

Mid-West University  
**Examinations Management Office**

End Semester Examination 2081

Bachelor level/ B. Sc. / 1<sup>st</sup> Semester

Time: 3 hours

Subject: Cryptogams (BOT411/311)

Full Marks: 60

Pass Marks: 30

*Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.*

**Group A**

**Long answer questions.**

[4x8 = 32]

1. Discuss briefly the life cycle of *Albugo* with well label diagram.
2. Discuss ecological and economical importance of pteridophyte.
3. Compare reproductive structures of *Batrachospermum* and *Fucus*.
4. Explain the anatomy of stem of *Equisetum* with well labelled diagram

OR

Describe life cycle of *Riccia* with figure.

**Group B**

**Answer the following questions in short.**

[7x3 = 21]

5. Emphasize on reproductive structures in *Chara*.
6. Describe anatomy of thallus of *Anthoceros*.
7. Show the diagrammatic life cycle of *Puccinia*.
8. Mention the similarities and dissimilarities between algae and fungi.
9. Give an account of stelar system found in pteridopytes.
10. Discuss in brief; On origin and evolution of bryophytes.
11. Describe vegetative structure of *Sphagnum*.

OR

Discuss economic importance of lichens.

**Group C**

**12. Answer the following questions in very short (any seven)**

[7x1 = 7]

- a) Define fruticose lichen with an example.
- b) Classify *Riccia*.
- c) What is function of pyrenoid?
- d) Mention the reserve food material of Rhodophyceae.
- e) What is synangium?
- f) What is coenocytic thallus?
- g) Define dolipore.
- h) Draw simple sketch of L.S. of sporogonium in *Porella*.
- i) Why Pteridophytes are called vascular cryptogams?

**The End**