North South University
Dept. of Biochemistry & Microbiology
Course code: BIO103L

LAB REPORT 3 (Exp 5)

NAME: Joy kumar Ghosh

SECTION: 08

STUDENT ID: 2211424 6 42

DATE & TIME: 21.12.2023

NAME OF THE INSTRUCTOR: THn

SIGNATURE: Joyb

REPORT SUBMISSION DATE (Assigned by the Instructor): 21.12.2023

North South University

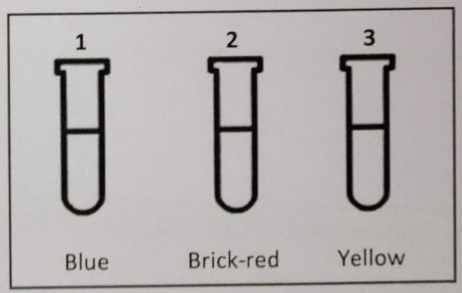
Dept. of Biochemistry & Microbiology

Course code: BIO103L

1. Based on your observation, record the results in the following table (2.5)

No.	Food product (Test sample)	Description of any change(s) before heating	Description of any change(s) after heating	Are there simple sugars present?
1.	Control (Distilled water)	mixing the benedicts reagent, we observed that solution colon is light blue	There is no change after heating for 10 minutes. It remains light blue colon	No
2.	Apple Juice	mixing the benedicts reagent, we observed that, the solution colon is blue.	It continuously change the colon from blue to green, yellow, orange and finally brick red	Yes

2. Observe the following diagram and detect which test tube has the highest concentrations of reducing sugar and which one has no reducing sugar. Explain your choice in one or two sentences. (2.5)



⇒ Brick-red (2) has the highest concentration

In hot ~~alkite~~ alkaline solution, reducing sugers reduce the blue copper (II) ions to brick red copper (I) oxide precipitate.

In test tube 01, its blue colon, which means there is no reducing sugar.

In test tube 02, its Brick-red colon, which means there is >2g%. reducing sugar.

In test tube 03, it yellow colon, which means there is 1-15 g%. reducing sugar.

Therefore, test tube 02 has the highest concentration.