

SEMESTER-III (Pool-B)

COURSE NAME : APPLIED MUSHROOM BIOLOGY (CHOI-B03)

Number of Credit: - 02

Maximum marks: 50

UNIT-I

Principles of Mushroom Biology: Introduction, concepts, types, uses of mushrooms, Edible, and poisonous mushrooms.

UNIT-II

Global production: Agribusiness involving mushrooms, global status, opportunities, and constraints

UNIT-III

Mushroom Cultivation: Cultivation: Culturing, preservation methods, spawn production, quality attributes, storage, transport of commercially important mushrooms.

UNIT-IV

Mushroom biotechnology: Constraints in transformation, production of new varieties, genomic and proteomic aspects.

UNIT-V

Environmental & Medicinal aspects: Bioremediation using mushrooms, Production of nutraceuticals & value-added products.

Recommended Reading material:

- 1. SHU-
TINGCHANG, PHILIP G. MILES: MUSHROOMS: Cultivation, Nutritional Value, Medicinal Effect, and Environmental Impact, SECOND EDITION, CRC Press, 2011**
- 2. Mushroom Biology: Concise Basics and Current Developments by Shu-ting Chang, Philip G Miles**