

Name: _____						
Subject: Biology		Class: 11 <sup>th</sup>	Time: 80 minutes	Total Marks:	40	
Chapter No.4 2 <sup>nd</sup> half		MJDexpert.com			Obtained marks	

**Note:** Please attempt any 11 short questions from Question 2. Also, attempt both parts (a and b) of Question 3. Cutting and removal of any content is strictly prohibited.

## Objective-Section

### Q. 1 Encircle the correct answer. (10x1=10)

1. Lysosomes are most abundant in cells that exhibit:  
(A) Phagocytic activity (B) Photosynthesis (C) Cellular respiration (D) Cell division
2. The process of digesting cellular parts to generate energy is known as:  
(A) Phagocytosis (B) Autophagy (C) Glycolysis (D) Photosynthesis
3. Which organelle is involved in the formation and decomposition of hydrogen peroxide?  
(A) Lysosome (B) Peroxisome (C) Mitochondrion (D) Chloroplast
4. Glyoxysomes are primarily found in:  
(A) Animal cells (B) Plant seedlings (C) Bacterial cells (D) Yeast cells
5. The main function of vacuoles in plant cells is:  
(A) Photosynthesis (B) Storage of water and cell products (C) Cellular respiration (D) Protein synthesis
6. Which cell structure is responsible for the movement of cyclosis and amoeboid movements?  
(A) Microtubules (B) Intermediate filaments (C) Microfilaments (D) Golgi apparatus
7. Mitochondria are also known as:  
(A) Powerhouses of the cell (B) Storage bodies (C) Protein factories (D) Energy converters
8. The green pigment responsible for photosynthesis is found in:  
(A) Chloroplasts (B) Chromoplasts (C) Leucoplasts (D) Peroxisomes
9. What structure controls the traffic of substances passing through nuclear pores?  
(A) Nuclear envelope (B) Nucleolus (C) Chromatin (D) Mitochondrial matrix
10. Prokaryotic cells lack which of the following structures?  
(A) Nucleus (B) Cell wall (C) Ribosomes (D) Plasma membrane

## Subjective-Section

### Q.2 Write short answers of any ten of the following questions: (11x2=22)

- I. Define lysosomes and their primary function.
- II. Describe the role of peroxisomes in the cell.
- III. What is the function of glyoxysomes in plant cells?
- IV. Explain the role of vacuoles in plant cells.
- V. What are microtubules and their function in the cell?
- VI. Describe the structure and function of centrioles.
- VII. What are the main functions of mitochondria?
- VIII. What are plastids and name their three main types?
- IX. Describe the structure and function of the nuclear membrane.
- X. Define the difference between prokaryotic and eukaryotic cells.
- XI. Explain the role of chloroplasts in plant cells.
- XII. What is the function of the nucleolus in the nucleus?

### Q.No.3 Long Question:

(5+5=10)

- a) Compare structure and function of chloroplasts and mitochondria.
- b) Explain chloroplast with its diagram.