# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

## BSc DEGREE EXAMINATION MAY 2017

(First Semester)

#### Branch - BOTANY

#### **PLANT DIVERSITY**

Time: Three Hours Maximum: 75 Marks.

## SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10x2 = 20)

- 1 What are symbiotic algae?
- What is meant by Palmelloid form?
- 3 Define frustule.
- 4 What are tetraspores?
- 5 Comment on the two types of rhizoids present in Riccia.
- 6 Define operculum.
- What is a synangium?
- 8 Define sorus.
- 9 What are coralloid roots?
- What are compression fossils?

#### SECTION - B (25 Marks!

**Answer ALL Questions** 

ALL Questions Carry EQUAL Marks  $(5 \times 5 = 25)$ 

11 a Draw and explain the fine structure of Chlamydomoas cell.

OR

- b Explain the sex organs of Oedognium.
- 12 a List any five characteristics of Diatoms.

OR

- b Describe the internal structure of the thallus of Dictyota.
- 13 a Explain the external structure of the gametophyte of porella.

OR

- b Explain the internal structure of the thallus of Anthoceros.
- 14 a Explain the external feature of the sporophyte of Psilotum.

OR

- b Briefly explain the internal structure of the stem of Selaginella.
- 15 a Explain the L.S. view of the ovule of Cycas.

OR

b Explain the structure of stem of Lepidodendron in a transverse section view.

### SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3x10 = 30)

- Describe the classification of alage proposed by F.E. Fritsch.
- 17 Describe the reproduction in Sagassum.
- Draw and explain the L.S. view of the psorophyte of polytrichum.
- 19 Elaborate on the reproduction of Equisetum.
- 20 Describe various fossilization processes.