

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory.

2. Figures to the right indicate full marks.

3. Draw neat and labelled diagrams wherever necessary.

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Q.1 A) Choose the **correct option** from the following:

- a. *Spirogyra* reproduces by _____
 - i) Vegetative means
 - ii) Asexual means
 - iii) Sexual means
 - iv) All of these
- b. *Spirogyra* belongs to order _____
 - i) Oscillatoriales
 - ii) Zygnematales
 - iii) Heterosiphonales
 - iv) Ectocarpales
- c. Reserve food material in Chlorophyta is _____
 - i) Oils & proteins
 - ii) Proteins & starch
 - iii) Starch & pyrenoids
 - iv) oils, starch & proteins
- d. *Nostoc* is used in reclamation of _____ soils.
 - i) Acidic & saline
 - ii) Sandy & acidic
 - iii) Alkaline & saline
 - iv) Alkaline & sandy
- e. Penicillin was discovered by _____
 - i) Alexander Fleming
 - ii) A.F Blakeslee
 - iii) Elie Metchnikoff
 - iv) Felix Dujardin
- f. _____ is the order of *Rhizopus*
 - i) Mucorales
 - ii) Aspergillales
 - iii) Puccinales
 - iv) Basidiomycetes
- g. Aspergillosis caused by _____
 - i) *Aspergillus flavus*
 - ii) *Candida albicans*
 - iii) *Rhizopus stolonifer*
 - iv) *Penicillium notatum*
- h. _____ are known as amphibians of plant kingdom.
 - i) Algae
 - ii) Fungi
 - iii) Bryophytes
 - iv) Lichens
- i. Archegonia of *Riccia* is a _____ shaped structure.
 - i) Sphere
 - ii) Flask
 - iii) Pear
 - iv) Oval
- j. Antherozoids of *Riccia* are having _____ number of flagella.
 - i) One
 - ii) Two
 - iii) Four
 - iv) None

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Q.1 B) Answer the following in **one sentence**:

- a) Enlist the pigments present in Cyanophyta.
- b) Role of Heterocysts.
- c) Name a fungus which produces penicillin.
- d) What is the name of fruiting body in *Aspergillus*?
- e) Types of rhizoids in *Riccia*

Q.2 Answer **any two** from the following:

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- Describe sexual reproduction in *Spirogyra*.
- Give economic importance of algae as bio-fertilizers and food.
- Describe the structure of *Nostoc* colony, single filament and a single cell. with the help of a neat and labelled diagram.
- Give a detailed account of scalariform conjugation with the help of neat and labelled diagram.

Q.3 Answer **any two** from the following:

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- With help of suitable diagram describe the life cycle of *Rhizopus*.
- Describe the sexual reproduction in *Aspergillus*.
- Give an account of economic importance of fungi.
- Give classification of *Aspergillus* and *Rhizopus*, add a note on their important characters

Q.4 Answer **any two** from the following:

- Give classification of *Riccia* and explain its internal structure.
- Give an account on distinguishing characters of class Hepaticae.
- Explain the structure and development of sporogonium of *Riccia*.
- Explain structure of sex organs in *Riccia* and add a note on dehiscence of sex organs.

Q.5 Write Short note on (any four):

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- Shapes of chloroplast in chlorophyceae
- Alginates
- Note on Phycomycetes
- Write a note on parasitic Fungi
- Structure of spore and spore germination in *Riccia*.
- Diagrammatic representation of alternation of generation in *Riccia*.

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