



# GOVERNMENT DEGREE COLLEGE

NARASANNAPETA, SRIKAKULAM DIST. - 532421

( Affiliated to Dr. B.R. AMBEDKAR UNIVERSITY, Etcherla, Srikakulam Dist.)(Accredited with NAAC "B" Grade)



## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: I

**MID - I EXAMINATION**

GROUP: I B.Sc (CBZ)

**Paper: I** (Paper Title: Fundamentals of Microbes and Non Vascular Plants) **Max.Marks: 20 Marks**

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Write in detail about R.H.Whittaker's five kingdom concept?
2. Give an account of Cyanobacteria?
3. Describe the cell structure of Bacteria?

II. Short answer questions answer any **Five** of the following questions.

**5 x 2 = 10 Marks**

1. TMV
2. Miller and Urey Experiment
3. Germ theory of diseases
4. Nutrition in Bacteria
5. Bacteriophage
6. Archaeobacteria
7. Citrus Canker

III. Answer **All** the following Objective Questions.

**10 x 1/2 = 5 Marks**

1. Which type of bacteria causes tuberculosis?  
a) Streptococcus b) Mycobacterium c) Escherichia d) Staphylococcus
2. Which of the following bacterial infections is commonly spread by contaminated food?  
a) Tetanus b) Salmonellosis c) Meningitis d) Lyme disease
3. Which of the following is a type of gram-positive bacteria?  
a) Escherichia b) Helicobacter c) Staphylococcus d) Pseudomonas
4. Which of the following is NOT a characteristic of a virus?  
a) Requires a host cell to replicate b) Contains genetic material in the form of DNA or RNA  
c) Can produce energy on its own d) can mutate and evolve over time
5. Which of the following is a common way viruses can be transmitted from person to person?  
a) Through contact with bodily fluids b) Through casual conversation c) Through the air we breathe  
d) Through drinking contaminated water
6. Bacteria are classified into different groups based on their shape, with spherical-shaped bacteria known as \_\_\_\_\_, rod-shaped bacteria known as bacilli, and spiral-shaped bacteria known as spirilla.
7. Match the organisms in Column A with their action in Column B.

A

- 1) Rhizobium
- 2) Lactobacillus
- 3) Yeast
- 4) A Virus

B

- (A) Causing cholera
- (B) Backing of Bread
- (C) Fixing Nitrogen
- (D) Setting of curd
- (E) Causing AIDS

Signature of the Lecturer  
(S.PARAMESWARA RAO)  
Lecturer in Botany



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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: I

MID - II EXAMINATION

GROUP: I B.Sc (CBZ)

**Paper: I** (Paper Title: Fundamentals of Microbes and Non Vascular Plants) **Max.Marks: 15 Marks**

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Describe the Internal structure of Funaria Capsule with a labeled diagram
2. Describe the Economic Importance of Algae?
3. Write an essay on evolution of Sporophyte in Bryophytes?

II. Short answer questions answer any **Four** of the following questions.

**4 x 2 = 8 Marks**

1. Teliopores
2. Gemma Cup
3. T.S of Lichen Thallus
4. F.E. Fritsch Classification
5. Cystocarp in Polysiphonia
6. Pigments in Algae

III. Answer **All** the following Objective Questions.

**4 x 1/2 = 2 Marks**

- (1) Which one of the Following is a colonial Algae.  
(a) Ulothrix (b) Spirogyra (c) Volvox (d) Chlorella
- (2) Which of the following has Non-flagellated isogamous gametes.  
(a) Spirogyra (b) Chlamydomonas (c) Volvox (d) Fucus
- (3) The thalloid plant body is found in....  
(a) Sphagnum (b) Funaria (c) Salvinia (d) Marchantia
- (4) Which among the following is also known as bog moss?  
(a) Riccia (b) Sphagnum (c) Marchantia (d) Funaria

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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: II

**MID - I EXAMINATION**

GROUP: I B.Sc (CBZ)

**Paper: II** (Paper Title: Basics of Vascular plants and Phytogeography) **Max.Marks: 20 Marks**

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain the T.S of stem in Lycopodium with a labeled diagram?
2. Discuss the Stelar Evolution in Pteridophytes?
3. Explain the anatomy of Leaf in Cycas with a neat labeled diagram?

