## HUMAN ANATOMY AND PHYSIOLOGY (Practical)

Practical physiology is complimentary to the theoretical discussions in physiology. Practicals allow the verification of physiological processes discussed in theory classes through experiments on living tissue, intact animals or normal human beings. This is helpful for developing an insight on the subject.

- 1. Introduction to hemocytometry.
- 2. Enumeration of white blood cell (WBC) count
- 3. Enumeration of total red blood corpuscles (RBC) count
- 4. Determination of bleeding time
- 5. Determination of clotting time
- 6. Estimation of hemoglobin content
- 7. Determination of blood group.
- 8. Determination of erythrocyte sedimentation rate (ESR).
- 9. Determination of heart rate and pulse rate.
- 10. Recording of blood pressure.
- 11. Determination of tidal volume and vital capacity.
- 12. Study of digestive, respiratory, cardiovascular systems, urinary and reproductive systems with the help of models, charts and specimens.
- 13. Recording of basal mass index .
- 14. Study of family planning devices and pregnancy diagnosis test.
- 15. Demonstration of total blood count by cell analyser
- 16. Permanent slides of vital organs and gonads.

## **Recommended Books (Latest Editions)**

1. Essentials of Medical Physiology by K. Sembulingam and P. Sembulingam. Jaypee brothers medical publishers, New Delhi.

2. Anatomy and Physiology in Health and Illness by Kathleen J.W. Wilson, Churchill Livingstone, New York

3. Physiological basis of Medical Practice-Best and Tailor. Williams & Wilkins Co,Riverview,MI USA

4. Text book of Medical Physiology- Arthur C,Guyton andJohn.E. Hall. Miamisburg, OH, U.S.A.

5. Principles of Anatomy and Physiology by Tortora Grabowski. Palmetto, GA, U.S.A.

6. Textbook of Human Histology by Inderbir Singh, Jaypee brothers medical publishers, New Delhi.

7. Textbook of Practical Physiology by C.L. Ghai, Jaypee brothers medical publishers, New Delhi.

8. Practical workbook of Human Physiology by K. Srinageswari and Rajeev Sharma, Jaypee brother's medical publishers, New Delhi.

## **Reference Books:**

1. Physiological basis of Medical Practice-Best and Tailor. Williams & Wilkins Co, Riverview, MI USA

2. Text book of Medical Physiology- Arthur C, Guyton and John. E. Hall. Miamisburg, OH, U.S.A.

3. Human Physiology (vol 1 and 2) by Dr. C.C. Chatterrje ,Academic Publishers Kolkata