

[Time: Three Hours]

[Marks:100]

Please check whether you have got the right question paper.

N.B:

1. All the questions are compulsory.
2. Figures to the right indicate full marks.
3. Draw neat and labelled diagrams wherever necessary.

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

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- a) *Spirogyra* reproduce by _____.
i) Vegetative means ii) Asexual means
iii) Sexual means iv) All of these
- b) _____ is a unicellular alga.
i) *Spirogyra* ii) *Volvox*
iii) *Chlamydomonas* iv) *Nostoc*
- c) _____ reproduction is absent in *Nostoc*.
i) Asexual ii) Vegetative
iii) Sexual iv) All of the above
- d) Cells of green algae contain _____ as principle pigments.
i) Chlorophyll a & b ii) Chlorophyll b & c
iii) Chlorophyll b & d iv) Chlorophyll a & c
- e) *Rhizopus* belongs to order _____.
i) Mucorales ii) Aspergillales
iii) Erysiphales iv) Puccinales
- f) Cleistothecium is a fruiting body observed in _____.
i) *Aspergillus* ii) *Rhizopus*
iii) *Mucor* iv) *Agaricus*
- g) The asexual spores in *Aspergillus* are called as _____.
i) ascospores ii) zoospores
iii) zygospores iv) conidia
- h) *Riccia* has _____ types of rhizoids.
i) one ii) two
iii) three iv) four
- i) Members of Hepaticae are commonly called as _____.
i) Mosses ii) Hornworts
iii) Liverworts iv) None of the above
- j) _____ number of neck canal cells are present in the archegonium of *Riccia*.
i) Two ii) Four
iii) Six iv) Eight

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

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- What are Hormogones?
- Define Conjugation.
- Name the male and female sex organs in *Aspergillus*.
- Give the mode of Nutrition in *Rhizopus*.
- Name the type of rhizoids found in *Riccia*.

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

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- Give economic importance of algae as bio fertilizer and food.
- Discus reproduction in *Nostoc*.
- Give the systematic position of *Spirogyra* and describe its cell structure.
- Describe the alternation of generation in Chlorophyta.

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

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- Explain asexual reproduction of *Rhizopus*.
- Give an account of general characters of Phycomycetes.
- Describe sexual reproduction in *Aspergillus*.
- Describe mode of nutrition in Fungi.

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

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- Describe the internal structure of *Riccia* thallus.
- Write a note on general characters of Hepaticae.
- Describe the structure of sporophyte in *Riccia*. Add a note on the spore structure.
- Describe sexual reproduction in *Riccia*. Add a note on its systematic position.

Q.5. Write short notes (**any four**):

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- Shapes of chloroplast in Chlorophyceae
- Alginates
- Fungi as food
- Systematic position of *Aspergillus*
- Vegetative reproduction in *Riccia*
- Structure of scales and rhizoids in *Riccia*.
