

TM153055B

Reg. No:.....

Name:.....

M. Sc. DEGREE (C.S.S.) EXAMINATION, APRIL 2017
(Supplementary – 2015 Admission
SEMESTER III - (BOTANY)
BO3C11TM - TAXONOMY OF ANGIOSPERMS

Time: Three Hours

Maximum Marks: 75

PART A

I. Answer any five questions. Each question carries 3 marks

1. Write a brief note on phylogenetic system of classification with a special emphasis on APG
2. Explain Monophyly, paraphyly and polyphyly?
3. What are the functions of BSI?
4. Write briefly on the applications of phytochemistry and molecular characters in taxonomy
5. What is typification and explain its significance in taxonomy?
6. Explain the typical floral diagram of the family Asclepiadaceae
7. Write the respective families of the following plants
a. *Garcinia xanthochymus*, b. *Sorghum vulgare*, c. *Argyria hirsuta*, d. *Morinda umbellata*
e. *Abutilon indica*, f. *Vanilla wightiana*

(5x3=15)

PART B

II. Answer any six questions. Each question carries 5 marks

8. Explain species concept and interspecific categories
9. What are the different types of taxonomic keys? Explain the use of different taxonomic keys in plant classification
10. Write a brief account of any ethno-botanical study from Kerala and explain its significance
11. What are the key features that should be taken care of while publishing a new valid plant species?
12. Describe the procedure of herbarium preparation. Give any two significance of herbarium in plant taxonomy
13. With the help of suitable diagrams explain the salient features of the family Asclepiadaceae
14. Explain the typical floral characters of the family Sapindaceae. Name any two medicinally important species of the family Sapindaceae
15. With the help of floral diagrams and floral formulae explain the floral features of convolvulaceae and solanaceae
16. What are the relevant sources of taxonomic characters? Discuss the relevance of taxonomic characters of from different sources in present day taxonomy

(6x5=30)

PART C

III. Answer any two questions. Each question carries 15 marks

17. Write an essay on the diversity of habit and floral features of Euphorbiaceae family. Explain the economic importance of the family Euphorbiaceae
18. Write a comparative account on Engler & Prantl and Bessy system of plant classifications. Evaluate these two systems of classifications with critical comments.
19. Write an essay on major phylogenetic concepts and terminologies that are in use in modern taxonomy.
20. Discuss different steps in plant taxonomy study. Explain how you would utilise herbarium in plant taxonomy studies?

(2x15=30)