

Chapter 5

ANSWERS

Multiple Choice Questions

- | | | | |
|---------|---------|---------|---------|
| 1. (c) | 2. (b) | 3. (c) | 4. (c) |
| 5. (c) | 6. (a) | 7. (b) | 8. (b) |
| 9. (a) | 10. (a) | 11. (c) | 12. (a) |
| 13. (d) | 14. (d) | 15. (d) | 16. (b) |
| 17. (a) | 18. (b) | 19. (c) | 20. (c) |
| 21. (a) | 22. (b) | 23. (a) | 24. (b) |
| 25. (a) | 26. (a) | 27. (b) | 28. (c) |
| 29. (d) | | | |

Short Answer Questions

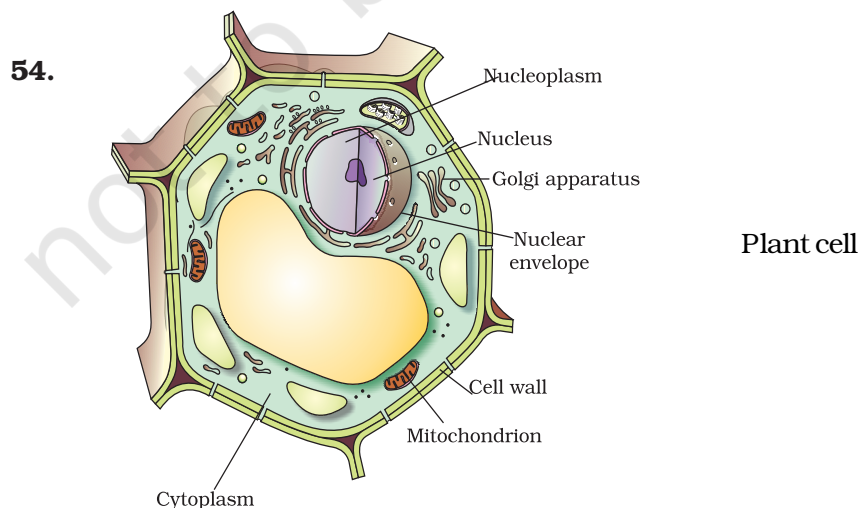
30. Lysosomes are known as 'suicide-bags' because when cell gets damaged during the disturbance in cellular metabolism, lysosomes may burst and the digestive enzymes thus released digest their own cell.
31. **Hint—** Cell → tissue → organ → organ system → organism
32. Soap solution is very concentrated - Hypertonic solution, so water moves out of your finger cells by osmosis.
33. **Hint—** Cell wall is absent in animals
34. Exosmosis in intestine causes dehydration
35. Ribosomes
36. Diffusion and osmosis respectively
37. Exosmosis
38. **Hint—** (b) Onion peel has cell wall and RBC does not have cell wall
39. **Hint—** Small vesicles associated with plasma membrane
40. a—iv; b—v; c—iii; d—i; e—ii

41. Flower and Fruit— Chromoplast
Leaves of the plant— Chloroplast
Root of the plant— Leucoplast
42. (a) Endoplasmic reticulum (b) Mitochondria
(c) Golgi body (d) Lysosome
(e) Vacuole (f) Chloroplast
(g) Nucleus
43. **Hint**— Bacterial cell is a prokaryote
Onion peel cell is a plant cell— an eukaryote
44. **Hint**—Diffusion and osmosis
45. **Hint**—Endocytosis
46. **Hint**—Mitochondria and plastids
47. **Hint**—Remove debris of the cell
48. **Hint**—Nucleus
49. **Hint**—(a) Leucoplast (b) Chloroplast (c) Chromoplast
50. **Hint**—Vacuoles not only store many important substances, they also contain cell sap that give turgidity to cell.
51. **Hint**—Chromosomes are made up of chromatids and chromatids are made up of chromatin
52. (a) Exosmosis (b) Endosmosis (c) No effect

Long Answer Type Questions

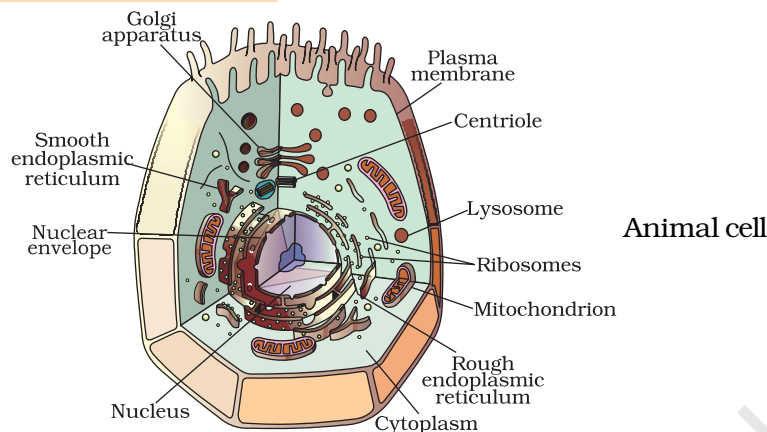
53. **Hint**— (a) Nucleus
(b) Golgi apparatus
(c) Cell wall
(d) Cytoplasm
(e) Nucleoplasm.

Diagram of the plant cell can be drawn and label it with parts mentioned above



Plant Cell	Animal Cell
1. Cell wall present 2. Plastids are present 3. It has a large vacuole 4. Centriole absent	1. Cell wall absent 2. Plastids are absent 3. It has a small vacuole 4. Centriole present

55.



56. Any electron microscopic diagram of Nucleus can be drawn. It is a membrane bound organelle.

57. The ribosomes, which are present in all active cells, are the sites of protein synthesis. Endoplasmic reticulum helps in transporting these proteins to various places. The smooth endoplasmic reticulum help in manufacture of fat and lipids which alongwith proteins help in building the cell membrane.

Smooth Endoplasmic Reticulum (SER)	Rough Endoplasmic Reticulum (RER)
SER has no ribosomal particles on the surface, hence look smooth SER helps in the manufacture of lipids and fat molecules	RER has particles of ribosome on the surface. Ribosomes are the sites of protein synthesis.

58. **Hints**—(a) First it swells due to endosmosis and then exosmosis occurs and it shrinks. (b) It will lose water and shrink. (c) The cell will die. (d) The cell gets killed on boiling so no plasmolysis (d) All sorts of vesicle formation stops.

59.

Plant cell

