563/Bot

UG/4th Sem./BOT-H-CC-T-08/20

U.G. 4th Semester Examination - 2020

BOTANY

[HONOURS]

Course Code: BOT-H-CC-T-08

Full Marks : 40 Time : $2\frac{1}{2}$ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **five** of the following questions:

 $2 \times 5 = 10$

- a) What is artificial system of classification?
- b) What is omega taxonomy?
- Name an important herbarium of your state.
 Name the Botanical Garden attached to that.
- d) Define holotype.
- e) What contribution of Bauhins is still used in plant taxonomy?
- f) Define monograph.
- g) Write scientific names of two economically important plants of Poaceae.
- h) Write scientific names of two medicinally important plants of Solanaceae.

- 2. Answer any **two** of the following questions: $5 \times 2 = 10$
 - a) Describe briefly how palynology has been used in taxonomy.
 - b) What are the functions of an herbarium?
 - Write briefly about the biological species concept.
 - d) Who is known as 'Father of Botany'? Write his major contributions.
- 3. Answer any **two** of the following questions:

 $10 \times 2 = 20$

- a) Why do you think Cronquist's system of classification was phylogenetic? Describe briefly the classification of Benthum and Hooker (up to series). 3+7=10
- b) Write down different theories of origin of Angiosperms. 10
- c) What are the differences between phenogram and cladogram? Write briefly about the APG III system of classification. 4+6=10
- d) Write down the diagnostic features of Orchidaceae and Asteraceae. Mention one plant of each family. 4+4+1+1=10

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