## LIST OF PRACTICAL SKILLS IN PHYSIOLOGY

### PHYSIOLOGY OF EXCITING STRUCTURES.

1. To be able to determine the absolute strength of the muscles of the hand.

2. To be able to determine the working capacity of the muscles of the hand.

3. To be able to recognize the indicator of the decrease in the working capacity of the muscles of the hand.

4. To be able to determine the type of muscle contraction.

### PHYSIOLOGY OF THE CNS.

5. Be able to determine the reflex time.

6. To be able to determine the type of response of a neuron upon its stimulation

7. To be able to reproduce clinically important reflexes.

8. To be able to determine the leading part of the body and the dominant hemisphere.

9. Be able to determine the vegetative tone of the patient.

10. To be able to determine the type of vegetative reactivity.

11. Be able to determine the type of intersystem relations at rest and during physical exertion.

12. To be able to determine the sensitivity of different parts of the body.

### BLOOD PHYSIOLOGY

13. To describe the general blood analysis.

14. Be able to investigate the rate of sedimentation of erythrocytes (ESR), evaluate the obtained value

and identify factors that do not affect it.

15. To be able to examine the hemoglobin content in the blood according to Sali's method and evaluate the obtained result

value

16. Be able to examine the number of erythrocytes in the blood and estimate the obtained value.

17. Be able to calculate the color index (CP) and evaluate the obtained value.

18. Be able to calculate the oxygen capacity of the blood (BEC).

19. To be able to investigate the blood group in the ABO and Rh system using standard serums.

20. To be able to study the blood group in the ABO system with the help of tsoliclons.

## PHYSIOLOGY OF THE CARDIOVASCULAR SYSTEM

21. Be able to determine the value of blood pressure, calculate pulse and average

blood pressure and estimate their value.

22. Be able to determine the type of reaction of the cardiovascular system to physical exertion.

23. To be able to investigate the properties of an apical impulse.

24. To be able to investigate the properties of heart sounds by auscultation.

25. To be able to calculate the minute volume of the heart.

26. Be able to calculate systolic (beat), end diastolic (KDO) and end

systolic volumes (CSO).

27. Be able to calculate the duration of the cardiac cycle and the frequency of heart contractions from the ECG and

estimate the obtained values.

28. Be able to determine and calculate the duration of the electrical systole of the heart from the ECG

systolic index and evaluate the obtained values.

29. Be able to determine the direction of the electrical axis of the heart of the ECG and evaluate the obtained result.

30. Be able to determine the characteristics of the teeth of the ventricular complex and segments of the

standard ECG leads and evaluate the obtained values.

31. Be able to determine the duration of the main ECG intervals and evaluate the obtained values.

32. Be able to assess the regularity of heart contractions according to the ECG.

33. To be able to estimate the conduction of the myocardium according to the ECG.

34. Be able to determine the source of excitation in the heart according to the ECG.

35. Be able to determine the direction of movement of liquid in a capillary.

**PHYSIOLOGY OF BREATHING**

36. Be able to determine by LNG a) Breathing volume; b) Inspiratory reserve volume; c) Reserve

exhalation volume; d) Vital capacity of the lungs; e) Breathing rate.

37. To be able to calculate according to LNG: a) Minute volume of breathing; b) Alveolar ventilation.

38. Be able to calculate the coefficient of pulmonary ventilation.

39. To be able to assess the state of elasticity of lung tissue.

40. Be able to assess the width of the small bronchi and the tone of the bronchial muscles.

**METABOLISM**

41. To be able to determine the value of the main exchange based on the data of indirect calorimetry.

42. To be able to determine the main metabolism in a person according to Harris-Benedict tables.

43. Be able to calculate the respiratory rate and determine which nutrients

prevail in the diet.

44. Know the basics of rational nutrition.

**PHYSIOLOGY OF EXCRETION.**

45. To describe the general analysis of urine.

46. Be able to determine the rate of filtration in the glomeruli and estimate the obtained value.

47. Be able to determine the amount of water reabsorption in the kidneys and estimate the obtained amount.

48. Be able to determine the value of maximum reabsorption of glucose in the kidneys and estimate

the obtained value.

49. Be able to determine the amount of secretion in the kidneys and estimate the obtained amount.