

D.K.M COLLEGE FOR WOMEN (AUTONOMOUS) VELLORE -1

QUESTION BANK

B.Sc., BIOCHEMISTRY

I B.Sc., BIOCHEMISTRY AND

ALLIED BIOCHEMISTRY

S.NO	SEMESTER	ODD/ EVEN	TITLE OF THE PAPER
1	I	ODD	CELL BIOLOGY
2	II	EVEN	BIOORGANIC CHEMISTRY
3	I	ODD	ALLIED – BIOCHEMISTRY I
4	II	EVEN	ALLIED – BIOCHEMISTRY II

I B.Sc Biochemistry

Semester : I

Title of the paper: CELL BIOLOGY

Subject Code : 15CBC1A

SECTION-A 2 MARKS

1. Define cell.
2. Define cell theory.
3. Nucleoid.
4. Permeability.
5. Suicidal bag
6. Protoplasm theory
7. Explain the function of cell.
8. Write the objections of cell theory
9. Explain organismal theory
10. Define prokaryotic cells.
11. Explain size of cells.
12. Explain shape of cells.
13. Draw structure of plant cell.
14. Mitochondria are the power house of the cell, why?
15. Define Tissue.
16. Define Epithelial tissue.
17. Connective tissue.
18. Define muscle tissue.
19. Write about function of tissues.
20. Draw the structure of nervous tissue.
21. Define Desmosomes.
22. Define keratinisation.
23. Define shapes of cells.

24. Explain Blood.
25. Define Plasmalemma.
26. Define Endocytosis
27. Define Tight Junction.
28. Define Gap Junction.
29. Add a note on Active transport.
30. What is Passive transport.
31. Explain Plasma membrane.
32. Define Lattice model.
33. Define Micellar model.
34. Explain interdigitations.
35. Define ion channels.
36. Write any three functions of plasma membrane.
37. Endocytosis.
38. Define suicidal bags.
39. Power house of the cell.
40. 4.Explain Microbodies.
41. Define vacuoles.
42. Write the function of Nucleous.
43. Define Lysosomes.
44. Write the functions of Lysosomes
45. Explain Ribosomes.
46. Define Giant Chromosomes.
47. Amitosis.
48. S-phase.
49. Define cell cycle.
50. Define resting phase.
51. Karyokinesis.
52. Cytokinesis.
53. Define Mitosis.
54. Explain Meiosis.

55. Define Heterotypic division.
56. Define Homotypic division.

SECTION-B 5 Marks

1. Differentiate prokaryotic cell from eukaryotic cells.
2. Draw animal cell with its parts.
3. Explain plant cell.
4. Write in detail about animal cell.
5. Differentiate animal cell from plant cell.
6. Write any five cell organelles with its function.
7. Explain Prokaryotic cell structure in detail.
8. Write short notes on Voluntary and involuntary muscle.
9. List out the types of tissue.
10. Give the significance of connective tissues.
11. Explain in detail about connective tissue proper.
12. Write in detail about supporting connective tissue.
13. Explain in detail about fluid connective tissue.
14. Make short note on Muscle tissue.
15. Write short note on nervous tissue.
16. Explain characteristics features of epithelial cell.
17. Write structure of epithelial cell.
18. Explain classification of epithelial cell based on the cell layers.
19. Explain the classification of epithelial cell based on the cell shape.
20. Write short note on the chemical composition and functions of cytoplasm.
21. Discuss about Fluid mosaic model.
22. Write short notes on Intrinsic and extrinsic protein of erythrocyte.
23. Explain Membrane models.
24. Write in detail about active and passive transport of ions.
25. Make short notes on plasma membrane.
26. Explain functions of plasma membrane.

27. Explain the structure of mitochondria.
28. Describe the structure of Golgi complex.
29. Give an account on the structure of Nucleous.
30. Explain about the structure of Ribosomes.
31. Write in detail about lysosomes.
32. Describe the structure of vacuoles.
33. Give an account on the structure of chromosomes.
34. Bring about the salient features of cell cycle.
35. Write the significance of the Mitosis.
36. Explain Amitosis.
37. Describe Meiosis.
38. Write the significance of Meiosis.

SECTION-C 10 Marks

1. Explain the Structure and composition of animal cell in detail.
2. Explain the Structure and composition of plant cell in detail.
3. Differentiate animal from plant cell.
4. Explain in detail about cell organelles with its functions.
5. How you differentiate prokaryotic cell from eukaryotic cell.
6. Explain the Role of various forms of epithelial tissues.
7. Discuss about the various types and functions of tissues.
8. Explain in detail about connective tissue.
9. Write in detail about active and passive transport mechanism.
10. Explain the Mode of transport across membrane.
11. Explain in detail about cytoplasm and plasma membrane.
12. Write in detail about membrane models.
13. Write in detail about specialization structure of plasma membrane.
14. Explain in detail about structure and function of ER.
15. Give a detailed note on Chromosomal structure.
16. Discuss mitochondria structure.
17. Explain in detail about physical and chemical properties of cytoplasm.

18. Write in detail about Golgi complex.
19. Describe about the Meiotic division.
20. Describe about the Mitotic division.
21. Write in detail about cell cycle.