



JAWAHARLAL NEHRU MEDICAL COLLEGE

**A Constituent Unit of KLE Academy of Higher
Education and Research**

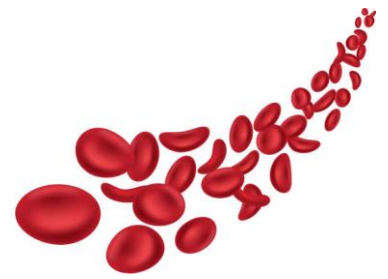
(Deemed –to-be-University)



DEPARTMENT OF PATHOLOGY



**BASIC COURSE IN
HEMATOLOGY**



INTRODUCTION:

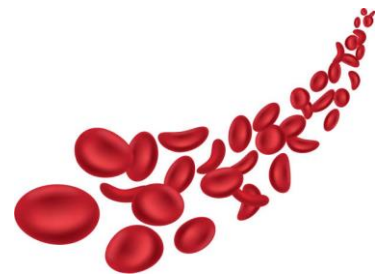
Hematology investigations have become indispensable tools in diagnosis and management of patients. The interpretation of the investigations requires in-depth understanding of pathophysiology of the disease, the criteria used in diagnosis and defining the various terms used in the reports. The clinicians need to understand the language of the laboratory physicians so that the information given is beneficial to patient care.

The junior residents working in the clinical departments play a very important role in the health care team and are often very important in conveying the reports of investigations to the clinicians. It is necessary that the residents are able to interpret the reports appropriately and convey the same to clinicians.

Pre-analytical factors play a very important role in quality control of the hematological investigations measures.

Junior residents are involved in facilitating sample collection and transfer to the laboratory, hence they need to understand various pre-analytical factors which need to be considered before analyzing the sample.

Hence the course intends to train the junior residents regarding the interpretation of the hematology reports and also about the quality control measures with main focus on pre-analytical factors in their early residency program.



Course eligibility:

Post graduate students admitted to clinical departments in the first 6 months of their residency.

Duration of Course:

2 ½ days with 16 hours of interactive teaching.

Course fees: Nil

Vision:

Empowering clinical postgraduates in handling Hematology laboratory investigation reports and quality control.

Mission:

1. To educate the clinical postgraduate students regarding the pre-analytical factors affecting hematological investigations.
2. To educate the clinical postgraduate regarding the basics of quality control in hematology laboratory.
3. To provide basic training to the clinical post graduates about the interpretation of hematology investigations.



GOAL:

To be competent in interpretation of hematology reports and understand the importance of pre-analytical factors in the Quality control of Hematology laboratory.

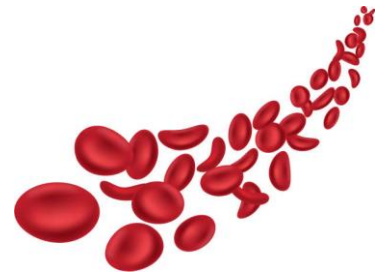
Objectives:

At the end of the course the postgraduate students should be able to-

1. Apply the knowledge of pre-analytical factors in quality control of hematology investigations.
2. Interpret the hematology laboratory reports in the context of a clinical situation appropriately.

Course Content:

<u>Topics</u>	<u>Duration</u>	<u>Mode of Conduct</u>
Pretest		Objective type Questions
1. Blood Collection, Types of vacutainers, Precautions, Anticoagulants	2 hrs	Lecture, observation
2. Importance of Clinical details & Fully filled requisition Forms	2 hrs	Lecture
3. Preanalytical variables affecting reporting & interpretation	2 hrs	Lecture
4. Interpretation of Common hematology tests & Bone marrow tests reports	2 hrs	Lecture, observation
5. Anaemias – Overview with clinical importance, Recent advances	2 hrs	Interactive lecture & Demonstration



6. Leukemias – Overview with clinical importance & recent advances	2 hrs	Interactive lecture & Demonstration
7. Blood Banking- Blood group, Crossmatching, Coomb's Test	2 hrs	Lecture, observation
8. Blood Banking – Blood components, Transfusion reactions	2 hrs	Lecture, observation

Post test & Feedback

Objective type Questions

Teaching learning methods

Interactive Lectures, Small group case-based discussion, Demonstration, Observation

Resources:

- Teaching faculty,
- Laboratory resources including analyzers,
- Teaching facility (Lecture halls, Laboratory space)

Assessment: Objective type questions

Criteria for certification: 100% attendance for all the sessions