



Fbti.1101

KERALA AGRICULTURAL UNIVERSITY  
B.Sc. (Hons.) Forestry 2018 Admission  
I Semester Final Examination-February 2019

Dendrology (2+1)

Marks: 50  
Time: 2 hours

I Fill in the blanks (10x1=10)

- 1 The number of natural orders in Bentham and Hooker classification is .....
- 2 When the published name of a plant have many more scientific names,..... rule of the ICBN will be applied to find the correct name
- 3 A modified and specialized leaf in the inflorescence, standing below partial peduncle is known as .....
- 4 The meristamatic cells in the periderm are known as .....
- 5 Corky eruptions on the bark that allow gas exchange called .....
- 6 The part of the tree trunk below the lower most branches is called as.....

State True or False

- 7 The term 'taxonomy' was coined by A.P.D. Candolle
- 8 When two leaves are born on the same node but on the opposed sides of the stem, the leaf arrangement is known as alternate
- 9 The plant species in which female and bisexual flowers on the same plant is known as gynomonocious
- 10 According to Linnaean system of classification, the class 'Didynamia' represents plants with 4 long and 2 short stamens

II Write Short notes on any FIVE of the following (5x2=10)

- 1 Species concept in plant taxonomy.
- 2 Commercially important bark exudates and their sources (any four)
- 3 Four important tropical timber trees are given below. Arrange them along with correct family
  - 1 *Tectona grandis* a Sterculiaceae
  - 2 *Dalbergia latifolia* b Moraceae
  - 3 *Terminalia arjuna* c Meliaceae
  - 4 *Artocarpus hirsutus* d Fabaceae
  - e Lamiaceae
  - f Combretaceae
- 4 Define the taxonomic terms Tautonym and Nomennudum
- 5 *Carolus Linnaeus* regarded as 'Father of taxonomy'. Justify this statement with a short description of his contributions to plant taxonomy.

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- 6 Important vegetative characteristics of leaves used in the taxonomic description of a woody forest species.
- 7 ICBN conditions for retention and choice of names during division or union of taxonomic ranks

**III Answer any FIVE of the following. (5x4=20)**

- 1 Major post-Darwinian systems of classification
- 2 Periderm and its significance in bark texture of tree trunk
- 3 Phyllotaxy and its important types in plants
- 4 Major differences between lenticels and rhytidome with important types of lenticels in dicots
- 5 Position of ovary and perianth play an important role in angiosperm taxonomy. Justify the statement with a brief explanation of different floral types based on ovary and perianth
- 6 Important floral features of Anonaceae, Malvaceae, Bignoniaceae and palmae
- 7 Placentation types and their phylogenetic relationship

**IV Answer any ONE of the following (1x10=10)**

- 1 Nomenclatural type with different kind of type materials used in plant nomenclature.
- 2 Important characteristics, merits and demerits of Bentham and Hooker Classification.

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