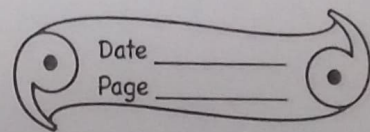


HW  
8/7/21

## Ch-3 The Cell



### Short answer Questions.

Q3) Briefly describe the three essential parts of a cell.

Ans) Cell membrane: It is very thin, flexible and delicate. It is a living structure present in both plant and animal cells. It has fine pores in it, through which only certain substances can pass.

Cytoplasm: A semi liquid, colourless and translucent substance. It is found between nucleus and membrane.

Nucleus: It is a spherical mass mostly located towards the centre of the cytoplasm. It is also the most important part of the cell. It also plays an important part during cell division. It coordinates and also regulates various life processes of the cell.

13/7/21

### MCQs

1) Identify the part which contains pigment:

Ans) a) cell membrane

(11) The organelle that controls all activities in a cell.

Ans) a) nucleus

(iii) A cell that is spherical in shape is:

Am) c) red blood cell

(iv) The vacuole cell contains:

Am) b) cell sap

### Short answer questions

① Antonie Van Leeuwenhoek was the scientist who invented the first microscope.

② Robert Hooke coined the term "cell".

③ The cell membrane is called selectively permeable because it has fine pores, through which only certain substances can pass in and out, while others cannot.

④ Nucleus: A small spherical mass mostly located towards the centre of the cytoplasm.

Nucleolus: A small dark body inside nucleoplasm.

⑤ Cytoplasm: Semi-liquid, colourless, translucent substance found between nucleus and cell membrane.

Protoplasm: A jelly-like substance found in cell.

(11) Cell wall : The outermost layer of a cell.

Cell membrane : A thin, delicate, flexible part of a cell.

(6) Plants Cell : Cell is usually bigger. It has a definite cell wall. Cytoplasm is not fully dense. A thin layer of cytoplasm contains plastids.

Animals Cell : Cell is usually smaller. No cell wall. Cytoplasm is denser and more granular. Do not contain plastids.

(7) The number of chromosomes is definite in each species of human body. Human body has 46 chromosomes which occur in 23 pairs. And a cell of pea plant has 14 chromosomes which occurs in 7 pairs.

(8) (i) Cell.

(ii) Pre-existing.

(iii) wall.

(iv) pigments.

(v) vacuoles.

9) (i) Plastid

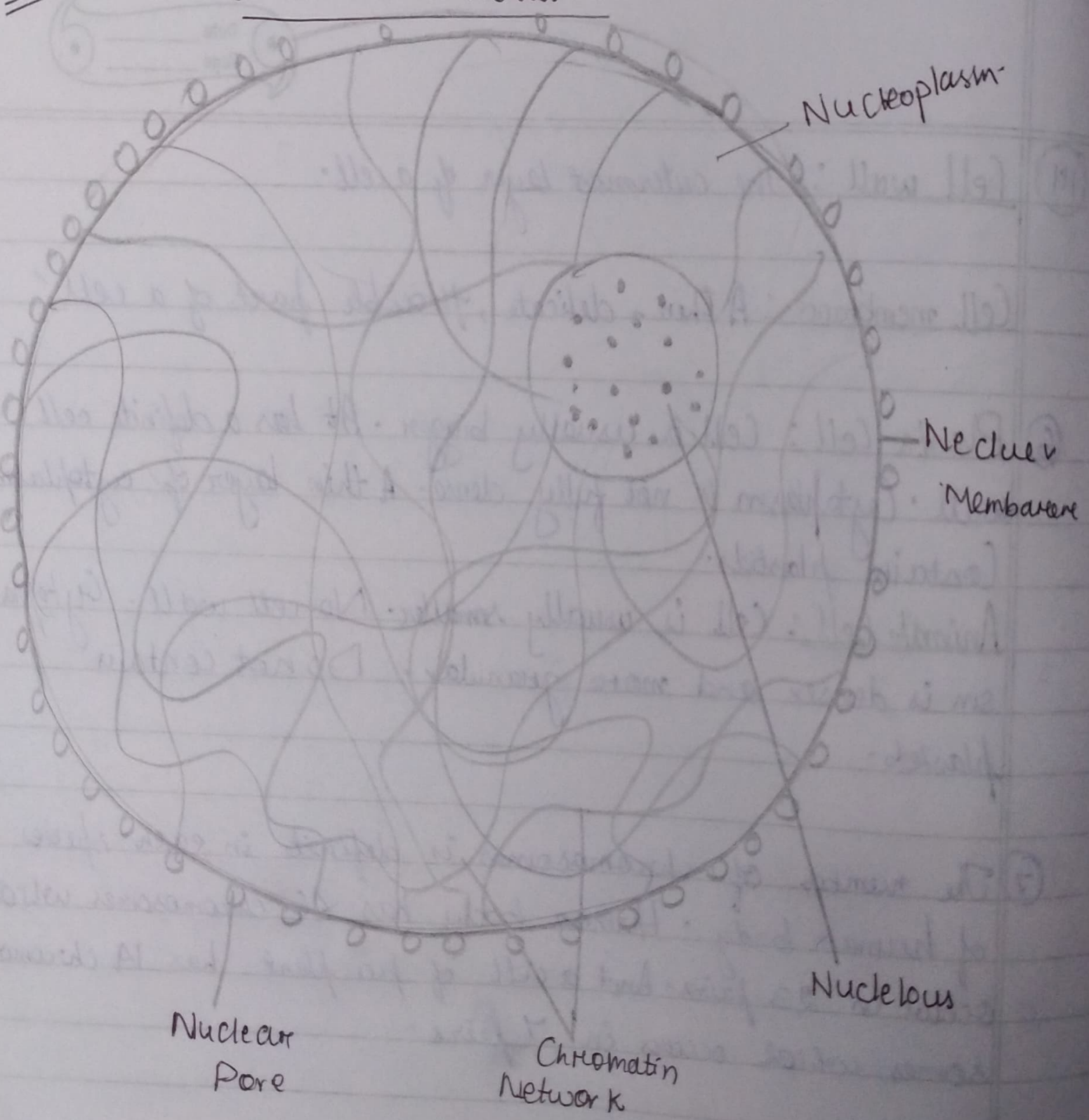
ii) Chromoplast

iii) Coplast

iv) Ribosomes.

1ans

# Structure of nucleus:



## Long Answer Questions

1) It regulates and coordinates various life processes.  
Plays an important part during cell divisions.

2) Robert Hooke was the scientist who coined the term "cell".  
He used two lenses.  
He observed a cluster of box-like cubicles piled up together.

3) Cell wall membrane

- Also called plasma membrane.
- Very thin, delicate and flexible.
- Living structure.

Cytoplasm

- A semi-liquid, colourless, translucent substance.
- Found between nucleus and cell membrane.

Nucleus

- Small spherical mass.
- Regulates / coordinates various life processes.