

XI S-30
Cell –The basic unit of life

Class Test:

Note: Part A contains 53 MCQs.

Each correct answer will fetch 4 marks while 1 marks will be deducted for each wrong answer.

No marks will be deducted for unattempted questions.

Q.1) What part of the cell is responsible for breaking down and digesting things?

- A.ribosomes
- B.lysosomes
- C.endoplasmic reticulum
- D.vacuole

Q.2) Identify the organelle pictured:



- A.chloroplast
- B.endoplasmic reticulum
- C.golgi apparatus
- D.mitochondria

Q.3) What part of the cell serves as the intracellular highway?

- A.endoplasmic reticulum
- B.golgi apparatus
- C.cell membrane
- D.mitochondria

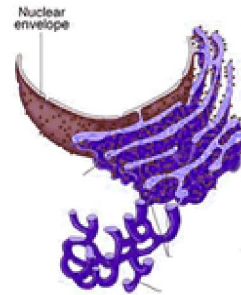
Q.4) Which of the following is found in plant cells, but NOT in animal cells?

- A.cell wall
- B.vacuole
- C.mitochondria
- D.endoplasmic reticulum

Q.5) The jellylike interior of the cell is called the

- A.vacuole
- B.cytoplasm
- C.nucleus
- D.lysosome

Identify the organelle:



Q.6)

- A.golgi apparatus
- B.endoplasmic reticulum
- C.mitochondria
- D.lysosome

Q.7) What part of the cell makes proteins?

- A.lysosomes
- B.mitochondria
- C.ribosomes
- D.vacuole

Q.8) Where are the ribosomes usually located in plant and animal cells?

- A.inside the nucleus
- B.near the cell membrane
- C.on the endoplasmic reticulum
- D.inside the vacuole

Q.9) What part of the cell serves to process, package, and export proteins?

- A.mitochondria
- B.endoplasmic reticulum
- C.nucleolus
- D.golgi apparatus

Q.10) DNA is stored in what organelle?

- A.nucleus
- B.endoplasmic reticulum
- C.cell membrane
- D.lysosome

11. Which of the following is NOT true of chloroplasts?

- a. They synthesize sugar
- b. They contain pigments
- c. They are only found in plants
- d. They appear green because of the chlorophyll

12. Which of the following organelles transports materials inside the cell

- a. lysosome c. mitochondria
- b. chloroplast d. endoplasmic reticulum

13. Which of the following is found in the nucleus?

- a. vacuoles c. mitochondria
- b. chloroplasts d. chromosomes

14. What type of cell has these characteristics: contains DNA but no nucleus, contains

flagella, ribosomes, cytoplasm, and a cell membrane.

- a. plant c. animal
- b. fungi d. bacteria

15. What site regulates what goes in and out of the cell?

- a. cell wall c. cell membrane
- b. vacuole d. nuclear membrane

16. Digestive enzymes or hydrolytic enzymes are terms associated with

- a. ribosomes c. golgi apparatus
- b. lysosomes d. smooth endoplasmic reticulum

17. In which of the following items would you expect to find cells?

- a. strawberry c. silver dollar
- b. eyeglasses d. plastic flower

18. Where is the site of protein synthesis?

- a. nucleus c. ribosome
- b. lysosome d. mitochondria –

19. A cell with relatively few energy needs will probably have a relatively small number of

- a. ribosomes c. mitochondria
- b. lysosomes d. chromosomes

20. Organisms whose cells do not have a nucleus are called

- a. plants c. eukaryotes
- b. organelles d. prokaryotes

21. Which of the following structures are common to both eukaryotic and prokaryotic cells?

- a. nucleus c. both b and c
- b. ribosomes

22. A cell is observed to contain a nucleus, mitochondria and chloroplasts. From this information you can conclude that the cell is:

- a. a plant cell c. a bacterial cell
- b. an animal cell d. a prokaryotic cell

23. Which of the following statements is always true?

a. All cells have a cell wall. c. All cells contain a chloroplast.

b. All cells contain a nucleus. d. All cells have a cell membrane.

24. Plant cells often have a box-like shape because of the

a. nucleus c. cytoplasm

b. cell wall d. cell membrane

25. Which is the "brain" of the cell?

a. nucleus c. golgi bodies

b. chloroplast d. mitochondria

26. The site of ATP production and the site of photosynthesis are the _____ and _____.

a. ribosomes and vacuoles c. mitochondria and chloroplast

b. chloroplast and lysosome d. Golgi complex and chloroplast

27. Which of the following forms of life is NOT eukaryotic?

a. a bacterial cell c. a plant cell like gumamela

b. protist such as an amoeba d. a human cell such as a red blood cell

28. A cell that lacks a nucleus and membrane bound organelles is known as a(an) _____ cell.

a. plant c. eukaryote

b. animal d. prokaryote

29. Which organelle has no membrane?

a. vacuole c. ribosome

b. lysosome d. chloroplast

30. What is the outermost boundary of an animal cell?

a. the cell wall c. the cell membrane

b. the cytoplasm d. the nuclear envelope

31. A common characteristic feature of plant sieve tube cells and most of mammalian erythrocytes is

a. Absence of mitochondria

b. Presence of cell wall

c. Presence of haemoglobin

d. Absence of nucleus

32. Select one which is not true for ribosome

a. Made of two sub units

b. Form polysome

c. May attach to m RNA

d. Have no role in protien synthesis

33. Which of the following features is common to prokaryotes and many eukaryotes?

a. Chromosomes present

b. Cell wall present

c. Nuclear membrane present

d. Sub cellular organelles present

34. Who proposed the fluid mosaic model of plasma membrane?

a. Camillo Golgi

- b. Schleiden and Schwann
- c. Singer and Nicolson
- d. Robert Brown

35. Which of the following statements is true for a secretory cell?

- a. Golgi apparatus is absent
- b. Rough Endoplasmic Reticulum (RER) is easily observed in the cell
- c. Only Smooth Endoplasmic Reticulum (SER) is present
- d. Secretory granules are formed in nucleus.

