

Bankura Christian College

Department of Physiology

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

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

Course ID: 32521

Credit- 04; Full Marks: 15

Classes: 06(Lecture)+08(Class test/Revision)

Course Title: Circulating Body Fluids Lab

Dr. Rajkumar Maiti

Course Learning Outcomes:

1. The course content will develop skill of our students on hematological techniques.
2. Student will gain the knowledge on total count of RBC and WBC.
3. They will increase their skill on blood film preparation and staining procedure.
4. Student will develop their knowledge on blood group detection and Rh typing.

Topics allotted

1. Hemoglobin estimation by Sahli's method.
2. Preparation of haemin crystal.
3. Preparation and staining of bone marrow and different stages of erythropoiesis.
4. Measurement of diameter of megakaryocyte.
5. Reticulocyte staining.
6. Blood group determination and Rh type

MONTH/YEAR	WEEK	PORTIONS
August 2023	3	Demonstration and estimation of Hemoglobin by Sahli's method (Class-1)
	4	Revision for estimation of Hemoglobin (Class -2)
	5	Preparation and staining of haemin crystal by 1% silver nitrate (Class -1)
MONTH/YEAR	WEEK	PORTIONS
September 2023	1	Revision for preparation and staining of haemin crystal by 1% silver nitrate (Class -2)
	2	Preparation and staining of bone marrow and different stages of erythropoiesis from goat rib by Lishman's stain (Class-1)
	3	Revision: Preparation and staining of bone marrow and different stages of erythropoiesis from goat rib by Lishman's stain (Class-2)
	4	Measurement of diameter of megakaryocyte by stage and ocular meter (Class-1)
MONTH/YEAR	WEEK	PORTIONS
October 2023	1	Revision: Measurement of diameter of megakaryocyte by stage and ocular meter (Class -2)
	2	Reticulocyte staining by Brilliant crystal blue (Class-1)
MONTH/YEAR	WEEK	PORTIONS
November 2023	1	Revision: Reticulocyte staining by Brilliant crystal blue (Class-2)
	2	Blood group determination and Rh typing by ABO kit method (Class-1)
	3	Revision: Blood group determination and Rh typing by ABO kit method (Class-2)
	4	Class test for practical on Circulating Body Fluids Lab
MONTH/YEAR	WEEK	PORTIONS
December 2023	1	Discussion on Viva voce for practical Examination

- Suggested Books**
1. Pal, G.K. Pal, P. (2013). Textbook of Practical Physiology. Third Edition. Universities. Shepherd. G.M. Neurobiology. Oxford University Press.
 2. Godkar P.B. and Godkar P.D. (2018). Textbook of Medical Laboratory Technology Clinical Laboratory Science and Molecular Diagnosis, 3rd Edition. Bhalani Publishing House.
 3. Note Books on Histology. Published by The Physiological Society of India. Kolkata
 4. Ghai, C.L. A Text Book of Practical Physiology. 8th Edition. Jaypee.
 5. Mukherjee, K.L. (2004). Medical Laboratory Technology. Vol. I, Vol. II and Vol. III. Tata McGraw-Hill.

Rajkumar Maiti