

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

B.Sc. DEGREE EXAMINATION – ADV.ZOOLOGY & BIOTECH.

FOURTH SEMESTER – NOVEMBER 2009

**B 451 - BOTANY - II**

Date & Time: 11/11/2009 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

**PART A**

**Answer ALL the questions, each within three or four sentences only (10×2=20)**

01. Define the term phyllotaxy.
02. What is aestivation?
03. Distinguish between paripinnate and imparipinnate leaves.
04. Enlist the contributions of Linnaeus.
05. What are essential oils?
06. Mention the botanical name of teak and manila hemp.
07. Define vascular cambium.
08. Differentiate tracheids from vessels.
09. What is female gametophyte?
10. What is double fertilization?

**PART B**

**Answer any FIVE of the following each within one page only. Draw necessary diagrams. (5× 8= 40)**

11. What is racemose inflorescence? Explain any two types of racemose inflorescence.
12. What are the distinguishing characters of the family Capparidaceae?
13. Mention the binomial, family, morphology of useful part and uses of any four Indian medicinal plants.
14. Write the economic importance of opium, cocaine, hemp and henbane.
15. Describe the organization of shoot apex in plants.
16. Describe the structure of any four types of stomata.
17. Describe the internal structure of a mature anther.
18. Write about nuclear endosperm.

**PART C**

**Answer any TWO of the following, each within 3 or 4 pages only. Draw necessary diagrams. (2×20= 40)**

19. Write an essay on Bentham and Hooker system of classification.
20. Describe the taxonomic features of Euphorbiaceae. Name any five plants of economic importance belonging to this family.
21. Explain the process of secondary growth in dicotyledonous stem.
22. Describe the development of dicot embryo.

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