

**Instructions:**

- Please attempt Section-A on the MCQs Answer Sheet only.
- Only black ball point or marker may be used for shading the relevant circle.
- Please make sure that there is no cutting, over writing, erasing, or multiple circles shading.

Time Allowed: 20 Minutes

**"Section – A"**

Marks: 13

**Q.1. Choose the correct option by filling in the circle.**

- 1) One of the following contain large number of cells but not a multicellular.
- Frog       Volvox       Mushroom       Chamydomonas
- 2) According to five kingdom system of classification mushrooms belong to:
- Plantae       Fungi       Animalia       Protista
- 3) which one is the first step in biological method
- Hypothesis       Experiment       Observations       Deduction
- 4) Which one of the following is true about the statement of hypothesis?
- Logical       All of them       Possible answer       On observation
- 5) The kingdom which contain Eukaryotic autotrophic organisms is.
- Protesta       Monera       Fungi       None of them
- 6) Which of the following kingdom possess the simplest organism.
- Protesta       Monera       Fungi       Plantae
- 7) In plants, which tissue makes new cells?
- Meristematic tissue       Collenchyma tissue       Epidermal tissue       Ground tissue
- 8) The nervous tissue has the ability to
- Contract and relax       Transmit the impulse       Prepare secretion       Provide energy
- 9) meiosis take place in which of the following organs?
- Testes       Lungs       Heart       Stomach
- 10) Two sister chromatids are collectively called:
- Chromosome       Centromere       Multichromatid       Homologous pair
- 11) The chemicals which are involved as catalysts inside the living bodies are:
- Carbohydrates       Fats       Proteins       Starch
- 12) One of the following may function as coenzymes for the enzymes.
- Proteins       Carbohydrates       Vitamins       DNA
- 13) During the process of regenrration, the type of cell division is:
- 1<sup>st</sup> meiotic Division       Both meiotic divisions       Mitosis       All of them

**Total Time: 3:00 Hours**

**Biology 8<sup>th</sup>**

**Total Marks: 75**

**Marks: 53**

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**Total Time: 2:40 Hours**

**Section B**

**Marks: 32**

**Q2: Write short answer to any eight (8) of the following parts. All parts carry equal marks:**

- i. Name few Muslim Scientists and their contributions in the field of biology and medicine?
- ii. What level of organization is represented by Volvox?
- iii. How does deforestation lead to desertification?
- iv. How you can differentiate between kingdom Monera and Protista?
- v. What proposed the cell theory and what are the main points of the cell theory?
- vi. How cell membrane helps in maintaining equilibrium while exchanging.
- vii. In which types of cell, meiosis take place and why its important.
- viii. What is chiasma and what is its role in crossing over?
- ix. In which type of cells, meiosis take place and why it is important
- x. Differentiate between lock and key model and the induced-fit model.
- xi. What is meant by denaturation of enzymes
- xii. How are enzymes specific for the substrate?

**Section C**

**Marks: 30**

**Note: Answer any three (3) questions. All question Carry equal marks:-**

**Q3:** (a) How to understanding of biology can be improved through the knowledge of geography, chemistry and state? Give Examples.  
(b) Enlist the various levels of biological organization and explain it with an example

**Q4:** (a) Differentiate between inductive reasoning and deductive reasoning?  
(b) Explain how biologists use scientific method to solve the mysteries of addressing the malarial problem?

**Q5:** (a) Differentiate between two kingdom system and five kingdom system along their advantages and disadvantages.  
(b) Explain bionomial Nomenclature. What are its advantages?

**Q6:** (a) Discuss different events of Meiosis 1 with the help of diagrams  
(b) Explain different stage of mitosis with diagrams and at what stage, cytokinesis take place?