Date		Name		Group	•••••
------	--	------	--	-------	-------

Lab report from the practical lesson on biochemistry

Topic: Examination of urine

Task 1: Qualitative estimation of pathological components of urine

Protein in urine – principles of test-tube reaction and diagnostic strips:

Blood in urine – principles of test-tube reactions and diagnostic strips:

Sugar in urine – principles of test-tube reaction and diagnostic strips:

Ketone bodies – principles of test-tube reactions and diagnostic strips:

Leukocytes and nitrite in urine – principles of diagnostic strip tests:

Results:

1) Test tube reactions with known samples:

Sample	Observed result								
Test with sulfosalicylic acid									
Urine with protein									
Physiological urine									
"Benzidine" test									
Urine with blood									
Physiological urine									
Heitz-Boyer's test									
Urine with blood									
Physiological urine									
	Fehling's test								
Urine with glucose									
Physiological urine									
Lestradet's test									
Urine with ketone bodies									
Physiological urine									
Legal's test									
Urine with ketone bodies									
Physiological urine									

	Sample 1		Sample 2		Sample 3		Sample 4	
	Test tube reactions	Dg. strip	Test tube reactions	Dg. strip	Test tube reactions	Dg. strip	Test tube reactions	Dg. strip
рН	×		×		×		×	
Protein								
Hemoglobin		-						
Glucose								
Ketone bodies								
Leukocytes	×		×		×		×	
Nitrite	×		×		×		×	
Bilirubin	×		×		×		×	
Urobilinogen	×		×		×		×	

2) Examination of the unknown samples of urine with test tube reactions and the polyfunctional diagnostic strips:

Evaluation and conclusion:

Task 2: Demonstration of semiautomatic reflectance photometer for objective semi-quantitative analysis of urine with diagnostic strips

Principle:

Result:

Task 3: Measurement of the relative specific gravity of urine with urinometer

Principle:

Result:

Task 4: Examination of urinary sediment

Results:

Draw and/or describe the findings in the provided microphotographs of urinary sediment preparations.