

Unit 5 - Week 03

Course outline

How does an NPTEL online course work?

Assignment 0

Week 01

Week 02

Week 03

- Lecture 11: Photosynthesis-I
- Lecture 12: Photosynthesis-II
- Lecture 13: Photosynthesis-III
- Lecture 14: Photosynthesis-IV
- Lecture 15: Photosynthesis-V
- Quiz : Assignment 3
- Feedback for Week 3
- Solutions - Assignment 3

Week 04

Text Transcripts

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Assignment 3

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

Due on 2020-03-18, 23:59 IST.

1) Role of water in photosynthesis was shown by

1 point

- Theodore Saussure
- Julius Robert Meyer
- Joseph Priestley
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Theodore Saussure

2) Jan Ingenhousz is known to prove the role of _____ in photosynthesis

1 point

- water
- oxygen
- light
- carbon dioxide

No, the answer is incorrect.
Score: 0

Accepted Answers:
light

3) Chlorophyll is different from heme group because

1 point

- it has a planar aromatic ring
- four substituted tetrapyrrole rings are part of the complex
- it absorbs in the visible spectrum
- it does not contain a transition metal at the core of the complex

No, the answer is incorrect.
Score: 0

Accepted Answers:
it does not contain a transition metal at the core of the complex

4) Which of these is not a property of both P680 and P700 reaction centres

1 point

- Both are photosystems
- Both are electron donors
- Both are activated in visible range
- Both are involved in oxygen evolution

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both are involved in oxygen evolution

5) The thylakoid vesicles occur in stacks that are called

1 point

- Lumen
- Grana
- Stroma
- Lamella

No, the answer is incorrect.
Score: 0

Accepted Answers:
Grana

6) The total energy captured by photosynthesis in green plants from the solar radiation is about _____ of energy per year.

1 point

- 2×10^{13} joules
- 2×10^{30} joules
- 2×10^{23} joules
- 2×10^{35} joules

No, the answer is incorrect.
Score: 0

Accepted Answers:
 2×10^{23} joules

7) Chloroplasts are one member in a family of related plant specific organelle known as _____.

1 point

- chromatids
- parasites
- plastics
- plastids

No, the answer is incorrect.
Score: 0

Accepted Answers:
plastids

8) Which of these is involved in water splitting during photosynthesis?

1 point

- Mo cluster
- Fe-S cluster
- Cytochrome- PQ cluster
- Mn cluster

No, the answer is incorrect.
Score: 0

Accepted Answers:
Mn cluster

9) The maximum red light absorption for PSI is at _____.

1 point

- 500 nm
- 460 nm
- 300 nm
- 700 nm

No, the answer is incorrect.
Score: 0

Accepted Answers:
700 nm

10) The 'R' group in chlorophyll a is _____ group

1 point

- alkyl
- benzyl
- phenyl
- aldehyde

No, the answer is incorrect.
Score: 0

Accepted Answers:
alkyl