II. Short answer questions answer any **Five** of the following questions.

**5 x 2 = 10 Marks**

1. Gnetum male cone
2. Marsilea Petiole
3. Heterospory
4. Cycadeoidea stem
5. Paleozoic Era
6. Coralloid roots of Cycas
7. Marsilea sporocarp

III. Answer **All** the following Objective Questions.

**10 x 1/2 = 5 Marks**

1. In Ferns leaves during young conditions are called as\_\_\_\_\_  
a) Scale leaf b) Sporophyll c) Circinate vernation d) None of these
2. Tallest known gymnosperm is  
a) Pinus b) Ginkgo c) Sequoia d) Ephedra
3. This serves as a connecting link between the angiosperms and gymnosperms  
a) Gnetles b) Coniferales c) Ginkgoales d) Cycadales
4. Pick the pair that is correctly matched  
a) Cycas – Coralloid roots b) Abies – Wood tar, Wood gas  
c) Pinus – Mycorrhizal roots d) Sequoia – Red wood tree
5. The Phloem of Pteridophytes does not possess \_\_\_\_\_ cells.
6. The gametophytic generation in Pteridophytes is commonly called \_\_\_\_\_.

7. Match the Column I (class of Pteridophytes), Column II (Examples)

Column I

- 1) Psilopsida
- 2) Sphenopsida
- 3) Lycopsidea
- 4) Pteropsida

Column II

- (A) Selaginella
- (B) Psilotum
- (C) Equisetum
- (D) Dryopteris
- (E) Marselia

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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: II

MID - II EXAMINATION

GROUP: I B.Sc (CBZ)

Paper: II (Paper Title: Basic Vascular Plants and Phytogeography) Max.Marks: 15 Marks

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Write about the Rules of ICBN ?
2. Write about the characters of Asteraceae Family ?
3. Write about Phytogeographic Regions of India ?

II. Short answer questions answer any **Four** of the following questions. **4 x 2 = 8 Marks**

1. Digital Herbarium
2. BSI
3. Euphorbiaceae economic importance
4. Vegetation of Andhra Pradesh
5. Spike
6. Endemism

III. Answer **All** the following Objective Questions. **4 x 1/2 = 2 Marks**

1. The binomial nomenclature system in plant taxonomy was developed by which scientist?  
A) Charles Darwin B) Carl Linnaeus C) Gregor Mendel D) Louis Pasteur
2. Which of the following is the correct order of taxonomic ranks in plant classification from broadest to most specific?  
A) Kingdom, Phylum, Class, Order, Family, Genus, Species  
B) Kingdom, Class, Phylum, Order, Family, Genus, Species  
C) Phylum, Kingdom, Class, Order, Family, Species, Genus  
D) Kingdom, Order, Class, Phylum, Family, Genus, Species
3. Which family does the plant species Zea mays (corn) belong to?  
A) Rosaceae B) Fabaceae C) Poaceae D) Solanaceae
- 4) Bentham and Hooker's classification system is considered to be:  
A) Phylogenetic B) Artificial C) Natural D) Cladistic

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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: III

MID - I EXAMINATION

GROUP: II B.Sc (CBZ)

Paper: III

Max. Marks: 20 Marks

(Paper Title: Plant Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity)

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Describe the anomalous growth in Boerhavia stem with a labeled diagram?
2. Describe the Vascular tissue system in plants?
3. Give an account on Pollen-Pistil interactions in angiosperms?

II. Short answer questions answer any **Five** of the following questions. **5 x 2 = 10 Marks**

1. Anther Wall
2. Tunica Carpus Theory
3. Tapetum
4. Meristems
5. Pericycle
6. Rose Wood
7. Ornithophily

III. Answer **All** the following Objective Questions. **10 x 1/2 = 5 Marks**

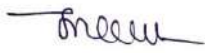
1. Lateral Roots originate in \_\_\_\_\_.  
a) Cortex b) Endodermal cells c) Pericycle d) Cork Cambium
2. Fibres associated with phloem  
a) Wood Fibres b) Bast Fibres c) Hard Fibres d) Surface Fibres
3. Bicollateral Vascular bundles are found in the stem of \_\_\_\_\_.  
a) Pumpkin b) Sunflower c) Dracaena d) Gram
4. Double Fertilization is characteristic of  
a) Gymnosperms b) Angiosperms c) Monocots d) Bryophytes
5. In angiosperms endosperm is  
a) Haploid b) Diploid c) Triploid d) None of the above
6. Monosporic eight nucleated female gametophyte is found in  
a) Adoxa b) Onion c) Fritillaria d) Polygonum
7. Match the Columns

