[This question paper contains 2 printed pages.]

Roll No.....

Sr. No. of Question Paper: 1804

Unique Paper Code:	2162012401
Name of the Paper:	Mycology
Name of Course:	B. Sc. (Hons) Botany
Semester:	IV

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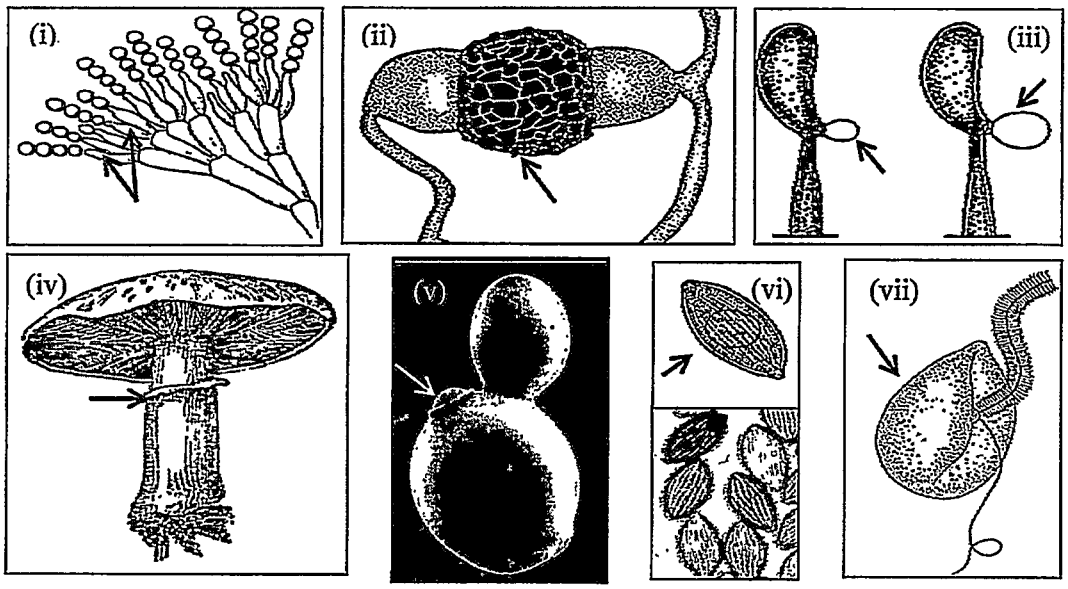
Duration: 2 Hours **Maximum Marks: 60**

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **FOUR** questions in all.
3. **Question number 1 is compulsory.** All questions carry equal marks.
4. All parts of a question must be answered together.
5. **Draw diagrams wherever required.**

1. (a) Identify the structure (**pointed by arrow**) visible in the following diagrams/pictures and name a studied genus in which it occurs (**Attempt any five**). (1x5=5)



(b) Distinguish the following terms in one or two sentences (**Attempt any five**). (1x5=5)

(i) Hypha and Pseudohypha
(ii) Hypertrophy and Hyperplasia
(iii) Heteroecious fungi and Autoecious fungi
(iv) Plasmodium and Pseudoplasmodium
(v) Sporangium and Sporangiolum
(vi) Fungi and Allied fungi
(vii) Dolipore and Simple pore
(viii) Perithecium and Pseudothecium

(c) Match the following: (1x5= 5)

(i)	Litmus paper	(A)	*Fusarium graminearum*
(ii)	Woronin bodies	(B)	Mycorrhiza
(iii)	Zearalenone	(C)	Ascomycetes
(iv)	A B Frank	(D)	Chytridiomycota
(v)	Straminipilous flagellum	(E)	Oomycota
		(F)	*Roccella tinctoria*

2. Differentiate between the following **(Attempt any three):** (5x3=15)

(i) Ascomycetes and Basidiomycetes
(ii) Primary and secondary mycelium
(iii) Cleistothecium and Apothecium
(iv) Primary zoospore and secondary zoospore
(v) Aeciospore and Teliospore
(vi) Foliose and Fruticose lichen

3. Write short notes on the following **(Attempt any three):** (5x3=15)

(i) Types of spores in *Puccinia*
(ii) Thallus organization in fungi
(iii) Fairy ring in mushrooms
(iv) Salient features of slime moulds
(v) Fungal biopesticides and their advantages over chemical pesticides

4. Draw the well-labelled diagram of the following **(Attempt any three):** (5x3=15)

(i) *Neurospora*: V. S. Perithecium
(ii) Dolipore septum: Structure
(iii) *Puccinia graminis tritici*: V. S. Aecidium
(iv) *Rhizopus*: W. M. Asexual stage
(v) T.S. Root showing Vesicular Arbuscular Mycorrhizal (VAM) fungi

5. Attempt **(any two)** from the following: (7.5x2= 15)

(i) Name the causal organism of black wart disease and its host. Illustrate its life cycle and describe its stages in detail. (2+5.5=7.5)

(ii) Why is *Neurospora* called "red bread mould"? Name the pigment responsible and its location. Describe the asexual stage of *Neurospora* with the help of suitable diagrams, and add a note on its importance. (0.5+1+4+2=7.5)

(iii) "Preparation of beverages cannot be imagined without fungi." Justify the statement. Describe the production of alcoholic and non-alcoholic beverages using different fungi and their raw materials as examples. (2.5+5=7.5)