

## BIOLOGY HOLIDAYS HOMEWORK 2020-2021

### CLASS 9

#### PART A

- Q1: What is COVID -19 and what is its causative agent?
- Q2: What does COVID -19 stands for?
- Q3: What are the symptoms of COVID -19?
- Q4: Are antibiotics effective in preventing or treating COVID -19? Give reason for your answer.
- Q5: Why vaccine for COVID -19 is difficult to prepare and taking so long?
- Q6: What is the difference between self isolation, self quarantine and social distancing?
- Q7: How can you protect yourself from the infection of COVID-19?
- Q8: What precautions are you taking these days before consuming fruits and vegetables?
- Q9: What precautions are you taking while buying groceries and when receiving a delivery at home these days?
- Q10: Can you get infected by COVID-19 through the air?
- Q11: How long does the virus survive on surfaces?
- Q12: Will taking extra vitamins supplements help against COVID-19 infection?

#### PART B

- Q1: Which organelle would you associate with elimination of old and worn out cells? Why?
- Q2: Describe an activity to demonstrate endosmosis and exosmosis. Draw a diagram in support of the activity.
- Q3: a. Draw a plant cell and name seven important organelles found in it.
- b. Name one organelle that can make some of its own protein in a plant cell and also mention one function of such an organelle.
- Q4:a) Where are chromosomes located?
- b) What are they composed of?
- c)What is chromatin material and how does it change just before the cell divides?
- d) What is their chemical composition?

e) How many pairs of chromosomes are present in humans?

Q6: Who discovered cell and how? From where do the new cells come?

Q7: Draw a neat diagram of an animal cell and label the following organelles:

- a. Plasma membrane
- b. Golgi apparatus
- c. Centriole
- d. Rough endoplasmic reticulum

Q8: Why are mitochondria called Power house of the cell? Give three similarities and one difference between mitochondria and plastid.

Q10: Put a drop of blood in three type of liquids:

- a. Pure water
- b. Salt solution
- c. Water containing 5M glucose and 0.9% NaCl

What will happen to the blood drop and why? Explain your answer

Q11: Draw a diagram of prokaryotic cell and label on it the following: Nucleoid, Ribosomes, Plasma membrane.

Q12: What is the difference in the type of cell division that takes place in sex cells and in the skin?

Q13. What is membrane biogenesis? How does it takes place?