List I

- 1) Ovary wall
- 2) Double Fertilization
- 3) Dormancy
- 4) Endosperm

List II

- (A) Food
- (B) Seeds
- (C) Angiosperms
- (D) Pericarp
- (E) Embryo

  
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## DEPARTMENT OF BOTANY

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Subject: BOTANY

SEMESTER: III

MID - II EXAMINATION

GROUP: I B.Sc (CBZ)

Paper: III

Max.Marks: 15 Marks

(Paper Title: Plant Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity)

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Give an account on the components of an ecosystem?
2. Write quantitative characters of plant communities?
3. Define biodiversity and explain levels of Biodiversity?

II. Short answer questions answer any **Four** of the following questions. **4 x 2 = 8 Marks**

1. Earth Summit
2. UNEP
3. NPP
- 4) P/R Ratio
5. Red Data Book
6. Raunkjer Life forms

III. Answer **All** the following Objective Questions. **4 x 1/2 = 2 Marks**

- (5) Plants Growing under direct sunlight are known as  
(a) Heliophytes (b) Sciophytes (c) Psamophytes (D) Dicots
- (6) Which is not the Characteristic of a Population  
(a) Natalty (b) Mortality (c) Stratification (d) Sex Ratio
- (7) Plant species with wide range of genetic distribution evolve into a local population known as  
(a) Ecotype (b) Population (c) Ecosystem (d) Biome
- (8) \_\_\_\_\_ is an example of an Ex-situ conservati  
(a) Sacred groves (b) Wildlife sanctuary (c) Seed Bank (d) National Park

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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: IV

MID -I EXAMINATION

GROUP: II B.Sc (CBZ)

Paper: IV (Paper Title : Plant Physiology & Metabolism)

Max.Marks: 20 Marks

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain the mechanism of Opening and Closing Stomata?
2. Explain Ascent of Sap?
3. Explain Glycolysis?

II. Short answer questions answer any **Five** of the following questions.

**5 x 2 = 10 Marks**

1. Osmosis
2. Water Potential
3. Water Physical Properties
4. Micro Nutrients
5. Enzyme properties
6. Respiratory Quotient (RQ)
7. Fermentation
8. Active Transport

III. Answer **All** the following Objective Questions. **10 x 1/2 = 5 Marks**

1. Wilting in the plants occurs due to \_\_\_\_\_.  
a) Excessive water uptake by the roots b) High soil salinity c) Loss of turgor pressure in cells  
d) Insufficient sunlight exposure
2. The boiling point of water of standard atmospheric pressure is \_\_\_\_\_.  
a) 0 C b) 25 C c) 100 C d) 200 C
3. Water has a unique property that allows it to stick to other substances. This Property is known as \_\_\_\_\_.  
a) Surface tension b) Viscosity c) Cohension d) Adhesion
4. Enzyme activity can be influenced by \_\_\_\_\_.  
a) Temperature & PH b) Light intensity & humidity c) Pressure and altitude  
d) Nutritional status & body weight
5. The final product of the Krebs Cycle is \_\_\_\_\_.  
a) Oxalic Acid b) Citrate c) Acetyl Co-A d) Fumarate
6. Plants can absorb mineral nutrients only through their Root hairs ( True / False)
7. Iron deficiency in plants leads to chlorosis, a condition characterized by yellowing leaves ....  
( True / False)

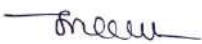
8. Match the Columns

List I

List II

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1) Total ATP Yield from Respiration | (A) 2 ATP                  |
| 2) Anaerobic Respiration            | (B) 36 ATP                 |
| 3) Krebs Cycle                      | (C) O <sub>2</sub> Present |
|                                     | (D) O <sub>2</sub> Absent  |

(E) Mitochondrial matrix (F) Cytoplasm

  
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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: IV

MID -I EXAMINATION

GROUP: II B.Sc (CBZ)

Paper: V (Paper Title : Cell Biology, Genetics & Plant Breeding) Max.Marks: 20 Marks

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain the Ultra structure of Cell Wall?
2. Explain the Organization of DNA?
3. Explain the Structure of Chromosome?

