

STD 10-BIOLOGY-FIRST BELL-CLASS-34 Dated 07/12/2020

**Chapter – 5
Soldiers of Defense**

Treatment – Final Defense

- Which are the different methods of treatment that we depend on?
- Ayurveda
- Sidda
- Unani
- Naturopathy
- Modern medicine
- Homeopathy

Ayurveda:

- Treatment emerged from India
- It is inevitable to live in harmony with nature to maintain an efficient and healthy body.
- In Ayurveda, plant and animal products are used as medicines.

Homeopathy :

- Method of treatment proposed by the German doctor, Samuel Hahnemann.
- The basic principle of homeopathy is **LIKE CURES LIKE**.

Siddhaidya:

- Is the ancient mode of treatment originated from Dravidian culture.
- No synthetic chemicals are used in Siddha medicine.
- Unani medicine is based on some of the principles put forward by Hippocrates.
- In this diagnosis is made by examining pulse.

Naturopathy :

- According to this medicine nature is the greatest physician and food is the only medicine.

Modern Medicine:

- Hippocrates paved the way for modern medicine.
- He began a treatment system that discarded superstitious beliefs and emphasized only on pathogens, diagnosis and medicines.
- Modern medicine is far advanced in the field of treatment.
- Scientific advancements in diagnosis and invention of new medicines became crucial in the development of modern medicine.

Diagnostic equipments and their uses

Stethoscope:

- To recognise minute sounds within the body



Thermometer:

- To record body temperature and variation in the body temperature



Sphygmomanometer:

- To measure blood pressure



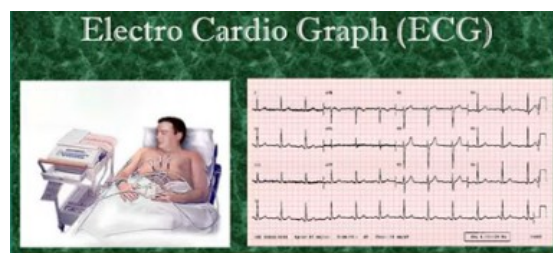
Electro Encephalo Gram (EEG):

- To record electric waves in the brain.



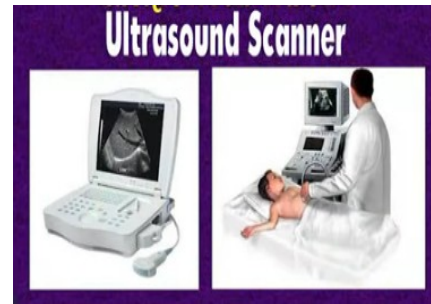
Electro Cardio Gram (ECG) :

- To record electric waves in the heart muscle.



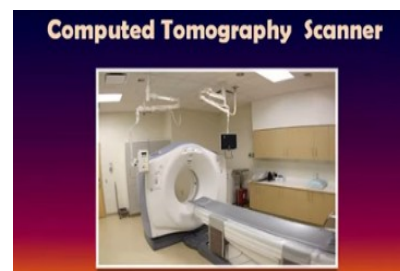
Ultra Sound Scanner:

- To understand the structure of internal organs using ultrasonic sound waves.



C.T. Scanner (Computed Tomography Scanner)

- To get three-dimensional visuals of internal organs with the help of computer, using X-rays.



MRI Scanner (Magnetic Resonance Imaging Scanner)

- To get three-dimensional visuals of internal organs.



Laboratory Tests are another tool for diagnosis of diseases

Report		
Complete Blood Count (CBC)		
Test details	Test result	Normal Value
Haemoglobin	12.2 gm /100 ml of blood	12-17 gm /100 ml of blood
Number of White Blood Cells	8,200/ml of blood	5000-10000 /ml of blood
Number of Red Blood Cells	47 lakhs /ml of blood	45 lakhs to 60 lakhs/ml of blood
Number of platelets	3.2 lakhs /ml of blood	2.5 lakhs to 3.5 lakhs/ml of blood

Blood analysis Used to identify

- Variation in the hormone level
- Cholesterol level
- Sugar level
- Arthritis
- Blood cancer

Various other laboratory tests that help in the diagnosis of diseases are :

- Urine analysis
- Stool analysis
- Sputum analysis

Advancements in technology have developed various areas of specialization in modern medicine.

Specializations and areas of treatment:

Specialization	Related Area
Cardiology	Treatment of heart
Ophthalmology	Treatment of eye
Neurology	Treatment of disorder of the nervous system
Oncology	Cancer treatment
E.N.T	Treatment of disorders of ear nose throat

EVALUATION:

- 1) Prepare a table consisting of specializations in medicines and related areas.
- 2) Prepare pamphlet by collecting more information related to various system of medicine.
- 3) Collect more information about most modern diagnostic tools available in the field of medicine.
- 4) Tabulate the name and use of the diagnostic equipments .
- 5) Collect more information about different types of tests conducted in the laboratory