

CLASS-IX

Cell Structure and Functions

Question 1.

Largest cell visible to uniaded eye is:

- (a) hen's egg
- (b) ostrich egg
- (c) bactería cell
- (d) nerve cell

▼ Answer

(b) ostrich egg

Largest cell visible to unaided eye is ostrich egg.

Ouestion 2.

Which of the following is not a major component of protoplasm:

- (a) hydorgen
- (b) nitrogen
- (c) Sulphur
- (d) oxygen

▼ Answer

(c) Sulphur

Sulphur is not a major component of protoplasm.

Question 3.

The organelle present oilly in plants is:

- (a) mitochondria
- (b) chromosomes
- (c) nucleus
- (d) plastids

▼ Answer

(d) plastids

The organelle present only in plants is plastids.

Question 4.

Which of the following is present only in plants:

- (a) plasma membrane
- (b) cell wall
- (c) nucleo membrane
- (d) cytoplasm

▼ Answer

(b) cell wall

Cell wall is present only in plants. It is not present in animal cells.

Question 5.

Yolk is:

- (a) small part of cell
- (b) yellow part of egg
- (c) white part of egg
- (d) none of these

▼ Answer

(b) yellow part of egg Yolk is yellow part of egg.

Question 6.

The outermost layer of animal cell is:

- (a) cell wall
- (b) cell membrane
- (c) nuclear membrane
- (d) none of these

▼ Answer

(b) cell membrane

Cell membrane is the outermost layer of animal cell.

Question 7.

The white part of egg is called:

- (a) yolk
- (b) albumen
- (c) cytoplasm
- (d) none of these

▼ Answer

(b) albumen

The white part of egg is called albumen.

Question 8.

The shape of amoeba is:

- (a) round
- (b) regular
- (c) irregular
- (d) none of these

▼ Answer

(c) irregular

The shape of amoeba is irregular.

Question 9.

The basic structural unit of living organisms is:

- (a) cell
- (b) tissue
- (c) organ
- (d) none of these

▼ Answer

(a) cell

Cell is the basic structural unit of living organisms.

Question 10.

Is hen's egg a single cell:

- (a) no
- (b) yes
- (c) can't say
- (d) none of these

▼ Answer

(b) yes

Yes, hen's egg is a single cell.

Ouestion 11.

Bacterial cell has a cell wall:

- (a) yes
- (b) no
- (c) can't say
- (d) none of these

▼ Answer

(a) yes

Yes, bacteial cell has a cell wall.

Question 12.

Which of the following cells are long in shape:

- (a) nerve Cells
- (b) muscle Cells
- (c) fibre Cells
- (d) all of these

▼ Answer

(d) all of these

The nerve cells, muscle cells and fibre cells are long in shape.

Question 13.

A group of similar cells perfonning a specific function is called:

- (a) organ
- (b) tissue
- (c) cell organalle
- (d) none of these

▼ Answer

(b) tissue

Tissue is a group of similar cells performing a specific function.

Question 14.

Cells without well-organised nucleus are called:

- (a) prokaryotic cells
- (b) eukaryotic cells
- (c) cell
- (d) none of these

▼ Answer

(a) prokaryotic cells

Cells without Well-organised nucleus are called prokaryotic cells.

Ouestion 15.

Eukaryotic cells are found In:

- (a) all organisms
- (b) bacteria and blue green algae.
- (c) all organisms except bacteria and blue green algae
- (d) none of these

▼ Answer

(c) all organisms except bacteria and blue green algae

Eukaryotic cells are found in all organisms except bacteria and blue green algae.

Question 16.

Which of these is multicellular?

- (a) amoeba
- (b) paramecium
- (c) bacteria
- (d) mushroom

▼ Answer

(d) mushroom

Mushroom is multicellular whereas amoeba, paramecium and bacteria are unicellualr.

Question 17.

