



GOVERNMENT OF JAMMU AND KASHMIR,
SERVICES SELECTION BOARD,

Sehkari Bhawan Near Bahu Plaza Jammu.

www.jkssb.nic.in

(P & S Section)

Marks:-150

Time:-2:30 Hours

Syllabus for the Post of Inspector/Farm Manager

Riverine Fisheries resources: *Riverine fisheries resources of India (Ganga river system, Brahmaputra river system, Indus river system, East coast river system, West coast river system). Effect of Anthropogenic activities on riverine fisheries. Fish migration. Protection and restoration of fish movements (different types of fish passes and enhancement of fish migration). Measures for development, management and conservation of riverine fisheries resources. Stock enhancement strategies like introduction of new species, pre- and post-stocking management, potential risk of stocking, emerging issues in management.*

25 Marks

Cold Water Fisheries of India: *Present trends, problems in coldwater fisheries of India. Resources of coldwater fisheries of India. Coldwater aquaculture practices in India. Hatchery management of trouts. Ecology and energy flow in typical wetlands of Kashmir, possible measures for fisheries development in coldwater areas. Sport fisheries (big game fishing, fishing tackle, bait casting, spin-casting, spinning and fly casting, jigging). Potential of Jammu and Kashmir for sport*

fisheries. Sport fishing in relation to tourism industry.

15 Marks

Reservoir Fisheries: *Classification of reservoirs, management practices in reservoir.*

10 Marks

Fish Stock Management: *Concept and Definitions of Fish stock. Estimation of growth parameters and mortality rates. Virtual population methods. Yield per recruit model. Over exploitation; cause and measures.*

10 Marks

Fisheries regulation: *Centre and states and their spheres of responsibility for fishery regulation. Control and surveillance (MCS) systems for capture fisheries. Regulatory and developmental issues concerning deep sea fishing with special reference to J&K State Fishries Act."*

15 Marks

Aquaculture: *Present scenario and problems: Trends in global and Indian aquaculture. Different farming systems. Different culturable finfish and shell fish in India. Culture of carps, cat fishes, shrimps. Integrated farming system (IFF). Fish species in IFF, types of IFF, Agri-aquaculture based system (Paddy-fish system, Horticulture-fish system, sericulture-fish system, aquatic-weed fish system), Animal husbandary-fish based system (Cattle-fish system, Goat-fish system, Duck-fish based, Poultry-fish system). Disease outbreaks in fish and shell fish.*

20 Marks

Aquatic environment: *Classification of aquatic ecosystems. Physical and Chemical properties of fresh water ecosystem. Different sources of Polloution. Taxonomy of freshwater microphytes and macrophytes; their importance in resources management.*

20 Marks

Fish Breeding: History, constraints and current status of natural seed collection and hatchery seed production, Gamete maturation and development Hormonal pathways and mode of control in fish breeding. Induced breeding of fish. Carp hatcheries. Hapa breeding, Bundh breeding. Fresh water prawn breeding.

15 Marks

Fish Nutrition: Brood stock nutrition. Nutrients required for fish. Protein nutrition of fish. Introduction, function and metabolism of protein, amino acids and their classification, specific function, protein deficiency symptoms, evaluation criteria of dietary protein. Introduction, function, metabolism, Fatty acids and their classification, specific functions of essential fatty acids, deficiency symptoms, evaluation of lipid quality, lipid nutrition in fish.

Definition of energetic, expression of energy value of feed (gross energy, digestible energy, metabolizable energy, net energy). Feed Formulation, classification of feed ingredients. Method of feed formulation. Pearson's method. Types of feed: Dry (Pellets, flakes, powered, micro-encapsulated, microboundand micro-coated diets) and non-dry. Promimate composition of feed.

20 Marks

Secretary,
Services Selection Board,
Jammu.