

# Anjuman Islam Janjira Degree College of Science

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Class: -F.Y.B.Sc.(G.S)	Subject: - Botany - I
Semester:- I	Course code: -USBOT101
Exam Event:- Additional Exam Summer 2024 (FH)	Marks: - 100
Date: - 23/03/2024	Duration: - 3 hrs

- N.B. – 1 – All questions are compulsory.  
2 – Figures to the right indicate full marks.  
3 – Draw neat labeled diagrams wherever necessary.

**Q. 1: A. Choose the correct option from the following and rewrite the sentences.**

**10**

- .....is also called resting spores.  
(a). Heterocyst                      (b). Hormogones  
(c). Akinetes                        (d). Vegetative cells
- Sexual reproduction of *Spirogyra* is.....  
(a). Isogamous                      (b). Physiologically anisogamous  
(c). anisogamous                    (d). Oogamous
- ..... Reproduction is absent in *Nostoc*  
(a). Asexual                          (b).Vegetative  
(c). Sexual                            (d). All of the above.
- Cytoplasm of hyphae in *Rhizopus* contains.....  
(a).One nucleus                      (b).Numerous nucleus  
(c).Two nuclei                        (d). Eight nuclei
- The thallus of *Rhizopus* consist of.....  
(a). Rhizoidal hyphae              (b). Sporengiospore  
(c). Stolon                            (d). All of these
- The male sex organ in *Aspergillus* is called.....  
(a). Anthredium                      (b). Ascogonium.  
(c). Carpogonium                    (d). Archegonium
- ..... are sexual spores of fungi.  
(a). Conidia                          (b). Aplanospores  
(c). Ascopores                        (d). Zoospores
- The sporophyte of *Riccia* contains.....  
(a). Capsule                          (b). Foot and seta  
(c). Foot, seta, Capsule              (d). Only foot
- Riccia* spermatozoid possesses.....flagella  
(a). One                                (b). Two  
(c). Three                              (d). Four
- The sporophyte of liverwort is.....  
(a). Fully independent              (b). Partially independent  
(c). Parasitic                         (d). Symbiotic

**Q. 1: B. Answer the following in one or two sentences.** **10**

1. State the function of heterocyst.
2. State the difference between aplanospore and *chlamydo-spore*.
3. What is coenobium?
4. Write functions of scales in *Riccia*.
5. Name the different types rhizoids in *Riccia* thallus.

**Q. 2: Answer any two of the following** **20**

- a) Describe the structure of colony, single filament and cell structure of *Nostoc*.
- b) Give a brief account of economic importance of algae.
- c) Give an account of positive aspect of algae.
- d) Explain range of thallus and different shapes of chloroplast in chlorophyta

**Q. 3: Answer any two of the following** **20**

- a) Give an account of economical importance of fungi.
- b) Discuss the sexual reproduction of *Aspergillus*
- c) Discuss sexual reproduction in *Rhizopus*.
- d) Give the account of beneficial activity of fungi as in Medicines and maintaining soil fertility

**Q. 4: Answer any two of the following** **20**

- a) Describe the structure of sex organs and fertilization in *Riccia*.
- b) Write a detailed account on the general character of Liverworts.
- c) Discuss sexual reproduction of *Riccia*.
- d) Write a note on general characters of Hepaticae.

**Q. 5: Write a short notes (Any four)** **20**

- a) Systematic position of *Nostoc*
- b) Harmful aspect of algae.
- c) Cleistothecium
- d) Diagrammatic representation of alternation of generation of *Aspergillus*.
- e) Systematic position of *Riccia*.
- f) V.S of *Riccia* thallus