

B. Sc Part III Examination – 2020 (Internal Assessment)

(General)

(Note: Answer script should include the below mentioned details)

Subject:

Name of the student:

Roll No:

Registration no. with Year:

Paper:

Full marks:

Submission deadline: 19th July, 2020 by 5.00 PM.

Email: rsmbotany@gmail.com or WhatsApp

Paper VII (Cytogenetics, Plant Breeding, Biostatistics and Biotechnology)

(Theory)

Answer any one question each from group A and group B. (FM-20)

Group-A (Cytogenetics and Plant Breeding)

Q1. (5+5)

- i. Write a short note on the structure of chloroplast.
- ii. Describe Mendel's experiment on generation of dihybrid cross.

Q2. (2+6+2)

- i. What is plant breeding?
- ii. How many types of artificial selection? Write the types of artificial selection.
- iii. Write the significance of artificial selection.

Group-B (Biostatistics and Biotechnology)

Q1. (5+5)

- i. What is Chi-square test? Write the formula for Chi-square test.
 - ii. Define median? Describe the method of calculating median.
- Q2.
- i. What do you mean by tissue culture? Discuss the applications of tissue culture.
 - ii. What is micropropagation? Discuss the drawbacks of micropropagation.

Paper VIII (Cytogenetics, Plant Breeding, Bistatistics and Biotechnology)
(Practical)

Answer any one question each from group A and group B. (FM-20)

Group-A (Cytogenetics and Plant Breeding)

Q1. Define mitosis. Describe the different divisional stages with proper labelled diagram. (2+8)

Q2. Define meiosis. Describe the different divisional stages of Prophase of Meiosis I division. (2+8)

Group-B (Bistatistics and Biotechnology)

Q1. (6+4)

- i. Define mean, median and mode.
- ii. Calculate the mean value from the table given below

No. Of flowers/plant	4	5	6	7	8	9
No. Of plants	3	5	6	9	5	4

Q2. (4+6)

- i. What is standard deviation and standard error?

- ii. Calculate the standard deviation and standard error from the table given below

No. Of flowers/plant	15-17	18-20	21-23	24-26	27-29
No. Of plants	5	6	8	7	4