

- 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

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) X ray
- Q.8 Which one of this is not a laboratory instrument
a) Incubator b) X ray
c) Auto analyzers d) Flame photometer
- Q.9 Select the device which is used for the sterilization process
a) X ray 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

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.