**ST JOSEPH’S UNIVERSITY, BENGALURU - 27**

**B.Sc. BOTANY – III SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2023**

**(Examination conducted in November /December 2023)**

**BO 323 – PLANT ANATOMY AND DEVELOPMENTAL BIOLOGY**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 60**

**This paper contains ONE printed page and THREE parts**

**Draw diagrams wherever necessary**

**Part-A: Answer any TEN questions in one or two sentences 10X2=20**

1. Multiseriate ray

2. Spiral phyllotaxy

3. Medullary bundles

4. Scope of plant morphogenesis

5. Self pollination and its advantage

6. Tenuinucellate ovule

7. Trilacunar node

8. Tetrahedral tetrad

9. Helobial endosperm

10. Laticifers

11. Alburnum

12. Anther culture

**Part-B: Write short notes on any FIVE questions 5X6=30**

13. Cytohistological zonation

14. NPC classification system

15. Korper-Kappe theory

16. Morphological changes in shoot apex at the time of flowering

17. Differences between mature dicot and monocot embryos

18. Anatomy of dorsiventral leaf with neat labelled diagram

19. Types of merstematic tissues

**Part-C: Explain any ONE question in detail 1X10=10**

20. Anomalous secondary growth in *Boerhaavia* with neat labeled diagram

21. Monosporic embryosac development with neat labeled diagram