

**MB-10**  
**OPTION (B). APPLIED MYCOLOGY**

**Max. Marks - 80**

Units	Topics
I	<p>General Characteristics of fungi, Taxonomic status and Classification of Fungi, Fungi Harmful to mankind, Fungi as pathogen, to plants, Animal &amp; human beings, Spoilage of food stuffs:</p> <p>Mycotoxins such as Aflatoxins, Ochratoxins, Zearalenone, Trichothecene, Mushroom Toxins, Ergot toxins, deteriorations of articles &amp; timbers.</p>
II	<p>Fungi as a food : Detailed account of mushrooms &amp; their cultivation, Yeast &amp; its related Industries, Single cell proteins &amp; its production.</p> <p>The Economic importance of the fructification of:</p> <p>Agaricus bisporus Amanita Vaginata Boletus edulis Lentinus edodes Morchella, Pleurotus, Volvaria &amp; Rhizopus</p>
III	<p>Fungi as medicines</p> <p>Industrial production of Ergot, Ephedrine, Steroids, Vitamins, Antibiotics</p> <p>Fungi in production of organic Acids: Citric Acid, Itaconic Acid, Gluconic Acid, Kojic Acid, Gallic Acid, Fumaric Acid.</p>
IV	<p>Fungi in Industries such as</p> <p>Brewery Industries Baking Industries Dairy Industries</p> <p>Fungi in Enzyme Production such as Inverstase, Zymase, Amylase, Cellulase</p>
V	<p>Broad principles of Fungal disease management, Disease forecasting, Regulatory and physical measure of fungal disease management - management of disease by cultural produces, cropping sequences, organic amendments: Biocontrol of fungal diseases, chemical measures of disease management,</p> <p>Fungi in agriculture:</p> <p>Fungicides As Scavangers As biological control Importance of Mycorrhiza In soil aggregation &amp; soil fertility As growth hormones As insecticides</p>