

Paper- 4A (Theory)

HP-104C

Total Mark = 50 (IA = 20 + ESE = 30) Credit = 02

Unit-I (Physiology of Blood and body fluids-I)

1. Bone marrow: Formed elements of blood–origin, formation, functions and fate.
2. Plasma proteins: Origin and functions.
3. Erythropoiesis-factors effecting and leucopoiesis.
4. Haemoglobin-Structure, types. Anaemia.

Unit-II (Physiology of Blood and body fluids-II)

1. Blood volume-factors effecting.
2. Haemostasis-Factors, mechanism, anticoagulants, procoagulants. Disorders of haemostasis -Haemophilia.
3. Blood group-ABO, Rh system and other minor blood group systems. Blood transfusion and its hazards.
4. Lymph and tissue fluids-Formation, circulation, functions and fate.
5. Lymphaticorgans-
Histologicalstructuresandfunctionsoflymphglandandspleen.Spleno
megalycauses andeffects.

Paper-4B (Practical)

HP-104C

Total Mark = 50 (IA = 20 + ESE = 30) Credit = 02

Sl. No.	Practical	Marks
1.		
2.		
3		
4.	Laboratory Note book	
5.	<i>Viva voce</i>	
TOTAL		40

CONTENTS:

1. Haematological experiments: Preparation and staining of blood film with Leishman's stain. Identification of blood cells. Total count of W.B.C and R.B.C. Differential count of W.B.C. Haemoglobin estimation by Sahli's hemoglobinometer. Preparation of haemin crystals.
2. Cardiovascular Physiology Experiments: Determination of Blood pressure in different body posture. Determination of pulse rate.
3. Interpretation of Kymographic recording of the movements of perfused heart to load and the effect of Excess Calcium, acetylcholine and adrenaline on the contraction of heart.
4. Respiratory Human Experiments: Pneumographic recording / demonstration of effects of hyperventilation, breath-holding and talking. Interpretation of lung function tests using Spirometry (Digital) and analysis of the results.
5. Determination of Peak Expiratory Flow Rate
6. **Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
7. **Viva voce:** Questions based on theory and practical syllabus of 3rd semester.