Course Title: Medical Biochemistry II RAD 2nd, Sec A Lab Assignment : Biochemistry Student Name: AMJAD ULLAH Student ID: 15985

Note: Avoid copy paste material, as it may deduct your marks.

Q1. Explain the process of Uric Acid Formation.

Q2. Discuss all the protein complexes used in Electron transport chain.

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Q No1.Uric acid is a chemical created when the body breaks down substances called purines. Purines are normally produced in the body and are also found in some foods and drinks. Foods with high content of purines include liver, anchovies, mackerel, dried beans and peas, and beer.

Most uric acid dissolves in blood and travels to the kidneys. From there, it passes out in urine. If your body produces too much uric acid or does not remove enough of it, you can get sick. A high level of uric acid in the blood is called hyperuricemia.

This test checks to see how much uric acid you have in your blood. Another test can be used to check the level of uric acid in your urine.

Q No2.

Ans: There are four protein complexes (labeled complex I-IV) in the electron transport chain, which are involved in moving electrons from NADH and FADH2 to molecular oxygen.

Complex I establishes the hydrogen ion gradient by pumping four hydrogen ions across the membrane from the matrix into the intermembrane space.

Complex II receives FADH2, which bypasses complex I, and delivers electrons directly to the electron transport chain.

Ubiquinone (Q) accepts the electrons from both complex I and complex II and delivers them to complex III.

Complex III pumps protons through the membrane and passes its electrons to cytochrome c for transport to the fourth complex of proteins and enzymes.

Complex IV reduces oxygen; the reduced oxygen then picks up two hydrogen ions from the surrounding medium to make water.

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