

DR. KANAILAL BHATTACHARYYA COLLEGE
PRACTICAL EXAMINATION - 2020
SEMESTER - V
BOTANY(HONOURS)
PAPER – CC11 (CELL AND MOLECULAR BIOLOGY)
Date – 14 – 03 – 2021
Time – 11 A.M – 12:30P.M

Time – 1:30Hr

F.M – 30

Answer the following questions (any three)
3X10

- A. What is the basic principle of micrometry? What are the requirements of micrometry? What do you mean by calibration? Write down briefly about the calibration procedure and calibration formula.

2+2+6

- B. What is the principle of estimation of DNA by DPA method? Write down the major reagents and equipments for the estimation of DNA? Describe in brief about the DNA estimation procedure.

2+2+6

- C. What is the principle of nucleolus staining? Mention the major requirements for staining of nucleolus. Write down the procedure of nucleolus staining.

2+2+6

- D. What is hemacytometer? What are required for cell counting by hemacytometer? Briefly describe for the procedure of cell counting.

2+2+6

- E. How can you study the plant cell describe it by an example(principle,

requirements & procedure)

2+3+5

DR. KANAILAL BHATTACHARYYA COLLEGE

B.Sc. Honours Practical Examination (CBCS system) – 2020

Semester- V

Subject- Botany

Paper: CC- 12 (Biochemistry)

Time: 1 hr 30 min (2:00 P.M. – 3:30 P.M)

Date: 15.3.2021

Full marks- 30

1. Write the principle, requirement and procedure of estimation of Catalase activity. (3+3+4)
2. Write the different test for protein. (10)
3. Answer the following:-
 - a. Describe the detection process of S and Fe from ash sample. (5)
 - b. State the principle and procedure of Quantitative estimation of Glucose. (5)

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B.Sc. Honours Practical Examination (CBCS system) – 2020

Semester- V

Subject- Botany

Paper: DSE- A (Biostatistics)

Time: 1 hr 30 min (2:00 P.M. – 3:30 P.M.)

Date: 16.3.2021

Full marks- 30

1. You are given following seeds. Determine the expected segregation ratio and Chi-square value. Comment on the nature of segregation. (3+3+4)

(Red long- 27, Red short- 10, White long- 9, White short- 3)

2. Calculate mean, mode, median, standard deviation and standard error of the following data. (2+2+2+2+2)

(Size of 20 leaflets are- 1.6 cm, 1.5 cm, 1.6 cm, 2.3 cm, 2.1 cm, 1.9 cm, 2.0 cm, 1.8 cm, 1.4 cm, 2.1 cm, 1.9 cm, 1.6 cm, 1.9 cm, 1.8 cm, 1.9 cm, 1.9 cm, 2.1 cm, 2.0 cm, 2.3 cm, 2.3 cm)

3. Answer the following:-

- a. Write the definition and formula of mean, median, Chi-square test, probability. (2×4)
- b. What is 'F' value? (2)