

**PAPER II**  
**ANATOMY OF ANGIOSPERMS,  
 ECONOMIC BOTANY AND  
 ETHNOBOTANY**

**Unit-1**

Plant anatomy : Introduction, organization of meristems; theories related to their organization; cell wall gross microscopic structure and chemistry.

**Unit-2**

Tissue and tissue systems; Parenchyma, Collenchyma, Sclerenchyma, Xylem, Phloem, Secretory structures and periderm.

**Unit-3**

Primary and Secondary Structure : root, stem and leaf. Primary and secondary anomalous structure with special reference to *Aristolochia*, *Salvadora*, *Bignonia*, *Achyranthes*, *Amaranthus*, *Boerhaavia*, *Mirabilis*, *Chenopodium* *Dracaena*, *Tinospora*.

**Unit-4**

Study of economic botany of the following :

- Cereals : *Triticum*, *Zea*  
 Pulses : *Glycine max*, *Cajanus cajan*  
 Fibres : Classification; *Gossypium*,  
*Crotolaria Corchorus*; artificial fibres.

- Wood : Classification, mechanical properties; *Shorea*, *Tectona*, *Pinus*, *Cedrus*.  
 Paper : Raw materials and manufacture.  
 Sugar : Sugarcane, Beet.

**Unit-5**

Study of economic uses of the following :

- Medicinal Plants : *Rauwolfia*, *Datura*, *Cinchona*, *Papaver*.  
 Beverages : Alcoholic; Non-alcoholic: tea and coffee.  
 Species and Condiments : *Coriandrum*, *Cuminum*, *Ferula*, *Curcuma*, *Trigonella*, *Elettaria*, *Capsicum*, *Piper*, *Zingiber*.  
 Oil : *Arachis*, *Cocos*, *Helianthus*.  
 Ethnobotany : Introduction; Aims and Objectives; knowledge of important plants of various groups from Ethnobotanical point of view as food, fodder and Medicine with special reference to Rajasthan.

**Note:**

The paper setter is required to set questions of 3 types contained in 3 Sections (**Section A-** 10 questions, **Section B-** 10 questions and **Section C-** 4 questions) from the 5 units of each paper. There will be 10 questions in