RAJASTHAN PUBLIC SERVICE COMMISSION

SYLLABUS FOR COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT FISHERIES DEVELOPMENT OFFICER FISHERIES DEPARTMENT

Part-A

<u>Unit-I:</u> History, Culture & Heritage of Rajasthan -

Pre & early history of Rajasthan. Age of Rajputs: Major dynasties of Rajasthan and the achievements of prominent rulers. Emergence of Modern Rajasthan: factors of socio-political awakening of 19th century; Peasants and tribal movements of 20th century; Political struggle of 20th century and the integration of Rajasthan.

Visual Art of Rajasthan - Architecture of forts and temples of Rajasthan; Sculpture traditions of Rajasthan and various schools of painting of Rajasthan.

Performing Arts of Rajasthan - Folk music and musical instruments of Rajasthan; folk dance and folk drama of Rajasthan.

Various religious cults, saints and folk deities of Rajasthan.

Various dialects and its distribution in Rajasthan; literature of Rajasthani language.

<u>Unit-II</u>: Geography, Natural Resource & Socio-Economic Development of Rajasthan -

Geography of Rajasthan: Broad physical features- Mountains, Plateaus, Plains & Desert; Major rivers and lakes; Climate and Agro-climatic regions; Major soil types and distribution; Major forest types and distribution; Demographic characteristics; Desertification, Droughts & Floods, Deforestation, Environmental Pollution and Ecological Concerns.

Economy of Rajasthan: Major Minerals- Metallic & Non- Metallic; Power Resources- Renewable and Non-Renewable; Major agro based industries- Textile, Sugar, Paper & Vegetable oil; Poverty and Unemployment; Agro food parks.

Unit-III: Current Events and Issues of Rajasthan and India -

Important Persons, Places and Current events of the State. National and International events of importance. New Schemes & Initiatives taken recently for welfare & development in Rajasthan.

- 40 Questions

Part- B

- 1. Taxonomy and external characters of the freshwater food fishes and shell fishes. Catla catla, Labeo rohita, Cirrhinus mrigala, Labeo calbasu, L. bata, Mystus seenghala, M. aor, Tor khudri, Oreochromis mossambicus, O. nitoticus, Wallago attu, Ompok pabda, Notopterus notopterus, Notopterus chitala, Channa marulius, C. striatus, Mastacembelus armatus, Freshwater Prawn, Shrimp: L .vannamei. Introduction to modern taxonomic tools in fisheries: Cryotaxonomy and use of DNA fingerprinting.
- 2. Biology and culture of Indian Major Carps (IMC), Exotic carps, Tilapia, Pangas, Freshwater prawn and *L. vannamei*. Food and feeding habits of commercially important fishes and shellfish.
- 3. Different type of fish hatcheries their operations and management. Selection and Identification of I.M.C. brooders and Brood-stock management. Gonadal development of fishes. Induced breeding of warm water fin fishes: Hypophysation, use of Synthetic hormones. Dosage and methods of hormonal injection. Methods of traditional fish Breeding: wet and dry bundh breeding. Environmental factors affecting spawning.
- 4. Counting and care of spawn, fry and fingerlings and identification of freshwater culturable fish seed. Transportation of live fish and use of anaesthetics in fish breeding and transport.
- 5. Survey and selection of site and layout of freshwater fish farm. Water and soil quality in relation to fish pond construction. Physical, chemical and biological factors affecting productivity of ponds. Different types of fish farm ponds and their characteristics. Basics of fish farm design and construction.
- 6. Soil and water quality management for aquaculture.
- 7. Types of different natural and supplementary feeds, feeding and methods of fish feed formulation.
- 8. Diseases of fish and prawn: Pathogenic, parasitic, nutritional and environmental diseases, their management and treatments.
- 9. Fisheries of some important reservoirs of Rajasthan. Conservation measures in reservoir fisheries. Fish stocking in Reservoirs.
- 10. Trade of common ornamental fishes, their biology and breeding. Fabrication and maintenance of aquaria and their accessories.
- 11. Common aquatic plants of freshwater pond ecosystem and their control.
- 12. Pre and Post stocking management in Nursery, Rearing and Stocking ponds.
- 13. Common freshwater fishing crafts and gears used in Rajasthan, their materials and maintenance.
- 14. Handling of freshwater fishes and shrimps. Different methods of fish preservation for marketing.
- 15. Recent advances in aquaculture: Cage culture, Pen culture, Bioflock technology, Integrated aquaculture systems, RAS and Aquaponics.

- 16. Central and State responsibilities for fisheries development, organizational set up of fisheries administration in Rajasthan. Recent policies and schemes in Rajasthan fisheries sector. Functions and powers of department of fisheries, corporations and cooperatives with special reference to Rajasthan. Different central and Rajasthan fisheries institutions.
- 17. Salient features of Rajasthan Fisheries Act 1953 and Rajasthan Fisheries Rules 1958. Environmental (Protection) Act, 1986.

Fundamental of IT & Computer Application:

Information Technology and its importance. Computer fundamentals; hardware and software; input and output devices; Operating systems (OS): Introduction to WINDOWS and LINUX Operating Systems; Local area network (LAN), Wide area network (WAN), Internet and World Wide Web, HTML and IP; Introduction to MS Office-Word, Excel, Power Point. Audio visual aids- definition, advantages, classification and choice of A.V aids. Web Browsing, Creation and operation of E-mail account.

110 Questions

Scheme of Examination of Assistant Fisheries Development Officer				
S. No.	Subject	No. of	Total	Examination
		Questions	Marks	Duration
Part-A	General Knowledge of	40	40	2.30 Hours
	Rajasthan			
Part-B	Concerned Subject	110	110	
	Total	150	150	

- 1. The competitive examination shall carry 150 marks and 150 questions of Multiple Choice Type questions.
- 2. There shall be one paper. Duration of Paper will be Two hours and Thirty Minutes.
- 3. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one-third of the marks prescribed for that particular question shall be deducted.

Explanation:-Wrong answer shall mean an incorrect answer or multiple answers.

उक्त पद हेतु आयोजित की जाने वाली परीक्षा के लिए ओ.एम.आर. उत्तरपत्रक में प्रश्नों के विकल्प भरने के संबंध में विशेष निर्देश:–

- 1. Each question has five options marked as 1, 2, 3, 4, 5. You have to darken only one circle (bubble) indicating the correct answer on the Answer Sheet using BLUE BALL POINT PEN.
- 2. It is mandatory to fill one option for each question.
- 3. If you are not attempting a question then you have to darken the circle '5'. If none of the five circles is darkened, one third (1/3) part of the marks of question shall be deducted.
- 4. After solving question paper, candidate must ascertain that he/she has darkened one of the circles (bubbles) for each of the questions. Extra time of 10 minutes beyond scheduled time, is provided for this.

A candidate who has not darkened any of the five circles in more than 10% questions shall be disqualified.
