Debrebrhan University

College of Natural and computational Science

Department of Biology

Use biologydepartmentdbu@gmail.com to submit the assignment via online for all courses. The file name should begin with your name and followed by course name.

Sept 2021

Biochemistry (Biol. 404) Questions

Individual Assignment-I (20%)

Instruction: The Following Questions (#**04**) are some of the Expected Learning
Competencies in Biochemistry. Give your answers in detail as much as possible according to the nature of each question. Mention the references or the reading material(s) you used.

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Q1. Define Biochemistry and describe the cellular basis of life (4pt).

Q2. List the important biological molecules of life, and explain its representative
structures, and the main functions in life processes (6pt)**.**

Q3. Describe enzyme structure, function, classes and the kinetics and regulation
of enzyme catalyzed reactions (5pt).

Q4. State your understandings on the composition, structure and functions of
biological membranes(5pt).

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Individual Assignment-II (20%)

Instruction: The Following Questions (#**04**) are some of the Expected Learning
Competencies in Biochemistry. Give your answers in detail as much as possible according to the nature of each question. Mention the references or the reading material(s) you used.

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Q5. Explain the details of signal transduction pathways (5Pt).

Q6. Mention the details of central metabolic pathways and energy transduction, and discuss how energy in the food is released and stored in high
energy molecules (5Pt).

Q7. Discuss the catabolism and anabolism of biological molecules (5pt).

Q8. Outline the basic concepts of Biosynthesis, and how the solar energy is harvested and used for carbon fixation (5pt).

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