

Q.6 Discuss in details about Auto-Analyzer.

Q.7 Write a Note on following:-

- i) Sterilization
- ii) Microscope

No. of Printed Pages : 4

Roll No.

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4th Sem. / Medical Eltx.

**Subject : Medical Laboratory Instruments/
Analytical Instruments**

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note:Very Short Answer type questions. Attempt any
15 parts. (15x2=30)

- Q.1
- a) Sterilization.
 - b) Define pH.
 - c) Name two types of Defectors.
 - d) Define Spectroscopy.
 - e) FES.
 - f) Monochromator.
 - g) Retention time.
 - h) NMR.
 - i) Beer's Law.
 - j) TLC.
 - k) HPLC.

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- l) LPG.
- m) Transmittance.
- n) RCF.
- o) Gel Electrophoresis.
- p) Electrode.
- q) Centrifuge.
- r) Photomultiplier Tube.

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) Discuss about various types of light sources.
 - ii) Explain photo colorimeter with diagram.
 - iii) What are optical filters. Explain it.
 - iv) Explain monochromator with its classification.
 - v) What do you mean by Photodiode.
 - vi) Explain the significance of pH measurement in Blood.
 - vii) Write a short note on Acid-Base Balance.

(2) 123241/33241

- viii) Explain the microscopic method of blood cell counting.
- ix) Discuss the operation and principle of centrifuge.
- x) Write a note on Incubator.
- xi) Explain the importance of Autoclave in health care.
- xii) Explain the Automated optical method of Blood Cell counting.
- xiii) Explain Beer-Lambert Law.
- xiv) Mention the role of dialyzer in Auto-Analyzer.
- xv) Describe briefly about-Electrophoresis .

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Explain in detail about pH meter with Block diagram.
- Q.4 What is Chromatography. Explain various types.
- Q.5 Explain Flame Photometer with Block diagram.

(3) 123241/33241