



বিদ্যাসাগর বিশ্ববিদ্যালয়  
**VIDYASAGAR UNIVERSITY**  
**Question Paper**

**B.Sc. Honours Examinations 2020**

(Under CBCS Pattern)

**Semester - III**

**Subject: BOTANY**

**Paper : C 5-T & C 5-P**

**(Morphology and Anatomy)**

**Full Marks : 60 (Theory - 40 + Practical - 20)**

**Time : 3 Hours**

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**C 5-T [Theory]**

Answer any *two* questions from the following :  $2 \times 20 = 40$

1. i. Write short notes on hydathodes, cavities, lithocysts and laticifers.  
ii. Write the applications of plant anatomy in systematics, forensics and pharmacognosy. 10 +10
2. i. Write down the concept of organization of shoot apex.  
ii. Write down the structure of nodal anatomy.  
iii. Discuss about the mechanical tissue mentioning its significance. 6+8+6
3. i. Write down the root-stem transition with suitable diagrams.  
ii. Discuss the origin of lateral root.

iii. Write the development and composition of periderm, rhytidome and lenticels. 8+5+(3+2+2)

4. i. Briefly discuss different types of secondary growth found in stem.

ii. Write the anatomical adaptations of xerophytes and hydrophytes. 10+ (5+5)

### C 5-P [Practical]

Answer any *one* questions from the following : 1 × 20 = 20

1. Draw and label the parenchyma, collenchyma and sclerenchyma with identifying characters. 20

2. i. Draw and label the heart- and sapwood.

ii. Draw and label the stomata types. 10+10

3. i. Enumerate the identifying characters of ring porous and diffuse porous woods.

ii. Write down the identifying characters of cavities, lithocysts and laticifers found in secretory tissues. 10+10

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