M. Sc.-IV Sem.

14116

M. Sc. Examination, June 2016

BOTANY–XIII

Modern Phytotechniques & Biostatistics

(H-4001)

Time : Three Hours]   *[Maximum Marks : 50*

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 2 marks.   2×5=10

1. Write short note on Haematoxylin.   2

2. Differentiate between median and mode.   2

3. Which factors influence staining process ?   2

4. Paraffin is a preferable embedding medium of choice during microtomy, why ?   2

5. What are main applications of cell sorting ?   2

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries 5 marks.   5×2=10

6. What precautions are taken into consideration, while preservation and storage of plant material is done?   5

7. Comment upon the following :   5
   (a) ELISA
   (b) Immunoblotting.

8. Write short notes on the following :   5
   (a) χ^2-test and its significance
   (b) How we calculate Standard Deviation and its application ?

Section-C

(Long Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 10 marks.   10×3=30

14116

9. Explain the classification of data and its objectives. Discuss the different methods of classification.   10

10. Define centrifuge and centrifugal force. What is the basic principle of centrifugation ? Explain instrumentation of high speed centrifuge.   10

11. Define spectrophotometry. Explain in detail MS and its applications.   10

12. Write notes on the following :   10
    (a) Mean Deviation
    (b) Standard error
    (c) Mean and its merits and demerits.

13. Define TLC. Give in detail its methodology and applications.   10