Online Class (class work)

05/05/2020

Class : VIII

Chapter : CELL

Q.1. Define the Following:

a) Cell : Cell is the basic structural and functional unit of life

b) Tissue : Tissue is the group of cells of same size, shape and function

c) Organ : An organ is a structure that contains more than one type of tissue.

d) Organ System : A group of Organs working together is called an Organ System.

e) Prokaryotic cell: The cells which lack a nuclear membrane is called Prokaryotic cell.

f) Eukaryotic cell : Organisms that have a well defined nucleus with a nuclear membrane are called Eukaryotic organisms

Q.2. How organism differs from each other ?

A.2 Organism differs from each other by Size, Appearance , Colour and Habitat.

Q.3. Who discovered Cell ?

A.3. Robert Hooke discovered cell.

Q.4. What are the different type of cell shapes?
A.4. Pg 108 (all 7 points)

Q.5. Give one example of Unicellular Animal and Multicellular animal.

A.5. Unicellular Animal : Yeast, Paramecium

Multicellular Animal: Cat, Dog.

Q.6. Name three basic components of cell.

A.6. a) Cell Membrane , Cytoplasm, Nucleus

Q.7. Give the functions of Cell Wall

A.7. Cell wall provides i) protection ii) shape and support to the cell.

Q.8.Give the functions of cell membrane.

A.8. Functions of cell membrane are :

i) Allows the movement of substances both inward and outward.

ii) Provides the shape to the cell

iii) Protects the cell

Q.9. What are the parts of Nucleus ?

A.9. Nucleus consists

i) Nuclear Membrane

ii) Nuclear Sap

iii) Nucleolus

iv) Chromosomes

Q.10. What are the function of Nucleus ?

A.10.The function of Nucleus are :

i) Helps in the inheritance of characters.

ii) Acts as a control centre for all the activities taking place in the cell.

Q.11. Give the functions of different cell organelles .

A. 11. Table 7.2 , pg 113

HOME WORK : DRAW PLANT CELL AND ANIMAL CELL

Online Class (CLASS WORK) on 7th May 2020

CLASS –VIII

CHAPTER :CELL

Q.12. Answer in One word:

i) The outer most covering layer in a animal cell – plasma membrane
ii) The material used by Hooke to observe cells – slices of cork
iii) The cell part that has tiny holes- cell membrane
iv) The tiny structures present in plant cell – Nucleus
v) The thread like structures which help in the inheritance of characters – chromosomes
vi) The green plastids found in plant cell – Chloroplast.
vii) Cells lacking a nuclear membrane – Prokaryotic Cell
viii) Cells with a well defined nucleus – Eukaryotic Cell

Fill n the blanks:

i) Cells are organized to form tissue.
ii) The control centre of the cell is the nucleus.
iii) Bacteria and Blue green algae are prokaryotic organisms.
iv) Yeast is an unicellular organism.
v) White blood cells are irregular.
vi) Genes are found in the nucleus.

Match the columns:

Column A	Column B
i) Mitochondria	a) carry genes
ii) Chloroplast	b) control centre of the cell
iii) Organ	c) Prokaryotic organsim
iv) Amoeba	d) Powerhouse of the cell
v) Protoplasm	e) Green Plastids
vi) Nucleus	f) Contains more than one type of tissue

vii) Chromosomes
viii)Bacteria

g) unicellular organism
h) living substance of the cell.

Ans. i--- d)
ii--- e)
iii—f)
iv—g)
v—h)
vi—b)
vii—a)
viii—c)

Experimentally show the study of temporary preparation of a onion peel with diagram

Aim : To study Plant Cell using Onion Peel

Materials Required: Onion Peel, Safranine Stain, Forcep, Glass Slide, Cover slip, Blotting Paper, Glycerine.

Procedure :

i) At first we cut a small piece of onion bulb.
ii) Then peeled off the inner surface of the onion leaf using a pair of forceps.
iii) We have a taken a glass slide and put a few drops of water in its centre.
iv) Then placed the peel in the water on the slide.
v) Then added a drop of Safranine Stain
vi) Then gently lowered the cover slip over the onion peel using a needle.
vii) Then the slide with the onion peel is ready for observation under microscope.
viii) Placed the slide on the stage of Microscope and observed it under the low power Microscope

Observation : We have observed prominent nucleus, cytoplasm, and a large central vacuole. Cell wall is also visible.

Experimentally show the study of temporary preparation of a human cheek cell with diagram

Aim : To study human cheek Cell

Materials Required: Onion Peel, Methylene blue Stain, Forcep, Glass Slide, Cover slip, Blotting Paper, Glycerine.

Procedure :

i) At first we rinsed our mouth well with water.
ii) Then taken a clean toothpick and gently scraped the inner slide of our cheek.
iii) Then we have spread in a drop of water on a glass slide.
iv) Then placed the peel in the water on the slide.
v) Then added a drop of Methylene Blue Stain
vi) Then gently lowered the cover slip over the cheek cell using a needle.
vii) Then the slide with the human check cell is ready for observation under microscope.
viii) Placed the slide on the stage of Microscope and observed it under the low power Microscope

Observation : We have observed human cheek cells which are flat cells with a round visible nucleus

HOMEWORK : DO MULTIPLE CHOICE QUESTION AND DRAWING (ONLY CELL) FOR TWO EXPERIMENTS.