**University of Kashmir**

**Industrial fish and Fisheries**

Syllabus Theory

**CBCS Semester IV**

**Aquaculture and Pond Management**

**Unit I:** **Basics of Aquaculture**

* 1. Definition and History of Aquaculture
	2. Scope and Importance of aquaculture
	3. Extensive, semi-intensive and intensive aquaculture
		1. Mono and Polyculture
		2. Integrated Fish farming
	4. Criteria for selection of fish

**Unit II:** **Preparation of Culture Ponds**

2.1. Site selection

2.2. Different types of fish ponds (nursery, rearing and stocking ponds)

2.3. Preparation of ponds

 2.3.1. Control of aquatic insects

 2.3.2. Control of predatory and weed fishes

 2.3.3. Control of Aquatic weeds

 2.3.4. Fertilization and liming of ponds

**Unit III:** **Post-stocking management of ponds**

3.1. Procurement of seed

3.2. Analysis of physico-chemical parameters of pond

3.3. Artificial feeding and its importance in aquaculture

3.4. Feed Formulation

**Unit IV: Fish Health management**

4.1. Viral Diseases

4.2. Bacterial Diseases

4.3. Protozoan Diseases

4.4. Fungal diseases and Miscellaneous Diseases

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**Syllabus Practical**

**CBCS Semester IV New 2019 Onwards**

1. Analysis of following parameters of water sample

 a. Dissolved oxygen

b. pH

c. Carbondioxide

d. Alkalinity

e. Hardness

1. Preparation of culture ponds
2. Morphological study of important cultivable fishes

4. Collection and identification of

a. Aquatic weeds

b. Aquatic insects

c. Local Fishes

5. Culture of fish food organisms

6. Preparation of formulated feed for culture fishes

7. Identification and procurement of fish seed

8. Packing of fish seed for stocking.