



Octahedral classes, kharadi
2nd floor, yashwant plaza, near bank of India,

Class 09 - Science
fundamental units of life

Maximum Marks: 57

Time Allowed: 2 hours

Section A

- | | |
|---|---|
| 1. Name two varieties of Indian fishes. | 1 |
| 2. Name the two organelles that contain their own genetic material? | 1 |
| 3. Define diffusion. | 1 |
| 4. What is active transport? | 1 |
| 5. What is the common name of mitochondria? | 1 |
| 6. Where are genes located? | 1 |
| 7. Which organelles other than nucleus contain DNA? | 1 |
| 8. What is endocytosis? | 1 |
| 9. Name two structures found in animal cells but not in plant cells. | 1 |
| 10. What is hypertonic solution? | 1 |
| 11. What is hypotonic solution? | 1 |
| 12. Which organelle is the storage sac of solid and liquid materials? | 1 |
| 13. Why is nucleus called director of the cell? | 1 |
| 14. What is the chemical composition of cell wall in plants and fungi respectively? | 1 |
| 15. Which organelle is involved in the formation of lysosomes? | 1 |
| 16. Is the plant cell wall living or dead? | 1 |
| 17. Name two cell organelles, which contain their own genetic material. | 1 |
| 18. Where are proteins synthesized inside the cell? | 1 |
| 19. What is isotonic solution? | 1 |
| 20. What is the outermost layer found in the plant cell? | 1 |
| 21. Which organelle serves as a channel for transport of materials between cytoplasm and nucleus? | 1 |
| 22. What happens to an animal cell when it is placed in a very dilute external medium? Why? | 1 |
| 23. Which structure is called little nucleus? | 1 |
| 24. Where are proteins synthesised inside the cell? | 1 |
| 25. What is cell theory? Who formulated it? | 3 |
| 26. What is the difference between plasma membrane and cell wall ? Give the functions of each one. | 3 |
| 27. Why is plasma membrane called selectively permeable membrane? | 3 |
| 28. What would happen if the plasma membrane ruptures or breaks down. | 3 |
| 29. Name the organelle of the cell, which has membrane-bound sac filled with power full digestive enzymes.
Write its any function in the cells. | 3 |
| 30. What is the function of cellulose in a plant cell? | 3 |
| 31. If you are provided with some vegetables to cook, you generally add salt into the vegetables. After adding salt, vegetables release water. Why? | 3 |
| 32. What is the functional unit of life ? Define it. | 3 |
| 33. Why is the plasma membrane called a selectively permeable membrane? | 3 |
| 34. What would happen to the life of a cell if there was no Golgi apparatus? | 3 |
| 35. If the organisation of a cell is destroyed due to some physical or chemical influence, what will happen? | 3 |