

Date Name Group

Lab report form for the practical lesson on biochemistry

Topic: **Enzymes**

Task 1 Proof of enzyme specificity

Principle:

Results:

Fill in the results using symbols + (reaction positive), – (reaction negative), +/- (reaction inconclusive), 0 (reaction not performed).

In the last row indicate where the cleavage of the substrate occurred.

	1	2	3	4
Composition	Starch Amylase	Sucrose Amylase	Starch Sucrase	Sucrose Sucrase
Fehling test:				
Reaction with Lugol solution:				
Substrate cleavage:				

Evaluation and conclusion:

Task 2 Effect of pH on the enzyme activity

Principle:

Results:

Use symbols + for complete clarification, \pm for partial clarification and – for persistent turbidity.

Final pH	1.2	1.5	2.5	Control (No pepsin)
After 5 min.:				
After 10 min.:				

Evaluation and conclusion:

Task 3.1 Oxidation of glucose with the air oxygen

Principle:

Result/Observation:

Evaluation and conclusion:

Task 3.2 Dehydrogenation with xanthine oxidoreductase

Principle:

Results:

	1	2	3
Composition	Fresh milk	Boiled milk	Fresh milk KCN
Result (color of mixture)			

Evaluation and conclusion:

Task 3.3.1 Proof of peroxidase by benzidine reaction

Principle:

Results:

	1	2	3	4
Composition	Extract Tolidine Peroxide	Control (Boiled extract)	Control (No extract)	Control (No tolidine)
Result (color of mixture)				

Evaluation and conclusion:

Task 3.3.2 Pseudoperoxidase reaction

Principle:

Results:

Evaluation and conclusion:

Task 3.3.3 Proof of catalase

Principle:

Results:

	1	2	3
Composition	Blood Peroxide	Blood Peroxide KCN	Boiled blood Peroxide
Result (amount of foam)			

Evaluation and conclusion: