS FOR SCREENING TEST FOR THE POST OF ENTOMOLOGIST MEDICAL & HEALTH DEPARTMENT

Unit - 1

General characters of phylum Arthropoda, its classification upto classes with distinguishing characters and interrelationship among different classes.

Characters of class Insecta, its classification upto orders with emphasis on orders of medical importance.

Unit - 2

Insect morphology and physiology in relation to digestion, respiration, nervous system, reproduction and excretion. Different types of mouth parts in insects, study of biology and life cycle of important parasitic/vector insects.

Unit - 3

Study of physiological disorders, hormonal imbalance, antigen - antibody reactions and effects on nervous system, Tolerance/resistance and development of immunity.

Unit - 4

Principles and methods of insect control *viz.* mechanical, physical, cultural, biological (Predators/Parasitoids/Pathogens) larvicidal fishes and modern approaches of Insect control (radiation/sound/light etc.).

Insecticides their classification and mode of action, knowledge of LD 50 values, maximum daily intake, permissible limits, tolerance limits, insecticide residues, their detection and biomagnification. General concept of hygiene, environmental pollution, domestic wastes and their disposal, Insecticide act - 1968.

Unit - 5

Arthropods of medical importance and related diseases, Mosquitoes, Black flies, Sand flies, Biting midges, Horse flies, clegs, House flies, Tsetse flies, Blow flies, Nasal lot flies, Sucking lice, chewing lice, Rat fleas, Rodent and Chicken Fleas, Chigger Fleas. Triatomina bugs, Bed bugs, Bees, Wasps, ants, Butter flies and Moths, Beetles, Thrips, Scab mites, Sarcoptic mites, Psorptic mites, Air sac mites, Feather mites, Trombiculid mites, Itch mites, Bird mites, Orbatid mites, Soft ticks, Hard ticks, Scorpions, Spiders, Centipedes, copepods, & Tongue worms.

Pattern of Question Papers :

- 1 Objective Type Paper.
- 2 Maximum Marks : 100
- 3 Number of Questions : 100
- 4 Duration of Paper : Two Hours.
- 5 All Questions carry equal marks.
- 6 There will be **Negative Marking**.

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