

Exam.Code:0002
Sub. Code: 0160

2071
B.A./B.Sc. (General) Second Semester
Biochemistry
Paper - A: Biochemical Techniques

Time allowed: 3 Hours

Max. Marks: 45

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

- I. Give the answer of following question in very brief.
- a) Write unique feature of visible spectrophotometer.
 - b) What is the visible range of light?
 - c) Who is discovered the chromatography?
 - d) Write name of two chromatography methods.
 - e) What is the SDS PAGE?
 - f) Write function of cation exchangers.
 - g) Write one criteria of void volume.
 - h) Give two functions of acrylamide in electrophoresis.
 - i) Chemical agent used for protein denaturation. (9x1)

UNIT - I

- II. a) What is the UV-VIS spectrophotometry? Also, make a diagram about different parts of UV instrument. (5,4)
- b) Write the merit and demerits of UV-VIS spectrophotometry. (5,4)
- III. a) Write only the application of fluorescence microscopy. (4,5)
- b) Describe in brief the various uses of IR spectroscopy. (4,5)

UNIT - II

- IV. a) What do you mean by chromatography? Write the advantages of ion-exchange chromatography. (5,4)
- b) Write short notes on paper chromatography (TLC). (5,4)

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(2)

- V. a) Write about the sample detection system in HPLC.
b) Mentioned the basic principle and application of Gas Chromatography. (4,5)

UNIT - III

- VI. a) What are the application of ultracentrifuge.
b) Describe about the types of centrifuges. (5,4)
- VII. a) Differentiate between analytical and preparative centrifugation.
b) Mentioned the safety measures related to centrifuge instrument (5,4)

UNIT - IV

- VIII. a) Explain the principle of Electrophoresis. Write the difference between SDS-PAGE and Native PAGE.
b) Describe the gel preparation principle in the case of SDS-PAGE. (5,4)
- IX. a) Write a short notes on Isoelectric focusing gels .
b) What is the Immunoelctrophoresis? Also its applications. (4,5)

x-x-x