36. What is a tonoplast?

- a. Outer membrane of mitochondria
- b. Inner membrane of chloroplast
- c. Membrane boundary of the vacuole of plant cells
- d. Cell membrane of a plant cell

37. Which of the following is not true of a eukaryotic cell?

- a. It has 80S type of ribosome present in the mitochondria
- b. It has 80S type of ribosome present in the cytoplasm
- c. Mitochondria contain circular DNA
- d. Membrane bound organelles are present

38. Which of the following statements is not true for plasma membrane?

- a. It is present in both plant and animal cell
- b. Lipid is present as a bilayer in it
- c. Proteins are present integrated as well as loosely associated with the lipid bilayer
- d. Carbohydrate is never found in it

39. Plastid differs from mitochondria on the basis of one of the following features. Mark the right answer.

- a. Presence of two layers of membrane
- b. Presence of ribosome
- c. Presence of chlorophyll
- d. Presence of DNA

40. Which of the following is not a function of cytoskeleton in a cell?

- a. Intracellular transport
- b. Maintenance of cell shape and structure
- c. Support of the organelle
- d. Cell motility

41. Which of the following is not correct?

- (a) Robert Brown discovered the cell.
- (b) Schleiden and Schwann formulated the cell theory.
- (c) Virchow explained that cells are formed from pre-existing cells.
- (d) A unicellular organism carries out its life activities within a single cell.

42. New cells generate from

- (a) bacterial fermentation (b) regeneration of old cells
(c) pre-existing cells (d) abiotic materials

43. Which of the following is correct:

- (a) Cells of all living organisms have a nucleus.
(b) Both animal and plant cells have a well defined cell wall.
(c) In prokaryotes, there are no membrane bound organelles.
(d) Cells are formed de novo from abiotic materials.

44. What controls most of the cell processes and contains the hereditary information of DNA.

- A.Mitochondria
B.Chloroplast
C.Nucleus
D.Nucleolus

Q.45) What is a Cell membrane?

- A. A thin flexible barrier around the cell that regulates transport
B. A rigid cover that provides support for the cell
C. The place where light energy, water, and carbon dioxide are used
D. Convert solar energy to chemical energy

Q.46) What is the main function of the Cell Wall?

- A.To protect and provide support for the cell
B.Builds proteins

- C.Convert solar energy to chemical energy
D.Takes in carbon dioxide

What regulates what enters and leaves

Q.47) *the cell and provides protection and support?*

- A.Nucleus
B.Ribosomes
C.Cell Wall
D.Cell Membrane

Q.48) *You will not find a cell wall in which of these kinds of organisms?*

- A.Fungi
B.Animal
C.Plants
D.All of the above

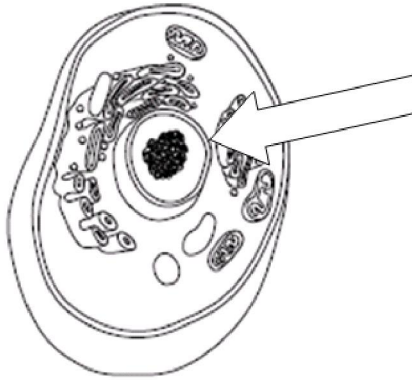
Q.49) *Which organelle would you expect to find in a plant cell but not a animal cell?*

- A.Smooth endoplasmic reticulum
B.Mitochondria
C.Ribosome
D.Chloroplast

Q.50) *Which organelle makes food?*

- A.The vacuole
B.The nucleous
C.The chloroplast
D.The ribosome

51. *What part of the cell is identified with the arrow?*



14. b 19. c 24. b 29. c

15. c 20. d 25. a 30. C

31 a

32 d 33b 34c 35b

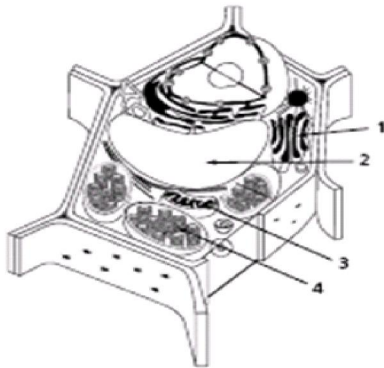
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- A.The nucleus
- B.The ribosome
- C.The vacuole
- D.The chloroplast

Q.52) *Which organelles helps provide cell with energy and release energy?*

- A.Rough endoplasmic reticulum
- B.Golgi apparatus and ribosomes
- C.Mitochondria and chloroplasts
- D.Smooth endoplasmic reticulum

53. Which part of the plant cell is the chloroplast?



11. c 16. b 21. b 26. c

12. d 17. a 22. a 27. a

13. d 18. c 23. d 28. d