The organelle not present in an animal cell is:

- (a) cell membrane
- (b) nucleus
- (c) mitochondria
- (d) chloroplast

▼ Answer

(d) chloroplast

Chloroplast is not present in an animal cell where as cell membrane, nucleus and mitochondria is present in animal cell. Chloroplast is present in plant cell.

Question 18.

Plant cell do not have:

- (a) cell wall
- (b) lysosome
- (c) mitochondria
- (d) cell membrane

▼ Answer

(b) lysosome

Lysosome. Plant cell do not have lysosome. It has cell wall, mitochondria and cell membrane.

Question 19.

Chlorophyll is found in:

- (a) chromoplast
- (b) centrosome
- (c) chloroplast
- (d) leucoplast

▼ Answer

(c) chloroplast

Chlorophyll is found in chloroplast.

Question 20.

Chlorophyll pigment is of:

- (a) yellow colour
- (b) green colour
- (c) red colour
- (d) white colour

▼ Answer

(b) green colour

Chlorophyll pigment is of green colour.

Question 21.

The cell organelle relying energy from the food is:

- (a) mitochondria
- (b) golgi bodies
- (c) endoplasmic reticulum
- (d) ribosomes

▼ Answer

(a) mitochondria

The cell organelle releasing energy from the food is mitochondria.

Question 22.

The outermost layer of plant cell is:

- (a) cell wall
- (b) cell membrane
- (c) nuclear membrane
- (d) none of these

▼ Answer

(a) cell wall

Cell wall is the outermost layer of plant cell. Cell membrane is the outermost layer of animal cell.

Question 23.

The liquid substance inside the cell enclosed by the cell wall or plasma membranes is called:

- (a) cytoplasm
- (b) nucleoplasm
- (c) protoplasm
- (d) none of these

▼ Answer

(a) cytoplasm

Cytoplasm is the liquid substance inside the cell enclosed by the cell wall or plasma membranes.

Question 24.

The green plastids in plants are called:

- (a) nucleoplasts
- (b) chloroplast
- (c) leucoplasts
- (d) none of these.

▼ Answer

(c) leucoplasts

The green plastids in plants are called chloroplasts.

Question 25.

Power house of the cell is:

- (a) nucleus
- (b) chloroplast
- (c) cytoplasm
- (d) mitochondira

▼ Answer

(d) mitochondira

Mitochondria is the power house of the cell.

Question 26.

The liquid substance present between the nucleus and plasma membrane is called:

- (a) cytoplasm
- (b) protoplasm
- (c) nucleoplasm
- (d) none of these

▼ Answer

(a) cytoplasm

The liquid substance present between the nucleus and plasma membrane is called cytoplasm.

Ouestion 27.

The organelle present in the nucleus which help in transfer of characters from parents to next generation is:

- (a) chromatin
- (b) chromosome
- (c) centromere
- (d) none of these

▼ Answer

(b) chromosome

Chromosomes present in the nucleus helps in transfer of characters from parents to next generation.

Question 28.

Cell was discovered by:

- (a) Robert Brown
- (b) Robert looke
- (c) M.J. Schleiden
- (d) T. Schwan

▼ Answer

(b) Robert looke

Robert Hooke discovered cell.

Question 29.

The controlling centre of the cell is:

- (a) protoplasm
- (b) plastids
- (c) nucleus
- (d) chromosomes

▼ Answer

(c) nucleus

The controlling centre of the cell is nucleus.

Question 30.

The life giving substance in a cell is:

- (a) cytoplasm
- (b) protoplasm
- (c) nucleoplasm
- (d) none of these

▼ Answer

(b) protoplasm

Protoplasm is the life giving substance in a cell.

Match the Column-A with Column-B:

Question 1.

Column-A	Column-B
(a) Cell wall	(i) Eukaryfotic cells
membrane	(ii) Nucleus
(c) Nucleus with a nuclear membrane	
(d) A small spherical body in the nucleus	(iv) Prokaryotic cells
(e) Thread like structures present in nucleus	(v) Plant cells

▼ Answer

Column-A	Column-B	
(a) Cell wall	(v) Plant cells	
(b) Nuclear material without nuclear membrane	(iv) Prokaryotic cells	
(c) Nucleus with a nucl	ar (i) Eukaryfotic cells	

membrane	
(d) A small spherical body in the nucleus	!!
(e) Thread like structures present in nucleus	(iii) Chromosomes

Question 2.