II. Short answer questions answer any **Five** of the following questions. **5 x 2 = 10 Marks**

1. Cell theory
2. Prokaryotic Cell
3. Nucleolus
4. Karyotype
5. Plastid DNA
6. Solenoid model
7. Ideogram
8. Lambrush Chromosome

III. Answer **All** the following Objective Questions. **10 x 1/2 = 5 Marks**

1. Which of the following cell organelles is absent in animal cells and present in a plant cell?

- (a) Cell wall (b) Cytoplasm (c) Vacuoles (d) Mitochondria

2. Which of the following cell organelles is called a suicidal bag?

- (a) Mitochondria (b) Golgi bodies (c) Cell membrane (d) Lysosomes

3. Which of the following statements is true about chromosomes?

- (a) It is present within the nucleus (b) It carries genes and helps in inheritance  
(c) It is composed of DNA in the form of Chromatin and protein (d) All of the above

4. \_\_\_\_\_ is involved in the synthesis of phospholipids.

- (a) Mitochondria (b) Smooth Endoplasmic Reticulum (c) Endoplasmic Reticulum (d) Cytoplasm

5. Unicellular microscopic organisms were first studied by -----

- (a) Robert Hooke (b) Priestley (c) Pasteur (d) Leeuwenhoek

6. Cells without a nucleus are eukaryotic cells. ( True/False )

7. DNA is a nucleic acid found in cells. ( True/False )

8. Match the components of DNA structure

- | List I               | List II   |
|----------------------|---|
| 1) Phosphate         | (A) Forms the backbone of the DNA strand                |
| 2) Deoxyribose sugar | (B) Determines the genetic code                         |
| 3) Nitrogenous base  | (C) Provides the energy for bonding between nucleotides |

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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: IV

MID -II EXAMINATION

GROUP: II B.Sc (CBZ)

Paper: IV (Paper Title : Plant Physiology & Metabolism)

Max. Marks: 15 Marks

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain the C<sub>4</sub> Cycle?
2. Explain Biological Nitrogen Fixation?
3. Explain Stomatal opening closing mechanism?

II. Short answer questions answer any **Three** of the following questions.

**3 x 2 = 06 Marks**

1. Water potential
2. Emerson Enhancement Effect
3. Osmosis
4. CAM
5. Cytokinin
6. Phytochrome

III. Answer **All** the following Objective Questions.

**4 x 1 = 4 Marks**

1. Photosynthesis occurs in \_\_\_\_\_.  
a) Chloroplast b) Golgi body c) Endoplasmic reticulum d) Nucleus
2. Kranz anatomy is found in the leaves of \_\_\_\_\_.  
a) Wheat b) Mustard c) Sweet potato d) Sugarcane
3. Non-cyclic photophosphorylation results in the production of \_\_\_\_\_.  
a) NADH b) NADPH c) ATP d) ATP and NADPH
4. Match the Columns

List I

- 1) Free living Nitrogen fixation Bacteria
- 2) Symbiotic Nitrogen fixing Cyanobacteria

List II

- (A) Rhizobium
- (B) Beijerinckia, Clostridium
- (C) Azolla
- (D) Aulosira

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## DEPARTMENT OF BOTANY

Year: 2022-23

Continuous Internal Assessment (CIA)

Subject: BOTANY

SEMESTER: IV

MID -II EXAMINATION

GROUP: II B.Sc (CBZ)

Paper: V (Paper Title : Cell Biology, Genetics & Plant Breeding) Max. Marks: 15 Marks

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain Mendel's Laws ?
2. Describe the structure of Watson & Crick Model DNA?
3. Explain the Crossing Over?

II. Short answer questions answer any **Three** of the following questions. **3 x 2 = 06 Marks**

1. Back Cross
2. Incomplete Dominance
3. mRNA
4. Linkage
5. Cistron
6. Lac operon

III. Answer **All** the following Objective Questions.

**4 x 1 = 4 Marks**

1. An individual's collection of genes is called \_\_\_\_\_

- (a) Genotype (b) Phenotype (c) Trait (d) Gametes

2. There are 4 pairs of chromosomes in a *Drosophila*. The Linkage groups present in it are \_\_\_\_\_

- (a) One less than the pair of chromosomes (b) One more than (c) Four (d) Eight

3. In DNA, the enzyme which breaks the H<sub>2</sub> Bonds is \_\_\_\_\_

- (a) Ligase (b) Helicase (c) Topoisomerase (d) Polymerase

4. Match the components of Meiosis

List I

List II

- |                              |                |
|------------------------------|----------------|
| 1) Crossing over takes place | (A) Zygotene   |
| 2) Termination of chiasmata  | (B) Diakinesis |
|                              | (C) Leptotene  |
|                              | (D) Pachytene  |

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## DEPARTMENT OF BOTANY

**Year: 2022-23**

**Continuous Internal Assessment (CIA)**

**Subject: BOTANY**

**SEMESTER: VI**

**MID - I EXAMINATION**

**GROUP: III B.Sc (CBZ)**

**Paper: 6C**

**(Paper Title 6C: Plant Tissue Culture)**

**Max.Marks: 20 Marks**

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain Totipotency in Plant Tissue Culture?
2. What are the important aspects in tissue culture?
3. Describe different methods of sterilization ?

