

- Q.27 Describe working atomizer in flame photo meter in a short note.
- Q.28 Explain the operation of electrophoresis in brief.
- Q.29 Write a short note on photodiode.
- Q.30 Explain the working principle of chromatography in a short note.
- Q.31 Write five applications of microscope.
- Q.32 Write a short note on the principle of photo colorimeter.
- Q.33 Explain the process of sterilization in a short note.
- Q.34 Write a short note on the operation of electric centrifuge
- Q.35 Write name of five laboratory instruments.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Draw the block diagram of auto analyser and explain its various parts.
- Q.37 Explain the working principle of spectrophotometer and draw its block diagram.
- Q.38 Draw the block diagram of pH meter and explain the electrodes used in it.

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4th Sem / Med. Eltx

**Subject:- Medical Laboratory Instruments / Analy
Inst. (BM)**

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 A_____ involves the measurement of color.
a) Colorimeter b) Microscope
c) Incubator d) MRI
- Q.2 A_____ is an instrument used to measure absorbance at various wavelengths.
a) Xray b) USG
c) Spectrophotometer d) Microscope
- Q.3 A_____ involves measurement of the emitted light intensity when a metal is introduced into the flame.
a) Xray b) Flame Photometer
c) CT d) Ventilator
- Q.4 An electronic instrument used for measuring the pH (acidity or alkalinity) of a liquid is known as
a) Defibrillator b) MRI
c) Spectrophotometer d) pH meter

- Q.5 It is a medical laboratory instrument designed to measure different chemicals with minimal human assistance
- a) Gamma camera b) MRI
c) Auto analyzer d) USG
- Q.6 An instrument that can count the number of the cells and check the size of the cells in per unit of volume of blood
- a) Ventilator b) Blood cell Counter
c) Xray d) USG
- Q.7 This is an instrument which uses a complex system of lens to magnify the size of object
- a) Microscope b) CT
c) USG d) Xray
- Q.8 Which one of this is not a laboratory instrument
- a) Incubator b) Xray
c) Auto analyzers d) Flame photometer
- Q.9 Select the device which is used for the sterilization process
- a) Xray b) Autoclave
c) Ventilator d) USG
- Q.10 _____ is a process which separates charged particles in a fluid with the help of electrical charge.
- a) Electrophoresis b) CT
c) Ventilator d) MRI

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SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Write name of one method of blood cell counting.
- Q.12 Write the full form of RBC.
- Q.13 Write one part of auto analyzer.
- Q.14 Write one use of pH meter.
- Q.15 Define the process of sterilization.
- Q.16 Write one use of autoclave.
- Q.17 State Lambert's law
- Q.18 Write the pH of blood.
- Q.19 Write the definition of frequency.
- Q.20 Name one light source used in spectrophotometer.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Draw the block diagram of auto analyzer.
- Q.22 Explain the microscopic method of blood cell counting.
- Q.23 Write the significance of pH measurement w.r.t. blood in a short note.
- Q.24 Explain the working principle of oven.
- Q.25 Write a short note on monochromator.
- Q.26 Explain various light sources used in the photo calorimeter.

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