

Acc No.

Q.T. 60

Sec. 2017-18

MCC/18/M.Sc./Sem.II/BOT/1

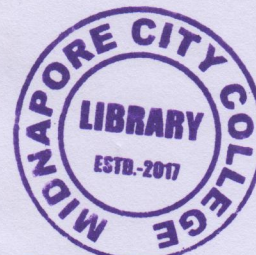
**Second Semester Examination-2018**

**M.Sc. BOTANY**

Paper Code: BOT-201

Angiosperm Taxonomy & Biosystematics

Full Marks : 40



Time: 2 Hours

**1. Answer any five questions from the following: 2×5=10**

- a) Define "Systematics" & "Taxonomy". 2
- b) What is "Plesiomorphy"? Give an example. 2
- c) Define "Phylocode" with example. 2
- d) What is "mes-angiosperm"? 2
- e) What is the full form of "ANITA"? 2
- f) What is "Cryptic species"? Give an example. 2
- g) What do you mean by  $NA = n \sin \theta$  2
- h) Name two monogeneric family. 2

**2. Answer any two questions from the following: 5×2=10**

- a) Homoplasy and Homology 5
- b) Monophyly and Polyphyly 5
- c) Monographs and Revision 5
- d) Systematics and Biosystematics 5

**3. Answer any two questions from the following: 10×2=20**

- a) What is integrated system of classification? Who first proposed this system? Mention any integrated system with merits and demerits. 2+1+4+2+1=10
- b) Define numerical taxonomy. Who first proposed this taxonomy? Mention the principles. Write the differences between phenetic and cladistic. What is the full form of OTU & UC? 2+1+4+2+1=10
- c) Write the important character of Asteridae & Caryophyllidae. 3+3+2+2=10  
Why Asteraceae is the highly evolved among Magnoliopsida?  
Write draw the putative relationship among the order & families of Asteridae.
- d) Define Chemotaxonomy. What are macro and micro molecules? 2+3+5=10  
Mention the importance of protein and isozymes in solving the taxonomic problems?

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