Paper 13a  PLANT ANATOMY AND EMBRYOLOGY
M. Sc. va. (Candidates admitted from the academic year 2008-2009)

Core Theory
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Core Theory

Plant Anatomy

UNIT I

Key words: Plasmodesmata, ramiform pits, fusiform initials, ray initials, storied cambium, non-storied cambium, cambial zone

UNIT II

Key words: Perforation plate, sieve plate, P-protein, heart wood, sap wood, tylosis,

UNIT III

Key words: Included phloem, conjunctive parenchyma, Kranz anatomy.

Embryology

UNIT IV
Ovule - types, integument, female gametophyte.
Self incompatibility.
Fertilization - Recent progress in in vitro fertilization.
Key words: Endothecium, endothelium, heterofertilization, obturator.

**Palynology**

UNIT - V


Applied Palynology:
A brief account on Melitopalynology, Aeropalynology, Iatropalynology, Pharmacopalynology, Forensic Palynology, Copropalynology, Paleopalynology and Palynotaxonomy.

Key words: Sporoderm, sporopollenin, oncus, viscin thread, pollen kit, harmomegathy, pollen diagram, pollen calender.

**Pollination Biology**

UNIT VI


Key words: Protogyny, protandry, heterostyly, herkogamy, pre-nectar, sub-glandular tissue.
Suggested Reading

Plant Anatomy


ESAU, K. 1977. Anatomy of seed plants. John Willey and Sons. USA.


Palynology


**Embryology**


**Pollination Biology**
