GOVT. AUTONOMOUS COLLEGE. ROURKELA
UG IST YEAR (Core Paper - 2) - BOTANY
QUESTION BANK

Long Question :-

- Describe the composition and characteristic features of buffer solution.
- Narrate the structure and functions of monosaccharides.
- What are lipids? Give a brief account of structure and function of fatty acids.
- Give a comparative account of saturated and unsaturated fatty acids.
- What are proteins? Describe the different structures of proteins.
- Describe the types of nucleic acids. Illustrate the structure of t-RNA.
- What is enzyme inhibition? Narrate different types of enzyme inhibition.
- What is mitosis? Describe the different stages of mitosis.
- What is cell cycle? Describe eukaryotic cell cycle. How the cell cycle in regulated?
- Discuss on the origin of eukaryotic cell and symbiotic theory?
- Give a comparative account of endocytosis and exocytosis?
- Give an illustrated account of structure of nucleus?
- Structure and function of mitochondria?
- Structure and function of Golgi apparatus and lysosome?

Short question :-

- Polar covalent bonds
- Hydrogen bonds
- Disulphide bond
- The PH scales
- Half- life
- mRNA
- Protein denaturation
- Z=DNA
- Chemical properties of triacyl glycerides
- Purines and pyrimidines
- Cofactors
- Michaelis constant
- Coenzymes
- Significance of mitosis
- Crossing - over
- Significance of meiosis

- Synaptonemal complex
- Synapsis
- Active membrane support
- Fluid mosaic model
- Difference between mitosis and meiosis

FILL IN THE BLANKS :-

- The lipids produce metabolites through _____in the tissues.
- Fats are esters of _____with ____.
- The soluble part of the cytoplasm is called____.
- Non-viscous colloidal solution is called_____.
- The inner membrane of mitochondria is fairly____.
- _____division technique is similar in mitochondria and bacteria.