

GOVERNMENT AUTONOMOUS COLLEGE, ROURKELA

DEPARTMENT OF BIOTECHNOLOGY

QUESTION BANK

PAPER- C3

TITLE: CELL BIOLOGY AND GENETICS

1. Fill in the blanks:

- a. The membrane lipid molecule assemble spontaneously into bilayers when placed in water are form a closed spherical structure known as _____.
- b. Most common type of phospholipid in the cell membrane of nerve cells is _____.
- c. Polar bears maintain their body temperature because they have more of _____.
- d. The cyclins that have essential functions in S-phase of cell cycle _____.
- e. _____ is the post-translational modification in a mammalian system.

2. Very short questions:

- a. What is cell membrane?
- b. What is the function of cell membrane?
- c. What is the steps involve in cell cycle?
- d. What is Mendelian principle?
- e. What is introns?
- f. What is exons?
- g. What is cistrans?

3. Short type questions:

- a. What are microtubules?
- b. What are microfilaments?
- c. What are lysosomes?
- d. What is mitochondria?
- e. What is ribosomes?

4. Long type questions:

- a. Differentiate between Prokaryotic and Eukaryotic cells.
- b. Describe the cellular components of Prokaryotes.
- c. Describe mitosis.
- d. Describe meiosis.
- e. Describe mechanism of sex determination.