



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

Course Code: MIC 3422

Max: 75 Marks

Course Title: Immunotechniques And Technology

Time: 2 Hours

Section A

Answer any **FIVE** questions

5 × 15= 75 marks

1. Elaborate the different types of ELISA and their applications with neat illustrations. Add a note on the enzymes used in ELISA and their corresponding substrates used for detection.
2. Describe how Fluorescence activated cell sorter (FACS) can be used for the enumeration of T cells.
3. Discuss the different types of radial and double immunodiffusion and their applications.
4. Illustrate and explain the strategy for the production of monoclonal antibodies and explain the applications of monoclonal antibodies in various fields of medicine.
5. Describe the development of any three types of vaccines with illustrations wherever necessary.
6. Explain the principle behind ELISPOT and Western Blot with suitable examples of its application in immunodiagnostics.
7. Explain the following: a) chronic granulomatous disease b) hemolytic disease c) congenital asplenia