



# THE PUNJAB SCHOOL

## DRC-JTC

Practice worksheet - 1  
Self - Assessment - Summer 2020  
Class-IX

Biology:-1

Marks: 50

**Q1. Choose the best option.**

**/20**

- i- Which of these materials is not a component of the plasma membrane?  
(a) Lipid                      (b) Carbohydrates                      (c) Proteins                      (d) DNA
- ii- Which of following do not have cell?  
(a) Plants                      (b) Animals                      (c) Bacteria                      (d) viruses
- iii- The thin extensions of the inner mitochondrial membrane are known as  
(a) Cristae                      (b) Matrix                      (c) Thylakoid                      (d) Stroma
- iv- Role of chloroplast is in  
(a) ATP synthesis                      (b) Protein synthesis                      (c) Photosynthesis                      (d) DNA replication
- v- Ribosomes are formed in  
(a) Nucleoid                      (b) ER                      (c) Nucleolus                      (d) Mitochondria
- vi- Organelle have their own DNA is  
(a) Chloroplast                      (b) Nucleus                      (c) Mitochondria                      (d) All
- vii- Who described the cell first?  
(a) Robert Hooke                      (b) Leeuwenhook                      (c) Robert Brown                      (d) Schleiden
- viii- Which one is the site of protein synthesis?  
(a) Nucleus                      (b) Golgi Apparatus                      (c) Ribosomes                      (d) Lysosomes
- ix- Xylem and phloem tissues are examples of  
(a) Simple tissues                      (b) Compound tissues                      (c) Meristematic tissues                      (d) None
- x- Which of the following movement requires energy in the form of ATP?  
(a) Diffusion                      (b) Osmosis                      (c) Active transport                      (d) All
- xi- The cells used for the transport of impulses are  
(a) Muscle cells                      (b) Gland cells                      (c) Neuron cells                      (d) RBC
- xii- The cells used for support in plants are  
(a) Sclerenchymatous cells                      (b) Collenchymatous cells  
(c) Parenchymatous cells                      (d) Both a & b
- xiii- Bacterial cell membrane is made up of  
(a) Peptidoglycan                      (b) Cellulose                      (c) Chitin                      (d) Mycoplasma
- xiv- The cells used for the secretion are  
(a) Muscle cells                      (b) Nerve cells                      (c) Gland cells                      (d) RBC
- xv- Nucleus in the cell was discovered by  
(a) Lorenz Oken                      (b) Robert Brown                      (c) Robert Hooke                      (d) Darwin

- xvi- Concept of 'Omnis cellula e cellula' was given by  
(a) Robert Hooke (b) Lorenz Oken (c) Robert Brown (d) Rudolph Virchow
- xvii- The Sieve tube cells are part of this tissue  
(a) Sclerenchymatous tissue (b) Parenchymatous tissue  
(c) Xylem tissues (d) Meristematic tissue
- xviii- The resolution of human eye is  
(a) 1.0 mm (b) 2.0 mm (c) 0.1mm (d).2nm
- xix- Cellulose is present in  
(a) Primary wall (b) secondary wall (c) Middle lamella (d) None
- xx- The structure present in prokaryotes is:  
(a) Mitochondria (b) ER (c) Golgi bodies (d) Ribosomes

**Q2. Write short answers of any FOUR of the following: /8**

- i- Define microscopy. What do you know about first microscope?
- ii- What is active transport?
- iii- Write salient features of cell theory.
- iv- What is chromosome?
- v- What are cristae?

**Q3. Write short answers of any FOUR of the following: /8**

- i. Define Resolving power.
- ii. What is micrograph?
- iii. Define phagocytosis.
- iv. What is plasmolysis?
- v. What is turgor pressure?

**Q4. Write short answers of any TWO of the following: /4**

- i. Define working principle of electron microscope.
- ii. Write difference between SEM and TEM
- iii. Write postulates of cell theory.

**Q5. Long Questions. /10**

- i. Write a note on lysosomes.
- ii. Write a note on chloroplast.