

Bankura Christian College

Department of Physiology

2nd YEAR: SEMESTER-III (Academic Session: 2023-24)

Course Code: SH/PHY/301/C-5

Course ID: 32511

Credit- 04; Full Marks: 35

Classes: 09 (Lecture) + 07 (Class test/Revision)

Course Title: Circulating Body Fluids

Dr. Rajkumar Maiti

Course Learning Outcomes:

1. From this course students will gain the knowledge about blood and its components.
2. This course will enrich the learner about the morphology, classification and important function of formed elements.
3. Student will acquire the knowledge on hemostatic mechanism and the clinical aspects of blood coagulation.
4. The students will gain their knowledge on blood group, blood transfusion and its related health hazards.

Topics allotted

1. Introduction
2. Blood – Components and general function.
3. Plasma - Composition and function.
4. Plasma proteins - Origin, synthesis, classification and function.
5. Blood volume and measurement of blood volume.

MONTH/YEAR	WEEK	PORTIONS
August 2023	3	Introduction to circulating body fluids
	4	Properties and Composition of Blood: Composition and function plasma (Class-1)
	5	Formed Elements – Red blood corpuscles and white blood corpuscles (Class-2)
MONTH/YEAR	WEEK	PORTIONS
September 2023	1	Platelets and general function of blood
	2	Revision of blood and plasma
	3	Class test on blood and its plasma and formed elements
	2	Plasma protein with their normal range and origin (Class-1)
	3	Synthesis, variation and classification of plasma protein (Class-2)
	4	Different separation methods and function of plasma protein
MONTH/YEAR	WEEK	PORTIONS
October 2023	1	Revision of plasma protein
	2	Class test on plasma protein and its separation methods
MONTH/YEAR	WEEK	PORTIONS
November 2023	1	Blood volume and measurement of blood volume (Class-1)
	2	Measurement of blood volume by different methods (Class-2)
	3	Revision of Blood volume
	4	Class test: Circulating Body Fluids
MONTH/YEAR	WEEK	PORTIONS
December 2023	1	Revision on Circulating Body Fluids

Suggested Books

1. Hall J.E. (2016). Guyton & Hall Textbook of Medical Physiology. Second South Asia Edition.
2. Mahapatra, A.B.S.M. (2014). Essentials of Medical Physiology. Forth Edition. Current Books International.
3. Sembulingam K. and Sembulingam, P. (2016). Essentials of Medical Physiology 7th Edition. Jaypee.
4. Khurana I. (2015). Medical Physiology. 2nd Edition. Elsevier India.
5. Chatterjee C.C. (2016). Human Physiology Volume 1. Eleventh Edition. CBS. Publishers and Distributors Pvt. Ltd.
6. Basak A .K. (2016). Textbook of Physiology for BDS. New Central Book Agency (P) Ltd. 3rd Edition.

Rajkumar Maiti