

THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University) Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

PGZ 4424

Cell Biology

Max. : 75 marks Time: 3 hours

Answer any FIVE questions.

5 X 15 = 75

1. Explain the principle of electron microscopy and the methods for preparation of materials for observation in an electron microscope.

2. Describe the membrane architecture of a cell in the light of fluid mosaic model with a neat diagram.

3. Give a detailed account on gap junction and tight junction.

4. Elucidate the molecular mechanism of cell signalling by peptide hormones,

- 5. Discuss the role of microtubule in ciliary movement.
- 6. With the help of neat sketch explain the orders of DNA packaging.
- 7. Enlist the stages and process of metastasis.
