JHARKHAND Rai University RANCHI

End Semester/Reappear (Semester II) Examination May, 2025

Programme:BMLT
Course:Hematology-I **Full Marks: 70**
Course Code: 42ABMT202 **Time: 3 Hrs.**
Enrolment no. _____

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
	Section I			
1	**Short Answer type questions.**			**4 x 5 = 20**
a	Write a short note on Neutrophil and Eosinophil	CO1	Apply	
	or			
	Define and sketch the diagram of Basophil and Monocyte.	CO1	Apply	
b	Explain the procedure of Hb estimation by colorimetric method	CO4	Understand	
	or			
	Illustrate the term Total Erythrocyte Count with their normal values.	CO4	Apply	
c	Interpret the normal values of ESR by Westergren and Wintrobe Method	CO5	Understand	
	or			
	Illustrate the Physical examination of Urine.	CO5	Apply	
d	Explain the term Total Leucocyte Count (TLC) with their normal values	CO3	Apply	
	or			
	Explain the anatomy of Platelets in the body	CO3	Understand	
	Section II			
	Long Answer type questions.			3 x 10 = 30
2	Design a neat labelled diagram of lymphocyte and differentiate between small lymphocyte and large lymphocyte on basis of function	CO1	Create	
	or			
	Classify the various types of Blood cells in detail.	CO1	Analyze	
3	Explain in brief description about “Blood Collection”.	CO2	Analyze	
	or			
	Design the term anticoagulants from Chemical to Biological anticoagulants.	CO2	Create	
4	Explain in brief description about the factors affect the TLC.	CO3	Analyze	
	or			
	Analyze normal Hemoglobin and its variants	CO3	Analyze	
	Section III			
	Application based questions			**1 x 20 = 20**
5	Plan the Phase and factors influencing ESR. Create the procedure of various methods of ESR estimation.	CO5	Create	
	or			
	Discuss about the introduction, collection, preservation and chemical examination of Urine.	CO5	Create	

At the end of the course candidate will able to
CO1Understand the process of hematopoiesis, different types of normal blood cells and give the identifying characteristics and role of each.

CO2 Discuss how the hemoglobin, hematocrit, erythrocyte to indices and ESR are used to diagnose.

CO3 Distinguish between normal and abnormal test results.

CO4 Distinguish between normal and abnormal test results for the diseases.

CO5 Discuss how the clinical science of hematology and the complete blood count (CBC) are used in the diagnosis and treatment of disease