

**CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN,  
NUVEM-GOA**

**B.Sc. CBCS Semester V Examination, January 2021**

Subject Code: **BOC 105 (Classical Taxonomy & Phylogeny)** Subject Name: **BOTANY-DSC**

Total Marks: **80**

Duration: **2 Hours**

Total No. of pages: **02**

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- Instructions:** 1) All questions are compulsory; however internal choice is available.  
2) Figures to the right indicate maximum marks assigned to the question.  
3) Draw labelled diagrams wherever necessary.

Q.I. Answer **any four** of the following in brief: (4 x 4 marks =**16**)

- a) Define phyllotaxy. Enlist the different types, with one example for each.
- b) Describe any four types of leaf surface giving one example for each.
- c) Define aestivation and placentation. List the different types.
- d) Describe phylogenetic tree.
- e) Give the systematic position of Amaranthaceae with one character for each level of classification.
- f) Describe the androecium and gynoecium in Capparidaceae.

Q.II. Write short notes on **any four** of the following: (4 x 4 marks =**16**)

- 1) Leaf margin types.
- 2) Characteristics and functions of roots.
- 3) Phylloclade and cladode.
- 4) Origin of corolla in Angiosperms.
- 5) Male and female flower of Arecaceae.
- 6) Importance of Family Myrtaceae.

Q.III. A) Describe modifications in adventitious roots with one example for each type. (6)

**OR**

- A) Describe different forms of: a) Reduced stem and b) Underground stem. (6)
- B) Briefly describe different types of compound leaves. (6)

Q.IV. A) Briefly describe different types of racemose inflorescence, giving one example for each. (6)

**OR**

A) With respect to Phylogeny of angiosperms, describe homology and analogy giving examples. (6)

B) With respect to origin and evolution of Angiosperms, describe Bennetitalean theory. (6)

Q.V. A) Write a short account on simple fruits. (6)

**OR**

A) Write a note on systematic position and vegetative characters of Araceae. (6)

B) Describe the diagnostic features of Annonaceae. (6)

Q.VI. A) Write a note on Rutaceae with respect to:

a) Vegetative characters    b) Fruit character    c) Floral formula (6)

**OR**

A) Describe Papilionaceae with respect to:

a) Corolla    b) Androecium    c) Floral formula (6)

B) Describe the floral characters of Asclepiadaceae. (6)

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