II. Short answer questions answer any **Five** of the following questions.

**5 x 2 = 10 Marks**

- |                |                           |  |
|----------------|---------------------------|--|
| 1. Inoculation | 2. De-differentiation     | 3. Laminar Air-Flow chamber                |
| 4. Autoclave   | 5. Types of Culture media | 6. Incubation 7. M.S.medium 8. Interferons |

III. Answer **All** the following Objective Questions.

**10 x 1/2 = 5 Marks**

1. Who is known as the Father of tissue culture \_\_\_\_\_.  
a) Bonner b) Laibach c) Haberlandt d) Gautheret
2. Which of the following growth hormones produces apical dominance  
a) Ethylene b) Cytokinin c) Gibberellins d) Auxin
3. Which of the following medium is composed of chemically defined compounds \_\_\_\_\_  
a) Natural media b) Artificial media c) Synthetic media d) None of the above
4. Which of the following plant cell shows totipotency?  
a) Cork cells b) Meristems c) Sieve tube d) Xylem vessels
5. Which of the Following vectors is used in crop improvement and crop management?  
a) Agro bacterium b) plasmid c) Cosmid d) Phasmid
6. Haploid plants can be obtained from \_\_\_\_\_.
7. The pair of hormones required for a callus to differentiate are \_\_\_\_\_.
8. Plant tissue culture is also called as micropropagation.....(A) True (B) False
9. Match the Columns

List I

- 5) Dry Air type sterilizer
- 6) Sterilize noncarbohydrate media and agar media

List II

- (A) Autoclave
- (B) Laminar Airflow
- (C) Hot Air Oven

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## DEPARTMENT OF BOTANY

**Year: 2022-23**

**Continuous Internal Assessment (CIA)**

**Subject: BOTANY**

**SEMESTER: VI**

**MID - II EXAMINATION**

**GROUP: III B.Sc (CBZ)**

**Paper: 6C**

**(Paper Title 6C: Plant Tissue Culture)**

**Max.Marks: 15 Marks**

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain Callus Culture?
2. Explain Somatic Embryogenesis?
3. PCR mediated Gene Cloning?

II. Short answer questions answer any **Four** of the following questions.

**4 x 2 = 8 Marks**

1. Fusogens
2. Somaclonal Variants
3. Morphogenesis
- 4) Cybrids
5. Bt Cotton
6. Cryopreservation

III. Answer **All** the following Objective Questions.

**4 x 1/2 = 2 Marks**

(9) Which of the following is not a benefit of callus culture in plant tissue culture?

- A) Production of large quantities of cells for genetic engineering B) Clonal propagation of plants  
C) Induction of genetic variation D) Development of disease-resistant plants

(10) Callus culture is commonly used in plant tissue culture for:

- A) Micropropagation of plants B) Somatic embryogenesis C) Cryopreservation of plant cells D) All of the above

(3) Which of the following is an application of plant tissue culture?

- A) Production of virus-free plants B) Production of synthetic seeds C) Production of secondary metabolites D)  
All of the above

(4)What is the main advantage of using callus culture for the production of secondary metabolites?

- A) It allows for the production of a wide range of secondary metabolites  
B) It provides a higher yield of secondary metabolites compared to intact plants  
C) It reduces the time required for secondary metabolite production  
D) It eliminates the need for specialized equipment in secondary metabolite production

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(S.PARAMESWARA RAO)  
Lecturer in Botany



# GOVERNMENT DEGREE COLLEGE

NARASANNAPETA, SRIKAKULAM DIST. - 532421

(Affiliated to Dr. B.R. AMBEDKAR UNIVERSITY, Etcherla, Srikakulam Dist.)(Accredited with NAAC "B" Grade)



## DEPARTMENT OF BOTANY

**Year: 2022-23**

**Continuous Internal Assessment (CIA)**

**Subject: BOTANY**

**SEMESTER: VI**

**MID - I EXAMINATION**

**GROUP: III B.Sc (CBZ)**

**Paper: 7C**

**(Paper Title 7C: Mushroom Cultivation)**

**Max.Marks: 20 Marks**

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Explain the life cycle of Mushroom?
2. Write an account on Morphological features of Button Mushroom and Milky mushroom?
3. Write an essay on the layout of a mushroom farm?

