

**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**

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)
