

**PARUL UNIVERSITY**  
**COLLEGE OF AGRICULTURE**

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

**Semester: 3****Date: 12/06/2018****Subject Code: 20110201****Time: 02:00 pm to 04:30 pm****Subject Name: 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 currency 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 kreb's cycle 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 chloroplast 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 dark reactions are
 

a) ATP and NADPH <sub>2</sub>	c) Pyruvic acid
b) Glucose	d) Sucrose
5. The location of cuticle 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 eukaryote 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) Hollicker	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 Attempt any Three/Long Questions/Example**

**(15)**

1. Write down the Krebs'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