

TOPIC _____

DATE _____

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Govt. S. U. S. College, Sunam.

GAGANDEEP KAUR

CLASS B.Sc (M)

ROLL NO. 359 UNI. ROLL NO. 168239

SUBJECT (ZOOLOGY) visit to a lab

SUBMITTED TO. Rajni Mam

SUBMITTED BY.

GAGANDEEP KAUR

Clinical Lab



Clinical laboratory! →

Clinical laboratories are healthcare facilities providing a wide range of laboratory procedures which aid the physicians in carrying out the diagnosis, treatment, and Management of patients.

- A Medical laboratory or clinical lab is a laboratory where tests are carried out on clinical specimens to obtain information about the health of a patient to aid in diagnosis, treatment, and prevention of Disease.

Full Form! → LAB
Lactic Acid Bacteria

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Instrument list

Instrument

Uses

Glass slide Mycole
and cover slips

In Microscopy,
Serology, etc. as
the solid backing
on which test
samples are.

Petri dish

Used for preparation of
Culture Media &
the Culture of
organisms they are in

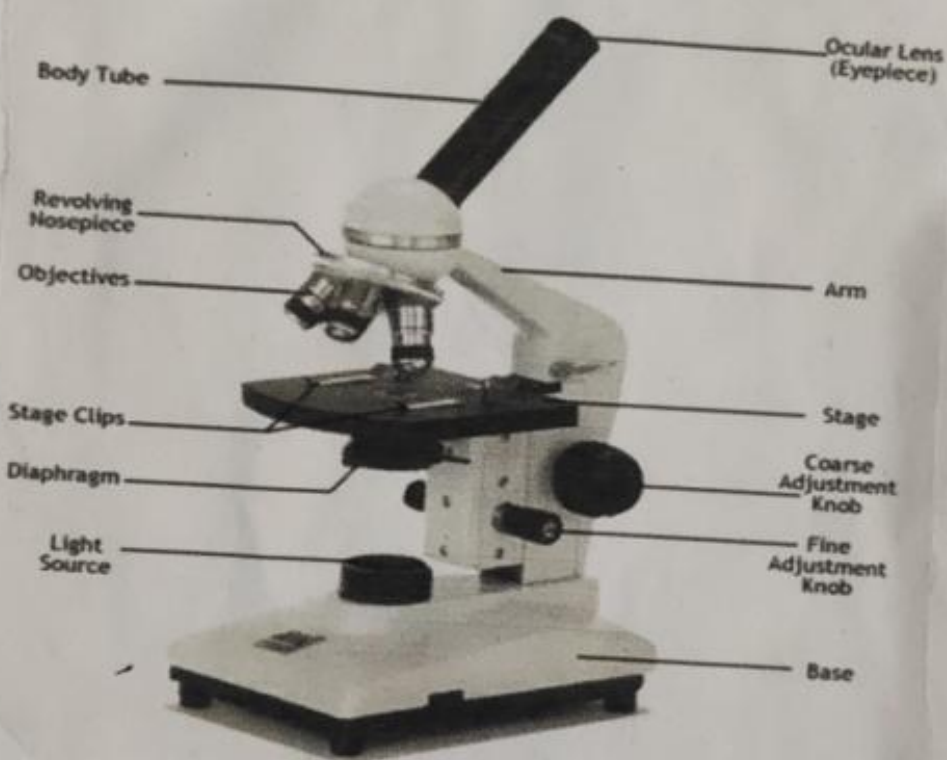
Glass beaker

reagent storage

Glass flask

Gastric acid, or
other fluid
titration.

MICROSCOPE



MICROSCOPE:→

A Microscope is very basic and Needful equipment of biology laboratory. A simple light Microscope (Compound Microscope) is the one, which is mostly used in schools and colleges and it uses natural light and a series of magnifying lenses to observe a tiny specimen.

Below is the schematic picture of a compound Microscope with details of its parts.

Reagents



Clusters and Subclusters of Laboratory tests

Cluster

Subcluster

Allergy

RAST

Total IgE

Anemia

Iron (Fe)

Fe & TIBC (Total Iron Binding Capacity)

Ferritin

Transferrin

Vitamin B12 & folic acid

Vitamin B12

Folic acid in the erythrocytes

Cardiovascular

Total cholesterol

Triglycerides

HDL - Cholesterol

LDL - Cholesterol

Blood cell count

Haemoglobin

RBC & hematocrit

Cluster
Diabetes

Subcluster

Lens

Glucose
Glycohaemoglobin
Sodium (Na)

Kidney

Bicarbonate
Potassium (K)
Chloride (Cl)
Urea

Liver

Creatinine
Uric acid
AST
ALT
AST & ALT

Protein

LDH
Total Protein

Thyroid

Electrophoresis
Thyroid Stimulating Hormone
free T₄
total T₄
free T₃
total T₃
Thyroglobin

Role of Medical lab technology

- Carry out routine and advanced lab tests using standard laboratory Methods.
- Apply problem-solving strategies to administrative technical and research problems.
- provide professional consultancy on Methods related to the establishment renovation, upgrading and reorganization of Medical lab of intermediate levels.

Without reliable laboratory services! →

- 1.] The source of a disease may not be identified correctly.
- 2.] Patients are less likely to receive the best possible care.
- 3.] Resistance to essential drugs may develop and continue.

Functions of Laboratory! →

Clinical chemistry, Haematology, Microbiology, blood bank, and support services (Phlebotomy & Specimen processing)

Role of Medical Laboratory Services! →

The Medical laboratory services play a pivotal role in the promotion, curative and preventive aspects of a nation's health delivery system.

- Treating patients and Monitoring their response to treatment.
- Monitoring the development and spread of infectious and dangerous pathogens
- Deciding effective Control Measures against Major prevalent disease.
- Deciding health priorities and allocating resources.