Column-A	Column-B
(a) Red blood cells	(i) Long branched shape
(b) Muscle cells	(ii) Spherical shape
(c) Nerve cells	(iii) Spindle shaped

▼ Answer

Column-A	Column-B
(a) Red blood cells	(ii) Spherical shape
(b) Muscle cells	(iii) Spindle shaped
(c) Nerve cells	(i) Long branched shape

Question 3.

Column-A	Column-B
(a) Plastids	(i) Protoplasm
(b) Small vacuoles	(ii) Mitochondria
(c) Living substance of the cell	(iii) Plant cells
(d) Power house of cell	(iv) Animal cells

▼ Answer

Column-A	Column-B
(a) Plastids	(iii) Plant cells
(b) Small vacuoles	(iv) Animal cells
(c) Living substance of the cell	(i) Protoplasm
(d) Power house of cell	(ii) Mitochondria

State whether the following statements are True or False:

Question 1.

Amoeba has regular shape.

▼ Answer

False

Question 2. All living organisms are made of cells.
▼ Answer
True
Question 3. Muscle cells are branched.
▼ Answer
False
Question 4. Unicellular organisms have one-celled body.
▼ Answer
True
Question 5. A dense round region present in the middle of the cell is called nucleus.
▼ Answer
True
Question 6. All animal cells are spherical or oval in shape while plant cells are rectangular.
▼ Answer
False
Question 7. Most of the cells have nucleus.
▼ Answer
False
Question 8. Mitochondria is called powerhouse of the cell.
▼ Answer

True

Question 9. The basic living unit of an organism is an organ.
▼ Answer
False
Question 10. The outermost covering in an animal cell is called cell wall.
▼ Answer
False
Question 11. Green plastids containing chlorophyll are called chloroplasts.
▼ Answer
True
Question 12. Cells without well-organised nucleus, i.e. lacking nuclear membrane, are called eukaryotic cells.
▼ Answer
False
Question 13. All organisms are made of smaller parts called organs.
▼ Answer
True
Question 14. The egg of a hen is a single cell.
▼ Answer
True
Question 15. Life of all organisms starts as a single cell called fertilized egg.

▼ Answer

irue
Fill in the blanks:
Question 1 is formed by collection of tissues.
▼ Answer
Organ
Question 2. Empty space in the cytoplasm is called
▼ Answer
vacuole
Question 3. Units of inheritance present on the chromosomes are called
▼ Answer
genes
Question 4. The living substance in the cell is called
▼ Answer
protoplasm
Question 5. A group of cells is called
▼ Answer
tissues
Question 6 are green plastics.
▼ Answer
Chloroplasts
Question 7.

▼ Answer
Chlorophyll
Question 8. Component present in the cytoplasm are called
▼ Answer
organelle
Question 9. The is the control centre of the cell.
▼ Answer
nucleus
Question 10. Cell wall is found in cell.
▼ Answer
plant
Question 11. The structural and functional unit of life is
▼ Answer
cell
Question 12. Energy is produced in
▼ Answer
mitochondria
Question 13 is the instrument which enlarge objects.
▼ Answer
Microscope
Question 14.
are responsible for passing hereditary characters.

▼ Answer
Chromosomes
Question 15. Nucleus is separated from cytoplasm by a,
▼ Answer
nuclear membrane
Question 16. Cells were discovered by
▼ Answer
Robert Hooke
Question 17. Coloured bodies called are found in the plant cells only.
▼ Answer
plastids
Question 18. The projections which appear and disappear as amoeba moves or feeds are called
▼ Answer
pseudopodia
Question 19. All organisms other than bacteria and blue green algae are called
▼ Answer
eukaryotes