

SECTION-D

No. of Printed Pages : 4
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Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain Auto Analyzer with diagram?

Q.24 Explain Flame Photometer with Diagram?

Q.25 Write note on following :

- a) Acid-Base Balance
- b) Autoclave

5th Sem / Medical Electronics

Subject : Medical Laboratory Instruments

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 The principal ion that is not involved with the phenomena of producing cell potentials is

- a) Sodium
- b) Potassium
- c) chlorine
- d) hydrogen

Q.2 What is the relatively static membrane potential of quiescent cells called?

- a) Half-cell potential
- b) action potential
- c) resting membrane potential
- d) cell potential

Q.3 The filter used to reject the 50Hz noise picked up from power lines or machinery is

- a) band reject filter b) band stop filter
- c) notch filter d) all reject filter

Q.4 What is the function of Autoclave

- a) To sterilize equipment
- b) To mix reagents
- c) To measure pH
- d) None

Q.5 The primary function of a centrifuge

- a) To separate blood components
- b) To mix reagents
- c) To measure pH
- d) None

Q.6 Silver-Silver Chloride electrodes are prepared by the process of _____

- a) centrifugation b) etching
- c) manually d) electrolysis

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 What do you mean by Monochromator.

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Q.8 Define Cuvette.

Q.9 Define pH.

Q.10 Beer's Law.

Q.11 Define Optical Density.

Q.12 Write names of two light sources used in analytical measurements.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Discuss various types of Light sources used in analytical instrumentation.

Q.14 Explain Electrophoresis.

Q.15 Explain Beer Lambert Law?

Q.16 Enlist the difference between Prism & Grating.

Q.17 Explain Microscope with neat diagram?

Q.18 Explain photo Multiplier Tube with diagram?

Q.19 Explain Photo-Diode.

Q.20 Explain Electric Centrifuge machine with diagram?

Q.21 Explain optical method of Blood cell counting.

Q.22 Explain Monochromators & Classify them.

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