

Unit 4 - Week 2: Basics of Biomass Technology & Biomass Resources

Course outline

How to access the portal

Pre-requisite assignment

Week 1: Introduction to Bioenergy

Week 2: Basics of Biomass Technology & Biomass Resources

- Lecture 06 - Basic Biomass Technology (Resources and Production)
- Lecture 07 - Basics of Mechanism of Light Reaction
- Lecture 08 - Exploration of Photosynthesis Process
- Lecture 09 - In Photosynthesis Oxygen Comes from Water Molecule
- Lecture 10 - Hill Reaction

Quiz : Assignment 2

- Lecture Notes
- Solutions - Assignment 2
- Feedback for Week 2

Week 3: Biofuels I

Week 4: Biofuels II

Week 5: Biofuels III

Week 6: Bio Power I

Week 7: Bio Power II

Week 8: Bioenergy Distribution & End Use For a Sustainable Future

Assignment 2

The due date for submitting this assignment has passed.

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

As per our records you have not submitted this assignment.

1) 1. Balance the following reaction in acidic medium : $x\text{H}_2\text{O} + y\text{Fe}^{3+} \rightarrow z\text{O}_2 + w\text{Fe}^{+2}$

1 point

- x = 1, y = 4, z = 1, w = 4
- x = 2, y = 4, z = 1, w = 4
- x = 2, y = 1, z = 3, w = 1
- x = 5, y = 4, z = 7, w = 3

No, the answer is incorrect.
Score: 0

Accepted Answers:

x = 2, y = 4, z = 1, w = 4

2) Formation of biomass deep under the ocean in the absence of sunlight is termed as _____

1 point

- photosynthesis
- chemosynthesis
- algal synthesis
- bacterial synthesis

No, the answer is incorrect.
Score: 0

Accepted Answers:

chemosynthesis

3) Formation of biomass on earth, using sun as a source of energy, is termed as _____

1 point

- photosynthesis
- chemosynthesis
- algal synthesis
- bacterial synthesis

No, the answer is incorrect.
Score: 0

Accepted Answers:

photosynthesis

4) In photosynthesis, water undergoes _____ process to produce oxygen

1 point

- oxidation
- reduction
- neutralisation
- salting

No, the answer is incorrect.
Score: 0

Accepted Answers:

oxidation

5) PSI ejects an electron to generate reducing power in form of _____

1 point

- ATP
- NADPH
- Mn
- Chlorophyll

No, the answer is incorrect.
Score: 0

Accepted Answers:

NADPH

6) _____ reaction in photosynthesis is involved in biomass production

1 point

- Light
- Dark
- Mn cluster
- PSII

No, the answer is incorrect.
Score: 0

Accepted Answers:

Dark

7) The evolved oxygen in photosynthesis directly comes from

1 point

- Carbon di oxide
- Water
- Sun
- Carbohydrate

No, the answer is incorrect.
Score: 0

Accepted Answers:

Water

8) Oxygen evolution decreases beyond _____, this is called red drop

1 point

- 80 nm
- 280 nm
- 480 nm
- 680 nm

No, the answer is incorrect.
Score: 0

Accepted Answers:

680 nm

9) Which two organelles have their own DNA

1 point

- Vacuole and lysosomes
- Mitochondria and chloroplast
- Vacuole and chloroplast
- Lysosomes and chloroplast

No, the answer is incorrect.
Score: 0

Accepted Answers:

Mitochondria and chloroplast

10) The 'R' group in chlorophyll a is

1 point

- Alkyl
- Allyl
- Ketone
- Aldehyde

No, the answer is incorrect.
Score: 0

Accepted Answers:

Alkyl