

**FATHER AGNEL SCHOOL, VAISHALI**  
**QUESTION BANK**  
**CLASS-VIII**

**CELL STRUCTURE AND FUNCTIONS**

Q1) Tick the only correct option amongst the following:

- 1) Animal cell does not have
  - a) Mitochondria
  - b) Chloroplast
  - c) Nucleus
  - d) Cell membrane
- 2) Which organelle acts as suicidal bag of the cell?
  - a) Centrosome
  - b) Lysosome
  - c) Mitochondria
  - d) Leucoplast
- 3) The largest cell is of \_\_\_\_\_.
  - a) Bacteria
  - b) Human neuron
  - c) Egg of an ostrich
  - d) Egg of hen
- 4) Living substance of cell is called \_\_\_\_\_.
  - a) Cytoplasm
  - b) Protoplasm
  - c) Nucleus
  - d) Chromosomes
- 5) Unit of inheritance is called \_\_\_\_\_.
  - a) Gene
  - b) Nucleus
  - c) Cell
  - d) Tissue
- 6) Green colour of leaves is due to presence of the pigment \_\_\_\_\_.
  - a) Chlorophyll
  - b) Ribosome
  - c) Mitochondria
  - d) Chloroplast
- 7) Which of the following term is not a part of the nucleus?
  - a) Ribosome
  - b) Nucleolus
  - c) Chromosome
  - d) Gene

Q2) Match the terms given in column I with their functions given in column II:

Column I	Column II
A. Chloroplast	i) Carries hereditary characters.
B. Cell membrane	ii) Controls the activities of cell.
C. Nucleus	iii) Site of photosynthesis.
D. Chromosome	iv) Controls the movement of materials into and out of cell.

Q3) Indicate whether the following statements are true (T) or false (F):

- a) Unicellular organisms have one-celled body.
- b) Muscle cells are branched.
- c) The basic living unit of an organism is an organ.
- d) Amoeba has irregular shape.
- e) In a plant cell, nucleus is present in the centre of the cell.

Q4) Very short answer type questions (1 mark each):

- a) The instrument used to observe cells is \_\_\_\_\_.
- b) Amoeba and paramecium belong to which category of organisms?
- c) Give an example of a unicellular and a multi-cellular organism.
- d) What is a tissue?
- e) Name the scientist who discovered cell.

Q5) Short answer type questions (2 marks each):

- a) What is the purpose of cell wall?
- b) Explain cytoplasm in brief.
- c) What is the relation between cell, tissue and organ?
- d) Why do cells of human body differ in shape and size? Give an example.
- e) What is the difference between eukaryotes and prokaryotes?
- f) What is the function of nerve cells? Draw a neat diagram of nerve cell.
- g) Write a short note on nucleus of a cell.
- h) What are pseudopodia?
- i) Can we see cells with unaided eye?
- j) Categorize the organisms based upon the number of cell present in them.

Q6) Long answer type questions (3 marks each):

- a) Mention three differences between plant and animal cell.
- b) Explain the structure of a cell.

## MICRO-ORGANISMS: FRIEND AND FOE

Q1) Tick the only correct option amongst the following:

- 1) Which of the following reproduces only inside a host organism?  
a) Bacteria  
b) Virus  
c) Amoeba  
d) Fungus
- 2) A disease in human beings caused by a virus is \_\_\_\_\_.  
a) Influenza  
b) Typhoid  
c) Dysentery  
d) Cholera
- 3) Pathogenic micro-organisms present in host cells are killed by medicines called:  
a) Pain killer  
b) Antibodies  
c) Antibiotics  
d) Vaccines
- 4) The two micro-organisms which live in symbiotic association in lichens are:  
a) Fungus and protozoa  
b) Alga and bacteria  
c) Bacteria and protozoa  
d) Alga and fungus
- 5) Rust of wheat is caused by:  
a) Bacteria  
b) Virus  
c) Fungi  
d) Protozoa
- 6) Which of the following can result in spread of microbes:  
a) Air  
b) Water  
c) Food  
d) All of these

Q2) Fill in the blanks:

- a) Tuberculosis is caused by \_\_\_\_\_.
- b) Tetanus disease is caused by \_\_\_\_\_.
- c) \_\_\_\_\_ fixes atmospheric nitrogen useful to plants.
- d) \_\_\_\_\_ is used in production of vinegar from alcohol.
- e) A micro-organism that has no cellular structure. \_\_\_\_\_.
- f) Fungi used in bakeries. \_\_\_\_\_.
- g) Microbes lying on the border of living and non-living. \_\_\_\_\_.
- h) The fungus which grows on bread is \_\_\_\_\_.

Q3) Define:

- a) Microbes
- b) Pathogens
- c) Nitrogen Fixation
- d) Pasteurization
- e) Preservatives
- f) Carriers
- g) Fermentation
- h) Antibiotics

Q4) Give the contributions of the following:

- a) Louis Pasteur
- b) Alexander Fleming
- c) Robert Koch

Q4) Very short answer type questions (1 mark each):

- a) Name one commercial use of yeast.
- b) Name the process in yeast that converts sugar into alcohol.
- c) Why should we avoid standing close to a tuberculosis patient while he/she is coughing?
- d) Name three habitats of microorganisms.

Q5) Short answer type questions (2 marks each):

- a) What are food preservatives? Name some common food preservatives.
- b) What are good microorganisms? Explain some of the uses of good microorganisms.
- c) How does vaccination help in fighting diseases?
- d) Describe the role of yeast in the preparation of bread and cakes.
- e) Name one disease each in humans, animals and plants caused by virus.
- f) How can we control the spread of diseases caused by mosquitoes?
- g) What are the different shapes of bacteria?
- h) Why are viruses considered to be the borderline between living and the non-living?
- i) Why are bacteria and fungi said to be decomposers?

Q6) Long answer type questions (3 marks each):

- a) Describe the role of *Rhizobium* in maintaining soil fertility.
- b) What is a pathogen? How does it gain entry into the body of living organisms?
- c) Discuss five methods of food preservation?
- d) Megha, a class VIII student was asked to submit a project report on mosquito transmitted diseases. She visited a nearby hospital where her aunt was staffed as a nurse. Her aunt took her to a patient suffering from malaria. Megha talked to the patient and asked him about his health and also took some flowers for him.
  - 1) Name the mosquito that spreads malaria.
  - 2) What is the name given to such organisms that transmit the diseases from infected to healthy persons?
  - 3) How can we control the spread of diseases by mosquitoes?
  - 4) Identify two important values as shown by Megha.
- e) What are antibiotics? Explain with the help of examples.
- f) Explain the process of Pasteurization in brief.

Q7) Very long answer type questions (4 marks each):

- a) Draw a systematic diagram of the nitrogen cycle and explain it.
- b) What are food poisoning and food preservation (short notes)?
- c) What are harmful microorganisms? Explain by giving the example of two disease carrying microbes.