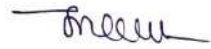
II. Short answer questions answer any **Four** of the following questions. **5 x 2 = 10 Marks**

1. Structure of mushroom
2. Importance of mushroom
3. Edible mushroom
- 4) Poisonous mushroom
- 5.Paddy straw mushroom
6. Spawn Unit
7. Pasteurization
- 8.Advantages of using bunkers

III. Answer **All** the following Objective Questions. **5 x 1/2 = 10 Marks**

1. Which of the following is not a characteristic of mushrooms?  
a) They are a type of fungus b) They have a stem and a cap c) They reproduce through spores  
d) They are a type of vegetable
2. What is the primary role of mushrooms in the ecosystem?  
a) Decomposition and nutrient recycling b) Pollination and seed dispersal c) Photosynthesis and oxygen production d) Pest control and crop protection
3. Which of the following statements best describes the nutritional value of mushrooms?  
a) Mushrooms are high in protein and low in carbohydrates b) Mushrooms are high in carbohydrates and low in protein c) Mushrooms are high in fiber and low in vitamins and minerals d) Mushrooms are low in fiber and high in vitamins and minerals
4. Which of the following cultural values is associated with mushrooms in many societies?  
a) Wealth and prosperity b) Longevity and immortality c) Beauty and aesthetics d) Wisdom and knowledge
5. What is the term used to describe the symbiotic relationship between certain mushrooms and tree roots?  
a) Mycorrhiza b) Lichen c) Hyphae d) Fruiting body

6. Mushroom cultivation typically involves growing mushrooms in not composted materials.(True / False)
7. The layout of mushroom forms refers to the arrangement of growing containers or beds for cultivating mushrooms. .(True / False)
8. Match the compost ingredient with its role in the composting process:
- |                    |   |
|--------------------|---|
| A. Straw           | (i) Enhances aeration and drainage in the compost               |
| B. Nitrogen source | (ii) Provides carbon and structure to the compost               |
| C. Gypsum          | (iii) Adds moisture and nutrients to support microbial activity |



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## DEPARTMENT OF BOTANY

**Year: 2022-23**

**Continuous Internal Assessment (CIA)**

**Subject: BOTANY**

**SEMESTER: VI**

**MID - II EXAMINATION**

**GROUP: III B.Sc (CBZ)**

**Paper: 7C**

**(Paper Title 7C: Mushroom Cultivation)**

**Max.Marks: 15 Marks**

I. Answer **One** from the Following Questions. (Draw a labeled diagram whenever necessary) **1 x 5 = 5 Marks**

1. Give an account of Spawning and Spawn running?
2. Write an essay on the production of Button (Agaricus) mushroom?
3. Write an essay on canning of mushrooms?

II. Short answer questions answer any **Four** of the following questions.

**4 x 2 = 8 Marks**

1. Straw Spawn
2. Casing Layer
3. Oyster mushroom
4. Green house crops
5. Common pests and Diseases observed in mushroom cultivation
6. Drying method

III. Answer **All** the following Objective Questions.

**4 x 1/2 = 2 Marks**

(1) Which of the following best describes mushroom spawning?

The process of introducing mycelium onto a substrate B) The process of harvesting mature mushrooms

C) The process of preparing the growing medium for mushroom cultivation D) The process of controlling temperature and humidity during mushroom cultivation

(2) What is the purpose of casing in mushroom cultivation?

A) To provide nutrients to the growing mushrooms B) To protect the mushrooms from pests and diseases

C) To create a favorable microclimate for mushroom growth D) To improve the texture and appearance of the harvested mushrooms

(3) Which of the following factors is crucial for successful mushroom cultivation?

A) Adequate ventilation B) Low humidity C) High light intensity D) Acidic pH of the growing medium

(4) Which type of mushroom cultivation involves growing mushrooms on logs or stumps?

A) Indoor cultivation B) Hydroponic cultivation C) Outdoor cultivation D) Vertical farming

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