

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE

B.Sc.(Hons.) Agriculture Summer 2017 - 18 Examination

Semester: 2

Date: 22/05/2018

Subject Code: 20110153

Time: 10:30 am to 01:00 pm

Subject Name: Fundamentals of Crop Physiology

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 basic unit of life _____
2. The place of light reaction in the chloroplast _____
3. The energy house of the cell _____
4. The full form of ATP _____
5. The only gaseous hormone is _____
6. The hormone produced in the plants during stress condition in the plants _____
7. The site of glycolysis in the plant cell _____
8. The semi-permeable membranes in the plants cells are _____ and _____
9. The type of ribosome in the prokaryote cell _____
10. The cell was discovered by _____

B. Multiple choice type questions. (Each of 1.00 mark)**(10)**

1. The main function of mitochondria is _____

a) respiration	c) reduction
b) photosynthesis	d) hormone synthesis
2. The enzyme present in the lysosome is ____

a) Hydroxylase	c) Nuclease
b) Acid phosphatase	d) DNA polymerase
3. The only 5 carbon compound in the kreb's cycle is

a) Succinate	c) Citrate
b) Malate	d) Alpha keto gluteric acid
4. The end product of light reactions are

a) ATP and NADPH ₂	c) Pyruvic acid
b) Glucose	d) Sucrose
5. The location of lenticels in the plants is

a) Stem	c) Root
b) Leaves	d) Flowers
6. Tiny pores on the surface of leaves

a) Stomata	c) Hydathodes
b) Lenticels	d) None
7. The type of ribosome in the prokaryote cells is

a) 80s	c) 60s
b) 70s	d) 50s
8. The osmosis is only applicable for

a) Liquids	c) Both
b) Solids	d) None
9. The centriole present in

a) Animal cell	c) Prokaryotes
b) Plant cell	d) Bacteriophages
10. Golgi bodies were discovered by

a) Holiicker	c) Benda
b) Camillo Golgi	d) Watson

Q.2 Do as Directed.

A. Define the following. (Any five)

(05)

1. Transpiration
2. Photosynthesis
3. Glycolysis
4. Photophosphorylation
5. Respiration
6. Guttation
7. Stomata

B. Answer the following. (Any Five)

(05)

1. Eukaryote cell
2. Plasmolysis
3. Osmosis
4. Krebs's cycle
5. Photolysis of water
6. Diffusion
7. Cell

Q.3 Write short notes. (Any five)

(15)

1. Explain the cell theory
2. Write the function of vacuole
3. Write down the structure of chloroplast and labelled it
4. Explain the types of transpiration
5. Write down the structure of stomata and labelled it
6. Mention the parts of plant cell and explain the main function of mitochondria

Q.4 Long Questions. (Attempt any three)

(15)

1. Write down the kreb's cycle
2. Explain the steps involved in the glycolysis
3. Explain nitrogen deficiency ,function and corrective measures in the plants
4. Explain the pathway of pyruvic acid in different organisms