

DCA CLASSES

CLASS VII – SCIENCE – CHAPTER 08

CELL STRUCTURE AND FUNCTIONS

Name:

Date:

01. The lowest level of organization of life is: -
(a). organ system level (b). organ level (c). cellular level (d). tissue level
02. Which of the following is not a part of nucleus?
(a). nucleolus (b). lysosomes (c). chromosomes (d). nucleoplasm
03. Centrosomes are present only in: -
(a). plant cells (b). animal cells (c). both a & b (d). only viruses
04. All functions of the body are carried out by a single cell in: -
(a). multicellular organism (b). unicellular organism (c). bicellular organism (d). tetracellular
05. The largest cells in our body are: -
(a). blood cells (b). liver cells (c). kidney cells (d). brain cells
06. The part of cell that provides shape to it is:-
(a). nucleus (b). cytoplasm (c). plasma membrane (d). nucleoplasm
07. Cells can be seen through: -
(a). hand lens (b). microscope (c). naked eye (d). both b & c
08. Control centre of a cell is: -
(a). nucleus (b). endoplasmic reticulum (c). mitochondria (d). golgi body
09. The cell organelle responsible for storage and secretion of materials from cell is: -
(a). golgi complex (b). lysosomes (c). endoplasmic reticulum (d). nucleus
10. Pollen grains of sunflower are:-
(a). tissue (b). organ (c). cell (d). organ system
11. Cells are: -
(a). transparent (b). colourless (c). both a & b (d). opaque & coloured
12. Deoxyribonucleic acid is found to be present within: -
(a). endoplasmic reticulum (b). nucleus (c). lysosome (d). ribosome
13. The water filled spaces found in plant cells are: -
(a). lysosomes (b). vacuoles (c). cell membrane (d). centrosome
14. Centrioles of an animal cell help in: -
(a). transfer of characteristics (b). transport (c). food oxidation (d). cell division
15. Which of the following is not a stain ?
(a). safranin (b). eosin (c). methylene blue (d). glycerine
16. Different types of tissues form together: -
(a). organs (b). cellular organization (c). epidermis (d). muscles
17. The cell wall of a plant cell is made up of: -
(a). cellulose (b). starch (c). glucose (d). glycogen
18. Ribosomes are found in: -
(a). plant cells (b). animal cells (c). viruses (d). only a & b
19. Food taken in by amoeba is digested in a: -
(a). ribosome (b). golgi body (c). centrosome (d). vacuole
20. Scattered in the cell are many small structures called: -
(a). chromosomes (b). genes (c). organelles (d). WBCs

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Q01. Match the column: -

- | | |
|---|---|
| (A). (a). magnifying glass
(b). Amoeba
(c). Ostrich egg
(d). chloroplast
(e). Mycoplasma | i) single celled organism
ii) smallest cell
iii) plant cell
iv) largest cell
v) simplest microscope |
| (B). (a). mitochondria
(b). vacuole
(c). plastids
(d). ribosomes
(e). lysosomes | i) contains cell sap
ii) power house of cell
iii) cellular digestion
iv) kitchen of the cell
v) protein synthesis |
| (C). (a). dead cells
(b). living cells
(c). cell theory
(d). lysosome
(e). nucleus | i) Schwann & Schleiden
ii) Robert Brown
iii) Leeuwenhoek
iv) Robert Hooke
v) Christian de duve |
| (D). (a). WBC
(b). chromosomes
(c). protoplasm
(d). centriole
(e). flagella | i) hereditary vehicles
ii) found in Euglena
iii) found in blood
iv) living material of cell
v) chromosomal movement |
| (E). (a). chromoplasts
(b). chloroplasts
(c). leucoplasts
(d). Chlamydomonas
(e). Yeast | i) unicellular alga
ii) unicellular fungus
iii) colorless plastids
iv) colored plastids
v) green plastids |

Q02. Fill in the blanks: -

- A _____ is the smallest unit of life.
- Chromosomes contain basic hereditary units called _____ .
- _____ is the cell organelle which produces energy by the oxidation of food.
- Chromoplasts provide different _____ to the flowers and fruits.
- Green plastids contain _____ that help in photosynthesis.
- All the life functions take place in the _____ of a cell.
- The nucleus of a cell is surrounded by _____ membrane.
- The process of coloring different parts of a cell is called _____ .
- A group of similar cells that are specialized to perform specific functions is called _____ .
- Kidney shaped cells in plant leaves are called _____ cells.
- _____ is a spherical body present inside the nucleus.
- The function of receiving and transferring messages is carried out by _____ cells.

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- (m). _____ of a non-dividing nucleus, condenses in a dividing nucleus to form chromosomes.
(n). _____ are parts of DNA that are passed from parents to their offsprings.
(o). _____ is the dense fluid like granular substance of a nucleus.

Q03. State whether the following statements are true or false: -

- (a). Nerve cells both in rat and elephants perform the same function.
(b). In animal cells nucleus is shifted to one side of the cell.
(c). Cellular respiration occurs in the vacuoles.
(d). Epidermis is an organ.
(e). Animal cells contain small sized vacuoles
(f). The size of a cell is related to body size of the organism.
(g). An amoeba is irregular in shape.
(h). In plant cells, the nucleus is shifted to one side of the cell.
(i). Golgi body of a plant cell is called dictyosome.
(j). Leucoplasts have pigments of different colours that give colour to flowers and fruits

Q04. What are the main postulates of the cell theory?

Q05. Differentiate between unicellular and multicellular organisms with examples.

Q06. How is a cell wall different from plasma membrane?

Q07. List the different functions performed by cell membrane.

Q08. What are genes? How are they important to organism?

Q09. Are nuclei of prokaryotic and eukaryotic cells different from each other?

Q10. What is the need of staining the cells? Name any four stains.

Q11. Define a vacuole inside a cell and mention its importance?

Q12. Complete the following flow chart:

Cell ->	? ->	? ->	? ->	Organism
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Q13. Pick the odd word out of the following:

Amoeba/Paramecium/Bacteria/Euglena/Plasmodium/Yeast.

Q14. Fill with correct words:

- (a). pseudopodia : false feet :: neurons : ?
(b). cell wall : bacteria :: centrosome : ?

Q15. Complete the following:

Protoplasm = nucleus + ?

Q16. Label in the following diagram:

