**Tarun Arora**  **R.L. Institute M :9416974837**

**Max Time : 1 hr** **The Fundamental Unit of Life Max Marks : 35**

**CODE : A**

1. Which of the following can be made into crystals ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) A bacterium | b) An amoeba | c) A virus | d) A sperm |

1. Which of these is not related to endoplasmic reticulum ?

a) It behaves as transport channel for proteins between nucleus and cytoplasm.

b) It transport materials between various regions in cytoplasm.

c) It can be the site of energy generation.

d) It can be the site of some biochemical activities of the cell.

1. Find out the false sentences

a) Golgi apparatus is involved with the formation of lysosomes.

b) Nucleus, mitochondria and plastids have DNA ; hence they are able to make their own structural proteins.

c) Mitochondria is said to be the power house of the cell as ATP is generated in them.

d) Cytoplasm is called as protoplasm

1. Which organelle plays a crucial role in detoxifying many poisons and drugs in the cell ?

|  |  |
| --- | --- |
| a) Golgi apparatus | b) Lysosomes |
| c) Smooth endoplasmic reticulum | d) Vacuoles |

1. The undefined nuclear region of prokaryotes are also known as

|  |  |  |  |
| --- | --- | --- | --- |
| a) nucleus | b) nucleolus | c) nucleic acid | d) nucleoid |

1. Which of the following is not a function of vacuole ?

|  |  |
| --- | --- |
| a) Storage | b) Provide turgidity and rigidity of the cell |
| c) Waste excretion | d) Locomotion |

1. Silver nitrate solution is used to study

|  |  |
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| a) endoplasmic reticulum | b) Golgi apparatus |
| c) nucleus | d) mitochondria |

1. Organelle other than nucleus , containing DNA is

|  |  |
| --- | --- |
| a) endoplasmic reticulum | b) Golgi apparatus |
| c) mitochondria | d) lysosome |

1. Kitchen of the cell is

|  |  |
| --- | --- |
| a) mitochondria | b) endoplasmic reticulum |
| c) chloroplast | d) Golgi apparatus |

1. Lipid molecules in the cell are synthesized by

|  |  |
| --- | --- |
| a) Smooth endoplasmic reticulum | b) Rough endoplasmic reticulum |
| c) Golgi apparatus | d) Plastids |

1. Cell arise from pre-existing cell was stated by

|  |  |  |  |
| --- | --- | --- | --- |
| a) Haeckel | b) Virchow | c) Hooke | d) Schleiden |

1. Cell theory was given by

|  |  |  |  |
| --- | --- | --- | --- |
| a) Schleiden & Schwann | b) Virchow | c) Hooke | d) Haeckel |

1. Organelle without a cell membrane is

|  |  |  |  |
| --- | --- | --- | --- |
| a) Ribosome | b) Golgi apparatus | c) chloroplast | d) nucleus |

1. 1 μm is

|  |  |  |  |
| --- | --- | --- | --- |
| a) 10 –6 m | b) 10 –9 m | c) 10 –10 m | d) 10 –3 m |

1. Lysosome arises from

|  |  |
| --- | --- |
| a) endoplasmic reticulum | b) Golgi apparatus |
| c) nucleus | d) mitochondria |

1. Living cell was discovered by

|  |  |  |  |
| --- | --- | --- | --- |
| a) Robert Hooke | b) Purkinje | c) Leeuwenhoek | d) Robert brown |

1. Which of the following microscope is used to observe sub-cellular structures ?

|  |  |
| --- | --- |
| a) Simple microscope | b) Compound microscope |
| c) Electron microscope | d) All of these |

1. Name the process by which CO2 moves out of the cells.

|  |  |  |  |
| --- | --- | --- | --- |
| a) Dialysis | b) Diffusion | c) Phagocytosis | d) Pinocytosis |

1. Name the process by which water moves across the selectively permeable membrane.

|  |  |  |  |
| --- | --- | --- | --- |
| a) Dialysis | b) Diffusion | c) Osmosis | d) Exocytosis |

1. If a membrane allow passage of solvent freely but selects the passage of specific solute particles, it is called as

|  |  |
| --- | --- |
| a) impermeable | b) permeable |
| c) semi- permeable | d) selectively permeable |

1. The two arms of each chromosome are termed

|  |  |  |  |
| --- | --- | --- | --- |
| a) chromatin fibres | b) centromeres | c) chromatids | d) none of these |

1. Inner membrane of mitochondria and chloroplasts is

|  |  |
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1. Which type of plastids provide various colours to flowers to attract insects for pollination ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Chloroplasts | b) Amyloplasts | c) Aleuroplasts | d) Chromoplasts |

1. What is the energy currency of the cell ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) ADP | b) AMP | c) ATP | d) FAD |

1. Transporting channels of the cell ………………….. .
2. Power house of the cell …………………… .
3. Packaging and dispatching unit of the cell ……………………….. .
4. Digestive bag of the cell …………………………….. .
5. Storage sacs of the cell …………………………………. .
6. Control room of the cell ……………………………… .

**True / False Statements**

1. The grana are the sites of dark reaction during photosynthesis
2. ATP, the energy currency of the cell is expanded as Adenosine triphosphate
3. Golgi complex modifies and packages the material coming from the ER or synthesized in the Golgi itself.
4. Animal cells have a centrosome containing centrioles but plant cell do not have them
5. DNA, present in the matrix of mitochondria, is circular

**Tarun Arora**  **R.L. Institute M :9416974837**

**Max Time : 1 hr** **The Fundamental Unit of Life Max Marks : 35**

**CODE : B**

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**Answers**

**The Fundamental Unit of Life [CLASS = 9th ]**

|  |  |
| --- | --- |
| **CODE : A** | **CODE : B** |
| 1. c | 1. a |
| 2. c | 2. a |
| 3. d | 3. c |
| 4. c | 4. c |
| 5. d | 5. c |
| 6. d | 6. d |
| 7. b | 7. a |
| 8. c | 8. a |
| 9. c | 9. c |
| 10. a | 10. d |
| 11. b | 11. d |
| 12. a | 12. d |
| 13. a | 13. c |
| 14. a | 14. b |
| 15. b | 15. b |
| 16. c | 16. c |
| 17. c | 17. c |
| 18. b | 18. c |
| 19. c | 19. b |
| 20. d | 20. b |
| 21. c | 21. c |
| 22. b | 22. d |
| 23. d | 23. b |
| 24. c | 24. c |
| 25. Endoplasmic  reticulum | 25. Golgi apparatus |
| 26. Mitochondria | 26. Nucleus |
| 27. Golgi apparatus | 27. Endoplasmic  reticulum |
| 28. Lysosome | 28. Mitochondria |
| 29. Vacuole | 29. Lysosome |
| 30. Nucleus | 30. Vacuole |
| 31. False | 31. True |
| 32. True | 32. True |
| 33. True | 33. True |
| 34. True | 34. False |
| 35. True | 35. True |