

Unit 4 - Week 2

Course outline

How to access the portal

Pre-requisite Assignment

Week 1

Week 2

- Lesson 6, Biomolecules: Carbohydrates, Water
- Lesson 7, Biomolecules: Amino acids, Proteins
- Lesson 8, Biomolecules: Enzymes
- Lesson 9, Biomolecules: Nucleotides
- Lesson 10, Cell structure and function – Prokaryotes
- Lesson 11, Cell structure and function – Eukaryotes

Quiz : Assignment 2

Week 3

Week 4

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Assignment 2

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-08-21, 23:59 IST.

- 1) Which of the properties of water allow it to sustain the ocean life in low temperatures 1 point
- The ability of water to naturally exist in all three states of matter
 - High specific heat of water
 - Cohesion property of water
 - Ice floats on water because it is less dense than water

No, the answer is incorrect.
Score: 0

Accepted Answers:
Ice floats on water because it is less dense than water

- 2) The set of reactions by which glucose is converted to pyruvate is termed as 1 point
- Glycobiology
 - Glycomics
 - Glycolysis
 - All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Glycolysis

- 3) Match the correct building block with their polymers 1 point
- Amino Acids - Protein
 - Nucleotides - Nucleic acid
 - (CH_2O) - Carbohydrate
 - All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

- 4) If one unit of glucoamylase produces 1μ mol of glucose per minute at pH 8.0 ,then 1 point
- Its enzyme specificity is one
 - Its unit of activity is one
 - Its turnover number is one
 - All of the above

No, the answer is incorrect.
Score: 0

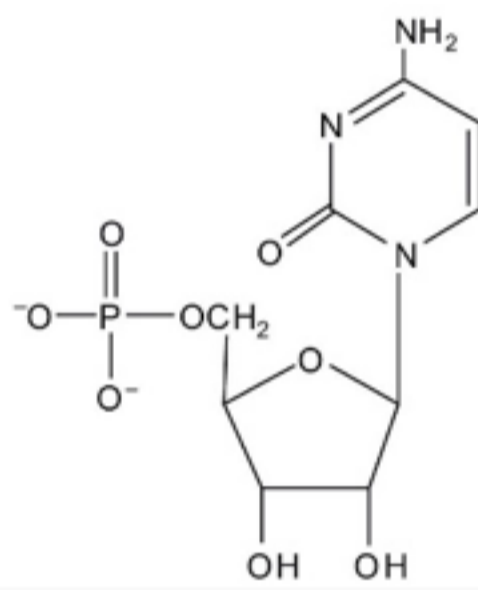
Accepted Answers:
Its unit of activity is one

- 5) Which of the following statements about amino acids are true 1 point
- Amino acid can be both polar and non -polar
 - The amino acid units are joined by the peptide bond
 - Twenty amino acids occur naturally
 - All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

- 6) For the following structure identify 1 point
- A. Base
B. Carbohydrate



- A- Pyrimidine , B -Ribose
- A- Pyrimidine , B -Deoxyribose
- A- Purine , B- Deoxyribose
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
A- Pyrimidine , B -Ribose

- 7) Select the best combination from the following options 1 point
- Pyrimidine - Uracil, Thymine and Guanine
 - Nucleoside - pentose sugar + Nitrogenous base+ phosphate group
 - Electron transport phosphorylation of ADP – enzyme mediated formation of ATP
 - Biomolecular composition of chromosomes – DNA -Protein complex

No, the answer is incorrect.
Score: 0

Accepted Answers:
Biomolecular composition of chromosomes – DNA -Protein complex

- 8) Choose the correct structural hierarchy of chromatin structure 1 point
- DNA → Nucleosomes → Chromosomes
 - DNA →Chromosomes → Nucleotide
 - Histone→Nucleotide→ DNA
 - None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
DNA → Nucleosomes → Chromosomes

- 9) The feature of eukaryotic cells are 1 point
- Membrane bound organelles
 - Single circular DNA
 - Lack of nucleus
 - All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Membrane bound organelles

- 10)Match the following 1 point
- | | |
|-----------------|-------------------------------------|
| A. Methanogens | (i) survive at high temperature |
| B. Halophiles | (ii) survive in acidic condition |
| C. Thermophiles | (iii) ability to produce methane |
| D. Acidophiles | (iv) survive at high salt condition |
- A-(ii), B- (iv), C- (i) and D- (iii)
 - A-(ii), B- (iv), C- (iii) and D- (ii)
 - A-(iii), B- (iv), C- (i) and D- (ii)
 - A-(ii), B- (iii), C- (i) and D- (iv)

No, the answer is incorrect.
Score: 0

Accepted Answers:
A-(iii), B- (iv), C- (i) and D- (ii)

- 11)The Endoplasmic Reticulum performs 1 point
- Light harvesting
 - Synthesis of membrane and secretory proteins
 - Chromosome alignment
 - All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Synthesis of membrane and secretory proteins

- 12)Actin is a monomer of 1 point
- Intermediate filaments
 - Microtubules
 - Microfilaments
 - All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Microfilaments