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**B.Sc.(BT) (2013 to 2017) (Sem.-2)**

**Subject Code : BSBT-102**

**Paper ID : [F0232]**

**Max. Marks : 60**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**Q1. Answer briefly :**

- Give the names of any two dye used for visualising eukaryotic cells.
- Which cell organelle is said to be the powerhouse of a cell and why?
- Which chemical is used as fixative or fixing agent?
- What is the function of lysosomes in cell?
- Name the different stages/phases of a cell cycle.
- Cell is a basic unit of life. Why?
- What is a cryoprotectant. Name any one.
- What is karyotyping?
- What is the difference between a cell and a tissue?
- What is apoptosis?

### SECTION-B

- Q2. Explain briefly about the cell theory.
- Q3. Discuss about the structure and function of nerve cells present in multicellular organism.
- Q4. Give a brief account of structure of chromatin.
- Q5. What is freeze drying? Give the steps involved in freeze drying.
- Q6. Discuss various methods for cytophotometric analysis.

### SECTION-C

- Q7. Write short notes on **any two** :
- a) Cytoskeletal structure
  - b) Ribosomes
  - c) Cell division
  - d) Microtomy
- Q8. Give detail account for different types of cells present in a multicellular organism.
- Q9. Give the structure and function of rough and smooth endoplasmic reticulum.