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4 SEM TDC BOT M 1

2016

(May)

BOTANY

(Major)

Course : 401



(Morphology and Taxonomy of Angiosperms)

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. (a) Choose the correct answer/Fill in the blanks of the following : 1×5=5
 - (i) The primitive characters are found in the members of the family Cucurbitaceae / Lamiaceae / Magnoliaceae / Commelinaceae.
 - (ii) Taxonomy -based on similarities between the groups of plants is called _____.

(2)

(iii) Corona, the outgrowths are usually present in the petals of the members of the family Apiaceae / Asteraceae / Arecaceae / Apocynaceae.

(iv) The name of Carolus Linnaeus, the father of taxonomy is the latinised form of name of ____.

(v) Amentiferae group of plants indicates naked flowers/primitive flowers/fused petals/free petals.

(b) Write short notes on the following :

2×5

(i) Objectives of plant taxonomy

(ii) Priority of publication

(iii) Vegetative characters of Musaceae

(iv) Affinities of Zingiberaceae

(v) Flora of Upper Assam

2. With the help of suitable examples, write about the different theories of origin of angiosperms. According to your view, why is the problem of angiosperm origin still unsolved?

8+2

Or

What is carpel? Who proposed the theory of carpel polymorphism? Write on the different types of carpel on the support of polymorphic nature of carpels.

1+1+8

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(Continuu

(3)

3. Write a comparative account of phylogenetic system of classification proposed by Engler and Prantl and Hutchinson. Also mention the merits and demerits of both the thoughts.

7+2+2=11

Or

Write short accounts of the following : 5+6=11

(a) Preparation technique of herbarium specimens

(b) Cytotaxonomical approach in plant classification

4. Write the floral characteristics of the following families with their floral formulae. Also mention one widely used economic plant from each family (any three) : (2+1+1)×3=12

(a) Rubiaceae

(b) Rosaceae

(c) Solanaceae

(d) Euphorbiaceae

(e) Poaceae

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