

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE
B.Sc.(Hons.) Agriculture Summer 2018 - 19 Examination

Semester: 3
Subject Code: 20110201
Subject Name: Crop physiology

Date:22/04/2019
Time:10:30am to 01:00pm
Total Marks: 60

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.

A. Fill in the blanks. (Each of 1.00 marks)

(10)

1. The place of light reaction takes place at _____.
2. The place of Krebs Cycle takes place at _____
3. The process of making food in the plants is called_____
4. The process of breakdown of organic molecules and release of energy in the cells called_____
5. Site of glycolysis in the plant cell_____
6. The pigment responsible for light harvesting in the plant cell is_____
7. The yellowing of older leaves due to deficiency of _____
8. The cell to cell connection is called _____
9. The study of internal mechanism of plants is called_____
10. The membrane surrounding the vacuole is called_____

B. Multiple choice type questions. (Each of 1.00 mark)

(10)

1. Nucleus was discovered by
 - a) Camillo golgy
 - b) Watson
 - c) Benda
 - d)Robert brown
2. The term chromosome was given by
 - a) Watson
 - b) Waldeyer
 - c) Camillo golgy
 - d) Benda
3. The network like channels in the plant cells are called
 - a)golgy bodies
 - b)nucleus
 - c)endoplasmic reticulum
 - d) none
4. The green colour plastids present in the plant cells are called
 - a)chromoplasts
 - b)leucoplasts
 - c)xanthophylls
 - d)chloroplasts
5. The first stable compound in CAM plant is
 - a)PGA
 - b)RUBP
 - c)OAA
 - d)CA
6. The first stable compound in C4 plant is
 - a) PGA
 - b) OAA
 - c) RUBP
 - d) CA
7. The site of dark reaction of photosynthesis in the chloroplast is
 - a)stroma
 - b)grana
 - c) stromal lamellae
 - d)plasma membrane
8. The cellwall of animals are made up of
 - a)chitin
 - c)hemicelluloses

- b)cellulose
 9. Advanced organisms are called
 a) eukaryotes
 b)bacteriophages
 10. The cell wall of bacteria are made up of
 a) hemicelluloses
 b) muramic acid
 d)starch
 c)prokaryotes
 d)viruses
 c) chitin
 d) starch

Q.2 Do as Directed.

A. Define the following. (Any five)

(05)

1. Transpiration
2. Photosynthesis
3. Glycolysis
4. Stomata
5. Prokaryote cell
6. Vacuole
7. Krebs's cycle

B. Answer the following. (Any Five)

(05)

1. Eukaryote cell
2. Photophosphorylation
3. Osmosis
4. Endosmosis
5. Photolysis of water
6. Diffusion
7. Respiration

Q.3 Write short notes. (Any five)

(15)

1. Mention the parts of plant cell and explain the main function of mitochondria
2. Differentiate between C₃, C₄ & CAM plants?
3. Explain the opening and closing process of stomata
4. Mention the classes of plant growth regulators
5. Mention the function of gibberilic acid in the plants
6. Write down the structure of chloroplast and label it

Q.4 Attempt any Three/Long Questions/Example

(15)

1. Write down the Krebs cycle
2. Explain the steps involved in the glycolysis
3. Explain nitrogen deficiency, function and corrective measures in the plants
4. Write down the dark reaction of photosynthesis