

Unit 5 - Week 3: Biofuels I

Course outline

How to access the portal

Pre-requisite assignment

Week 1: Introduction to Bioenergy

Week 2: Basics of Biomass Technology & Biomass Resources

Week 3: Biofuels I

- Lecture 11 - Electron Transport Process in Light Reaction
- Lecture 12 - How Carbon dioxide converted in Carbohydrate
- Lecture 13 - From Carbon dioxide to two Molecules of 3 - Phospho Glycerate by RUBISCO
- Lecture 14 - RUBISCO enzyme
- Lecture 15 - Photo respiration and Calvin Cycle
- Lecture Notes
- Quiz : Assignment 3**
- Solutions - Assignment 3
- Feedback for Week 3

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 3

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) Water spitting is orchestrated by _____

1 point

- PSI
- Chlorophyll b
- Mn cluster
- Chlorophyll a

No, the answer is incorrect.
Score: 0

Accepted Answers:
Mn cluster

2) Role of water in photosynthesis was elucidated by _____

1 point

- Robert Hooke
- Theodore De Saussure
- Jean Senebier
- Joseph Priestley

No, the answer is incorrect.
Score: 0

Accepted Answers:
Theodore De Saussure

3) In _____ cycle, carbon dioxide is converted to 3-phosphoglycerate

1 point

- Calvin
- Light
- Kreb
- Urea

No, the answer is incorrect.
Score: 0

Accepted Answers:
Calvin

4) 'Chlorophyll a' shows an absorption at _____

1 point

- 500 nm
- 550 nm
- 600 nm
- 700 nm

No, the answer is incorrect.
Score: 0

Accepted Answers:
700 nm

5) RUBISCO is converted to a catalytically active form by addition of _____ to ϵ amino acid of a specific lysine residue to form a carbamate

1 point

- carbon dioxide
- oxygen
- carbohydrate
- water

No, the answer is incorrect.
Score: 0

Accepted Answers:
carbon dioxide

6) RUBISCO has a small subunit of _____

1 point

- 5 kDa
- 13 kDa
- 43 kDa
- 55 kDa

No, the answer is incorrect.
Score: 0

Accepted Answers:
13 kDa

7) The order of electron transfer from PS2 is

1 point

- Ph \rightarrow QA \rightarrow QB \rightarrow cytochrome complex
- QA \rightarrow Ph \rightarrow QB \rightarrow cytochrome complex
- QB \rightarrow QA \rightarrow Ph \rightarrow cytochrome complex
- cytochrome complex \rightarrow QA \rightarrow QB \rightarrow Ph

No, the answer is incorrect.
Score: 0

Accepted Answers:
Ph \rightarrow QA \rightarrow QB \rightarrow cytochrome complex

8) The model system for photosynthesis experiments was chlorella which is

1 point

- Virus
- Algae
- Reptile
- Fungus

No, the answer is incorrect.
Score: 0

Accepted Answers:
Algae

9) Before formation of 3-phosphoglycerate, a _____ is formed

1 point

- 1 degree carbocation
- 1 degree carbanion
- carbocation
- carbanion

No, the answer is incorrect.
Score: 0

Accepted Answers:
carbanion

10) In photoperspiration, _____ is formed

1 point

- Sericine
- Serine
- Fibroin
- Glutamine

No, the answer is incorrect.
Score: 0

Accepted Answers:
Serine