

- Q.18 Write a short note on Microtome.
- Q.19 Write four application of flame photometer .
- Q.20 Write a short note on the accidents in laboratory.
- Q.21 Explain ELIZA reader in a short note.
- Q.22 Write a short note on the professional laws for medical laboratories.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Draw block diagram of electric centrifuge and explain its principle in detail.
- Q.24 Draw block diagram of fully automatic analyzer and explain its parts .
- Q.25 Draw block diagram of photo colorimeter and explain its components.

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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 What is the primary function of medical laboratory services in healthcare ?
- To provide surgical interventions
 - To conduct diagnostic testing on patient specimens
 - To administer medications
 - To perform physical examinations
- Q.2 What is the primary function of a photo colorimeter ?
- To measure the temperature of a solution
 - To measure the viscosity of liquids
 - To analyze the pH level of a solution
 - To determine the concentration of colored compounds in a solution

- Q.3 What is typically displayed on the screen of a digital pH meter ?
- Temperature of the solution
 - Voltage readings
 - pH value of the solution
 - Color intensity of the solution
- Q.4 What is the primary function of a fully automatic analyzer in a laboratory setting ?
- To manually conduct tests
 - To automate the process of analyzing samples for various parameters
 - To store patient data
 - To perform surgical procedures
- Q.5 What is the primary function of a microscope ?
- To magnify small objects for detailed observation
 - To measure temperature
 - To project images onto a screen
 - To analyze chemical composition
- Q.6 What is the primary function of blood cell counter ?
- To measure blood pressure
 - To analyze the biochemical composition of blood.
 - To count and differentiate various type of blood cells
 - To perform blood transfusions

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SECTION-B

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

- Q.7 Write one role of medical laboratory services in health care .
- Q.8 Write one precaution to avoid laboratory accidents .
- Q.9 Write name of one clinical laboratory instrument .
- Q.10 Write name of one component of fully automatic analyzer.
- Q.11 Write one system component of blood cell counter.
- Q.12 Expand PCR.

SECTION-C

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

- Q.13 Write a short note on the microscopic method of blood cell counting.
- Q.14 Write a short note on the buffer solution .
- Q.15 Draw block diagram of spectrophotometer .
- Q.16 Explain atomizer in a short note.
- Q.17 Write a short note on the acid base balance .

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