



# THE AMERICAN COLLEGE, MADURAI

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

## Backlog Arrear Examination, March 2021

**BCH 3422**

**Cancer Biology & Immunology**

**Max Marks: 75**

**Time: 3 Hrs.**

### PART A

**Answer any FIVE questions each not exceeding 4 pages:**

**(5 x 15 = 75)**

1. Explain in detail about Structure and function of Immunoglobulin with a neat diagram.
2. Define lymphoid organ. Explain the structure and immunological function of thymus.
3. Describe the principle of ELISA and explain indirect and sandwich ELISA with suitable diagram.
4. Explain the clinical features and pathology of cancer in detail.
5. Define viral carcinogenesis. Explain in detail on the source, causes and molecular expression of tumor viruses with a neat diagram.
6. Explain the following:
  - (a) Cancer associated genes
  - (b) Tumour suppressor genes
7. Explain about chemotherapy and gene therapy in cancer treatment.

