

S.Y.B.SC. SEM – III (CBCS - 2016 Course) : WINTER - 2018
SUBJECT: BOTANY: PLANT SYSTEMATICS AND PLANT ECOLOGY

Day: Wednesday
Date: 24/10/2018

W-2018-0716

Time: 11.00 A.M. To 02.00 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) Describe natural system of classification
- b) What is biogeochemical cycle? Describe carbon cycle.
- c) Give salient features of Bentham and Hookers system of classification with merits.

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

- a) Give the concept of Binomial Nomenclature.
- b) Explain concept of plant systematics.
- c) Give diagnostic characters of the family *Meliaceae* and *Caesalpinaceae*.

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

- a) What is hydrosere? Explain succession in hydrosere.
- b) Give salient features of *ICBN*.
- c) Assign the family and give two medicinal uses of the following plants-
Coriandrum sativum, *Adathoda vasica*.

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

- a) Describe concept of species.
- b) What is plant indicator? Give their role in environmental monitoring with respect to soil and water.
- c) Describe Engler and Prantle's system of classification with merits.
- d) Describe abiotic component of an ecosystem.

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

- a) Give major types of ecosystem.
- b) Give the economic importance of the family *Annonaceae* and *Asteraceae*
- c) Give the ecological adaptation in *Xerophytes* and *Halophytes*.
- d) Give biotic component of an ecosystem.
- e) Explain pyramid of energy.
- f) Explain siliqua type of fruit.

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