

VIDHYADEEP UNIVERSITY
B.Sc. HAEMATOLOGY
Teaching & Evaluation Scheme

Course name: B.Sc (Haematology)			Semester I						
Grade System:									
Subject			Teaching Scheme		Examination Scheme		Passing Scheme		Total Marks
Code	Paper No.	Paper Title	Hours/week	Credit	Theory		Passing Head		
			Theory	Theory	Internal	External	Internal	External	
004396102	Haem-101	Haematology	3	3	50	50	14	21	100
004396102	Haem-P101	Haematology Practical	2	1	20	30	8	12	50

Objective of Program	This paper includes the study and management of the red and white blood cells, platelets and the coagulation system. It includes the process that takes place in the lab to make sure that donated blood, or blood products, are safe before they are used in blood transfusions and other medical procedures.
Program specific Outcome	<p>Students will be able to appear and qualify for competitive exams like NET, GSET, and GATE. They will be skilled enough to join any research institute, Biopharma industry or even start ventures of their own.</p> <p>PSO1: Students will develop skill to observe, isolate, identify the cause of problems.</p> <p>PSO2: Students will acquire and demonstrate proficiency in good laboratory practices in haematology laboratory.</p> <p>PSO3: Students will develop practical skills of tools and techniques used to study haematology.</p> <p>PSO4: Students will develop oral and written communication skills, effective report preparation skills and interpretation skill from observed results.</p> <p>PSO5: Students will be graduates in haematology who shall understand the societal problems and play a vital role by providing disease related solutions.</p> <p>PSO6: Students will be able to build their careers in public and global health, environmental organizations and pharmaceuticals.</p>
Course Objectives:	<p>CO 1 To study the blood and blood components.</p> <p>CO 2 To investigate and diagnose the disorders of blood, hemostasis and immune function.</p> <p>CO 3 To learn the typing of blood for transfusion and testing for infectious diseases.</p> <p>CO 4 To investigate the harmful responses of the body to blood transfusion and learn the collection, separation, delivery and storage of blood components</p>

Mapping between CO and PSO		PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
	CO1	✓	✓	✓		✓	✓
	CO2	✓	✓	✓	✓	✓	✓
	CO3		✓		✓	✓	✓
	CO4	✓		✓	✓	✓	✓

Course content:

Unit No.	Unit Name	Content	Hours/Week
Unit-1	Introduction to the profession	1.1. Introduction to medical terminology 1.2. Disciplines in laboratory medicine and application to function of the body system 1.3. Anticoagulants	11
Unit-2	Introduction to hematology	2.1. Specimen collection and Laboratory preparation in Hematology 2.2. Routine Hematological tests 2.3. Special Hematological tests	12
Unit-3	Parasitic infections of blood	3.1. Introduction to Homeostasis and coagulation 3.2. Laboratory investigation of bleeding disorders 3.3. Principles of immunohematology and clinical significance of blood transfusion	11
Unit – 4	Collection and Processing of blood for transfusion	4.1. Routine laboratory Process in blood banking 4.2. Transfusion reactions and hemolytic disease of newborn 4.3. Hematological diseases	11
References	<ul style="list-style-type: none">➤ Medical laboratory technology procedure manual for Routine Diagnostic tests by Mukherjee, McGraw hill Education➤ Text book of medical laboratory technology by Godkar, Bhalani Publishing House➤ Clinical Microbiology made Ridiculously Simple, GLADWIN➤ Microbiology an introduction By Tortora, Benjamin Cummings➤ Medical Microbiology by Kayser➤ Instant Notes in Biochemistry, Hoper➤ Instant Notes in Microbiology➤ Oxford handbook of clinical and laboratory investigation by Provan➤ District laboratory practice in tropical country by Cheesbrough, Cambridge University Press		