

Date:

Registration number:

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**

**B.Sc. BOTANY - II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2022**

(Examination conducted in July 2022)

**BO 221 - Diversity of Non - Flowering Plants**

**Time- 2hrs Max Marks-60**

**This question paper contains ONE printed page and four parts**

**Part-A: Answer or define any FIVE questions in one or two sentence 2×5= 10**

1. Photosynthetic pigments in class Cyanophyceae
2. Siphonostele
3. Diplontic life cycle in algae
4. Cystocarp
5. Birbal Sahni
6. *Pentoxylon*
7. Gemma cup
8. Ligule

**Part-B: Write short notes on any FIVE questions 6×5= 30**

1. Economically useful products from algae (any 6)
2. Sporophyte of *Funaria*
3. Types of fossils
4. Heterospory in Pteridophytes
5. Anatomy of *Pinus* needle
6. Heterospory and seed habit
7. General characters of Gymnosperms

**Part-C: Explain any TWO questions in detail 10×2= 20**

1. Sexual reproduction in *Sargassum*
2. Morphology and anatomy of sporocarp in *Marsilea*
3. Male and female reproductive structures of *Gnetum*