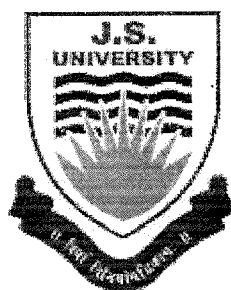


# **J.S. University, Shikohabad**

Established by UP Govt. Act No. 07 of 2015

Recognized by U.G.C. under section 2 (f) of Act-1956




**Value added course**

**Mushroom Cultivation Technology**

**Course code –VAC-068**

**2019-20**

**Faculty of Science**

	<p align="center"><b>J.S. University, Shikohabad</b> Faculty of Science</p>	<p align="center"><b>Value added course</b> <b>2019-20</b></p>
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### MUSHROOM CULTIVATION TECHNOLOGY

**Learning Objectives--**

- To enable the students to identify the edible and poisonous mushrooms.
- To provide hands on training for the preparation of bed for mushroom cultivation and harvesting , pests control and diseases control and post harvesting management.
- To provide the students awareness about the marketing trends of mushrooms.
- To give the students exposure to the experiences of experts in the field and to function mushroom farms.
- To help the students to learn a means of self- employment and income generation.

**Duration** – 30 hrs

**Course Outcome-** After completion of the course the student shall be able -

- To facilitate self-employment.
- To know the nutrient value of mushroom.
- To study the morphology and types of mushrooms.
- To know the spawn production technique.
- To aware the identification of edible and poisonous mushrooms.
- To learn the prospects and scope of mushroom cultivation in small scale industry.
- To understand the diseases and post harvesting techniques of mushroom.

**Syllabus Outline**

**Module- I**


1. Introduction and history of mushroom cultivation
2. Classification of mushroom and their life cycle
3. Identification of poisonous mushroom.

**Module- II**

1. Spawn preparation
2. Nutrient media for pure culture, layout of spawn preparation room, raw material of spawn.
3. Sterilization, preparation of mother spawn and multiplication.

**Module-III**

1. Cultivation of mushroom layout of mushroom shed small scale and large scale production unit.

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2. Types of raw material preparation and sterilization.
3. Mushroom bed preparation, maintenance of mushroom shed.
4. Harvesting and preservation of mushroom.

**Module-IV**

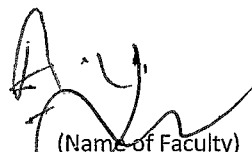
1. Nutrient value of mushroom protein, carbohydrate, fat fiber, vitamins and amino acids contents.
2. Short and long term storage of mushroom.
3. Preparation of various dishes from mushroom.
4. Medicinal value of mushroom.
5. Cultivation, extraction, isolation and economic values of mushroom.


**Module-V**

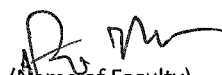
1. Cultivation of milky mushroom.
2. Cultivation of Oyster mushroom, button mushroom and any one of medically valuable mushroom.

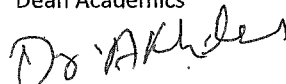
**Suggested Books –**


1. Paul Stamets, J.S. and Chilton, J.S. 2004. Mushroom cultivation A practical guide to growing mushrooms at home, Agarikon Press.
2. Tewari and Pankaj Kanpoor S.C. 1993. Mushroom cultivation. Mittal Publication Delhi.
3. Marimuth et al. 1991. Oyster mushrooms. Deptt. Of Plant Pathology, TNAU, Coimbatore.
4. Nita Bahl. 1988. Hand Book of Mushrooms, IInd Edition, Vol. I&II.
5. Shu Fing Chang, Philip G. Miles and Chang. S.T. 2004. Mushroom cultivation, nutritional value, medicinal effect and environmental impact. IInd Edition, CRC Press.

  
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