

Branch Name:	B.Sc. Microbiology
Program Code:	SC102
Course Name:	Blood Banking and Haematology
Course Code:	2SC1020621
Pre-requisite Course:	Basics of Hematology

Course Objective:

1. To understand Blood and its Components
2. To understand Anticoagulants
3. To understand Blood collection and Transfusion
4. To understand Blood grouping

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
2	--	--	2	35	15	--	--	50

Subject Contents:

Unit	Content	Lectures	Weightage
1	• Blood and its Components • Functions of Blood • Plasma and serum • Red blood cells • White blood cells • Platelets • Anticoagulants	18	60%
2	Blood Transfusion & Transfusion Reactions • Collection, Storage and transfusion of blood • Blood grouping • Minor and Major cross matching • Erythroblastosisfetalis	12	40%

Text books:

1. Textbook of Medical Laboratory Technology by Praful B. Godkar

Reference Books:

1. Baker, F., Silverton, R.R. PallisterC..T. (1998) Baker and Silverton's Introduction to Medical Laboratory Technology. (7th edn.) Butterworths. Heinemann. Oxford. UK

List of Open Source Software/learning website:

1. <https://www.youtube.com/watch?v=dvEk5PxZ9Ko>

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Learn components of blood and its types and function	1 Remember 2 Understand
CLO2	Basically, understand the collection and tests before transfusion of blood.	2 Understand 3 Apply 4 Analyze
CLO3	Apply and explore complications because of incompatibility of blood group	3Apply
CLO4	Analyze various types blood cells and their clinical significance	4 Analyze
CLO5	Think critically about types of blood group and its analysis	5 Evaluate
CLO6	The Student would understands understand the difference between plasma and serum and apply various tests for checking compatibility of blood group in various cases and study the methods of blood storage	1 Remembering 2 Understanding 3 Applying 4 Analyze 5 Evaluate 6 Create

Mapping of CLOs with Pos& PSOs

Course Learning Outcomes	Program Outcomes (POs)									Program Specific Outcomes (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3
CLO1	M	M				M		M				
CLO2	H	H	M		M			L	M			
CLO3	M	M	H					M	M		M	
CLO4	M				M				H	M		
CLO5	M		H		M					H		
CLO6				H		M	H		H		H	M

L= Low M= Medium H= High