

S.Y.B.SC. SEM – III (CBCS - 2016 COURSE) : WINTER - 2017
SUBJECT : BOTANY - PLANT SYSTEMATICS AND PLANT ECOLOGY

Day : **Wednesday**
Date : **08/11/2017**

Time : **11.00 A.M. TO 02.00 PM**
Max. Marks : **60**

W-2017-0577

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate full marks.
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Q.1 Attempt any **TWO** of the following: **(12)**

- a) Describe abiotic components of an ecosystem.
- b) Explain phylogenetic system of classification in angiosperm.
- c) Give diagnostic characters and floral formula of family Annonaceae and Solanaceae.

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

- a) Give merits and demerits of Engler and Prantle's system of classification.
- b) Explain Nitrogen cycle in an ecosystem.
- c) Give outline of Bentham and Hooker's system of classification.

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

- a) Describe concept of plant systematics.
- b) Give economic importance of family Brassiaceae and Euphorbiaceae.
- c) Give salient features of family Maliaceae.

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

- a) Give energy flow diagram in an ecosystem.
- b) Describe *ICBN* system of in Botanical nomenclature.
- c) Describe natural system of plant classification in an angiosperm.
- d) Give Carbon cycle in an ecosystem.

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

- a) Give distinguishing characters of family Caesalpinaceae.
- b) Give economic importance of the family Asteraceae.
- c) Give objectives of plant systematics.
- d) What is autotrophy and heterotrophy?
- e) Give concept of species.
- f) Give distinguishing characters of family Apiaceae with suitable example.

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