

Activity Code:- 1903019021

B.Sc 6th SEMESTER (Honours) EXAMINATION, October-2020

Subject: BOTANY

Course ID :- 61317

Course Code :- SHBOT/603/DSE-4

Course Title :- Research Methodology

Full Marks: 15

Time: 1h

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer any five of the following questions: (1X5=5)

- a) Write down molarity and normality of commercial sulphuric acid.
- b) What are hazardous elements? Give example.
- c) How can you make 0.1M 10ml solution from 1M stock solution?
- d) What do you mean by whole mount and peel mount?
- e) Name two model organisms used in medical biology?
- f) What do you mean by pretreatment?
- g) How can you dehydrate thin section of tissue?
- h) Why HCl is used in acetic orcein squash technique to observe mitotic stages?
- i) Point out one difference between dye and stain.
- j) Why tissue fixation is done ?

UNIT II

2. Answer any two of the following questions: (2X5=10)

- a) Briefly discuss about the research methods and methodology . =5
- b) What is staining? Describe the different types of staining processes. = 5
- c) Describe the process of acetic carmine- squash technique to study the meiotic stages from flower bud. =5
- d) Why *Arabidopsis thaliana* and *Drosophila* are suitable organisms for research? =5
- e) Write short notes: Any two 2.5x2=5

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