



M 8110

Reg. No. :

Name :

VI Semester B.Sc. Degree (CCSS-Reg./Supple./Improv.)
Examination, May 2015
CORE COURSE IN BOTANY/PLANT SCIENCE
6B11 BOT/PLS : Diversity of Life 3-Angiosperm Systematics and
Morphology
(2011 and Earlier Admn.)

Time : 3 Hours

Total Weightage : 30

Instruction: Draw diagrams wherever necessary.

SECTION – A

Answer **all**. (Questions in bunches of **four**; **Each** bunch carries a weightage of **1**.)

1. Choose the correct answer.

i) Inferior ovary is present in

- | | |
|--------------|------------------|
| a) Labiatae | b) Anacardiaceae |
| c) Rubiaceae | d) Liliaceae |

ii) A specimen cited with original description other than the holotype

- | | |
|--------------|------------|
| a) Lectotype | b) Isotype |
| c) Paratype | d) Neotype |

iii) A phylogenetic system of classification is based on the

- | | |
|----------------------|----------------------------|
| a) Number of sepals | b) Floral parts |
| c) Number of stamens | d) Evolutionary principles |

iv) Leafless stem of onion which is produced to bear flowers is called

- | | |
|----------------|-----------|
| a) Floral axis | b) Scape |
| c) Peduncle | d) Rachis |

2. State **true** or **false**.

- Spirocyclic arrangement of floral parts is a primitive character.
- Anthers are dithecous in Malvaceae.
- Follicle is a dry dehiscent fruit.
- The Indian Royal Botanic garden is situated at Bangalore.



3. Fill in the blanks.

- The unit of biological classification is _____
- In lamiaceae the stamens are _____
- The family Myrtaceae belongs to the series _____
- A(9) + 1 is the characteristic of _____

4. Rearrange Column B and C to match Column A.

A	B	C
i) Scitamineae	Linnaeus	Annona
ii) Aggregate fruit	Bicarpellatae	Inferior ovary
iii) Species Plantarum	Apocarpous pistil	Polemoniales
iv) Solanaceae	Labellum	Binomial nomenclature

5. Answer in **one** word or in **one** sentence.

- ICBN
- Gynostegium
- Name the order of the family capparidaceae
- Phyllotaxy.

(5×1=5)

SECTION – B

Answer **any four**. (Differentiate the following. **Each** question carries a weightage of 1.)

- Acanthaceae and scrophulariaceae.
- Berry and drupe.
- Syngenesious and synandrous condition.
- Synonym and syntype.
- Ranales and malvales.
- Monographs and flora.

(4×1=4)

SECTION – C

Answer **any five**. (Short answer questions. **Each** question carries a weightage of 1.)

- What is OTU ?
- Write the binomial of any two medicinal plants of apocynaceae.



- What is aestivation ? Mention the types.
- Comment on tautonym.
- In which family resupination is found ? Define it.
- What is chemotaxonomy ?
- Define floral diagram.

(5×1=5)

SECTION – D

Answer **any six**. (Short essay questions. **Each** question carries a weightage of 2.)

- What is placentation ? Explain the different types.
- With the help of diagram explain the spikelet inflorescence.
- What is a herbarium ? Explain the technique.
- Discuss the role of anatomy in taxonomy.
- The order umbellales is placed at the end of the sub class polypetalae. Justify.
- Briefly explain typification.
- Explain indented key and bracketed key.
- Write the botanical name, family, morphology of useful part of any three pulses.

(6×2=12)

SECTION – E

Answer **any one**. (Long essay type questions. **Each** question carries a weightage of 4.)

- Describe the different types of inflorescence.
- Give an account on natural system of classification. Comment on its merits and demerits.
- Explain the characteristic features of the family asteraceae. Why it is considered as an advanced family ?

(1×4=4)