**Reg. No.:**

**Date: 3-12-2022 (9am)**

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

**B.Sc. BOTANY - III SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2022**

(Examination conducted in December 2022)

**BO 322: PLANT ANATOMY AND DEVELOPMENTAL BIOLOGY**

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

Draw diagrams and write examples wherever necessary

This paper contains ONE printed page and THREE parts

**A. Answer any TEN of the following:10x2=20**

1. Annual rings
2. Callose plug
3. Complex tissues
4. Double fertilization
5. Egg apparatus
6. Free nuclear endosperm
7. Heartwood
8. Lateral meristem
9. Pollen aperture
10. Pollination
11. Secretory tissues
12. Primary xylem

**B. Write a critical note on any FIVE of the following 5x6=30**

1. Applications of Palynology
2. Dicot root with a labelled diagram
3. Histogen theory with a labelled diagram
4. Post fertilized structures of ovule
5. Structure of anatropous ovule
6. Structure of mature Anther
7. Structure of stomata with a labelled diagram

**C. Give a comprehensive account of any TWO of the following 1x10=10**

1. Monosporic type of Embryosac development
2. Types of Vascular bundles