

S.Y.B.SC. SEM – III (CBCS - 2016 Course) : SUMMER - 2019
SUBJECT: BOTANY: PLANT SYSTEMATICS AND PLANT ECOLOGY

Day: Thursday
Date: 25/04/2019

S-2019-0834

Time: 03.00 P.M. To 06.00 P.M
Max. Marks: 60

N.B:

- 1) All Questions are **COMPULSORY**.
 - 2) Draw neat and labeled diagrams **WHEREVER** necessary.
 - 3) Figures to the right indicate **FULL** marks.
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Q.1 Answer **ANY TWO** of the following: (12)

- a) Explain in brief energy flow model of ecosystem.
- b) Give major types of ecosystem.
- c) Explain merits and demerits of Bentham and Hookers system of classification

Q.2 Attempt **ANY TWO** of the following (12)

- a) Describe nitrogen cycle.
- b) Give economic importance of family *Asteraceae* and *Solanaceae*
- c) Explain concept of plant systematics.

Q.3 Attempt **ANY TWO** of the following (12)

- a) Give salient feature of *ICBN*.
- b) Explain phylogenetic system of classification.
- c) Give floral formula and floral diagram of family *Amaryllidaceae* and *Brassicaceae*.

Q.4 Attempt **ANY THREE** of the following (12)

- a) Give medicinal importance of the family *Meliaceae* and *Acanthaceae*
- b) Explain role of plant indicator in environment monitoring with respect to pH, minerals and pollution.
- c) Give ecological succession in *Xerosere*
- d) Give the concept of Binomial nomenclature system of classification

Q.5 Attempt **ANY FOUR** of the following (12)

- a) Give outline of phosphorus cycle
- b) Give types of ecosystem with respect to pond ecosystem
- c) Explain biotic component of an ecosystem
- d) Give objectives of plant systematics.
- e) Give adaptation to habitats in halophytes with suitable example.
- f) Give salient features of family *Euphorbiaceae*.

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