Total Pages: 3

End Semester Examination of Semester-I, 2015 Subject: BOTANY (PG)

Paper: 102
Full Marks: 40
Time: 2 Hrs

The figures in the margin indicate the marks corresponding to the question.

Candidates are requested to give their answers in their own word as far as practicable.

Illustrate the answers wherever necessary.

Answer all the questions

Type-A

1. Answer the following question:

8

a) What are the different types of life-cycle pattern found in algae.

OR

b) Write the silent feature of Rhodophyta with economic important.

Type-B

- 2. Answer any four (4) questions from the following:

 4x4=16
 - a) What do you mean by algal toxin? What are the different types of toxins produced by the members of Cyanophyta.

- b) Anthoceros-Asynthetic Group explain.
- c) Why <u>Voucheria</u> is placed in Xanthophyceae rather than Chtorophyceae?
- d) Stellar evolution in Pteridophyts.
- e) Write the characteristics of Bryum.
- f) Write in brief the structure of Porella Capsule.
- g) Give a illustrated account of development of eusporangiate type of sporangia.
- h) Write the form genus under <u>Lepidodendron</u>. Characterise the form genus <u>Stigmaria</u>.

Type-C

- 3. Answer any five (5) questions from the following: 2x5=10
 - i) What do you mean by endoscopic embryo? Where it is found?
 - ii) What is 'Floridean Starch' and where if is present?
 - iii) What is the basic differences between aplanosporus and hyprosporus? Give an example from each.
 - iv) What is secondary protonema?
 - v) What is 'elaterophore' and mention its function?
 - vi) Define 'Sphero-Riceia' and mention its significance.

- vii) Name two aquatic heterosporous pteridophyts.
- viii) What is "red sea"?
- ix) What are kelps? mention its one.
- x) Name one pridophyte and one bryophyte which has highest and lowest chromosome number (n) respectively.

Type-D

- 4. Answer any six (6) questions of the following: 1x6=6
 - a) Name two colourless green algae.
 - b) Name one first primitive vascular land plant with family.
 - c) Mention the root genera and stem genera of <u>Calamites</u>.
 - d) Which cell in the archegonium are considered vestigial female gamete?
 - e) What are nurse cell?
 - f) What is amphigastria?
 - g) What type of stele found in Adiantum?
 - h) What is leptoid and hydroids?
 - i) What is palmella stage?