**KARIM CITY COLLEGE, JAMSHEDPUR**

**DEPARTMENT OF BOTANY**

SYLLABUS DISTRIBUTION

AS PER FYUGP, NEP -2022

**SEMESTER VIII**

**SEMESTER -VIII Paper Title – Minor Paper – 2 (MN-2D)**

**CREDIT-04 [THEORY- 03 + PRACTICAL- 01]**

**Mushroom Culture Technology**

**DR.AFTAB ALAM KHAN:**

**Course Outcomes: - On completion of this course, the students will be able to:**

1. Recall various types and categories of mushrooms.

2. Demonstrate various types of mushroom cultivating technologies.

3. Examine various types of food technologies associated with mushroom industry.

4. Value the economic factors associated with mushroom cultivation

5. Device new methods and strategies to contribute to mushroom production.

**Full Mark - 60 Time: - 3 Hrs. 8 lectures**

**UNIT:1**

Introduction, History. Nutritional and medicinal value of edible mushrooms;

Poisonous mushrooms. Types of edible mushrooms available in India - Volvariella

volvacea, Pleurotus citrinopileatus, Agaricus bisporus

**Unit II 20 lectures:**

Cultivation Technology : Infrastructure: substrates (locally available) Polythene bag,

vessels, Inoculation hook, inoculation loop, low cost stove, sieves, culture rack,

mushroom unit (Thatched house) water sprayer, tray, small polythene bag. Pure

culture: Medium, sterilization, preparations of spawn, multiplication. Mushroom

bed preparation - paddy straw, sugarcane trash, maize straw, banana leaves.

Factors affecting the mushroom bed preparation- Low cost technology; composting

technology in mushroom production.

**DR.SHARMILA CHAKRABORTY:**

**Unit III 10 lectures:**

Storage and nutrition: Short-term storage (Refrigeration – up to 24 hours) Long term

Storage (canning, pickels, papads), drying, storage in salt solutions. Nutrition -Proteins - amino acids, mineral elements nutrition Carbohydrates, and Crude fibre content Vitamins.

**Unit IV 7 lectures:**

Food Preparation: Types of foods prepared from mushroom. Research Centres -

National level and Regional level. Cost benefit ratio - Marketing in India and abroad,