

Reg. No.:	
Nama :	AMPANIN JULIA

## Second Semester M.Sc. Degree Examination, October 2018 Branch: Botany BO 221: TAXONOMY OF ANGIOSPERMS, ECONOMIC BOTANY, ETHNOBOTANY AND EVOLUTION (2013 Admission Onwards)

Time: 3 Hours

Max. Marks: 75

- I. Write note on the following.
  - 1) Index Kewensis.
  - 2) National Botanical Garden.
  - 3) Nomen novum.
  - 4) Bracketed taxonomic key.
  - 5) Syntype.
  - 6) Hortus sicuss.
  - 7) Index Herbariorum.
  - 8) Contributions of Janaki Ammal.
  - 9) Sympatric speciation,
  - 10) Write the centre of origin and binomial of
    - a) Maize
    - b) Cinchona
    - c) Opium
    - d) Cocoa

 $(10\times1=10 \text{ Marks})$ 

- II. Answer the following questions in not more than 50 words.
  - 11) a) Explain the concepts of monophyly, polyphyly and paraphyly.

    OR
    - b) What is Biosystematics. Explain two examples highlighting the significance of it.



12) a) Discuss the salient features of APG classification.

OF

- b) Write a note on monographs and revisions.
- 13) a) Write a short note on the salient floral features of Araceae.

OR

- b) Comment on the salient features of Commelinaceae.
- 14) a) What are the major rules of naming hybrids?

OF

- b) Briefly discuss the history and development of the Botanical code.
- 15) a) Comment on the progress in concepts of evolution.

OF

b) Comment on concepts of evolution above species level.

(5×2=10 Marks)

- III. Answer the following questions in **not** more than **150** words.
  - 16) a) Explain Lectopification citing one example.

OR

- b) Discuss the trend of floral evolution in Orchidaceae.
- 17) a) Write a note on the salient features of Taktajan's classification scheme.

OR

- b) Write on the major changes made in the code in the recent period. Discuss their impacts.
- 18) a) Discuss the salient features and systematic position of Asteraceae.

OR

- b) Discuss the concepts of Family.
- 19) a) Discuss the significance of Chemotaxonomy, citing two examples.

OR

b) Discus the salient features of Ranunculaceae in the light of modern phylogenetic concepts.



20) a) Make a comparative account of salient features of Poaceae and Cyperaceae.

-3-

OR

- b) Discuss the trends in the systematic position of Euphorbiaceae.
- 21) a) Write the binomial, family, part used, major products and uses of the following :
  - 1) Pepper
  - 2) Rose wood
  - 3) Cannabis.
  - 4) Sword bean.
  - 5) Brinjal.

OR

- b) Write the binomial, family, part used, major products and uses of the following:
  - 1) Vinca
  - 2) Teak wood
  - 3) Cardamom
  - 4) Cashew nut
  - 5) Citrus.
- 22) a) Discuss the history and development of ethnobotanical documentation in India.

OF

- b) Comment on ethnobotanical aspects of five plants used by ethnic groups of Kerala. (7×5=35 Marks)
- IV. Answer the following questions in not more than 250 words.
  - 23) a) Make a comparative account of Asclepiadaceae and Apocynaceae. Discuss their systematic position of in the light of APG system.

OR

- b) Discuss the diversity of floral features and phylogenetic inter relations of Leguminosae.
- 24) a) Discuss the major concepts of Molecular evolution.

OF

b) Discuss the progress in the concepts of speciation.

 $(2\times10=20 \text{ Marks})$