



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

CHE 1462

CHEMISTRY FOR BOTANIST-II

Marks: 75

Time: 3 Hrs

Answer any FIVE questions

5 x 15=75

1. Briefly explain about Bomb calorimeter.
2. What is enzyme catalysis? Drive Michaelis Menton equation for enzyme catalyzed reaction and write its applications.
3. Derive Kirchoff's equation.
4. Discuss the instrumentation method, principle and applications of UV spectroscopy with neat diagram.
5. Determine the CFSE for d2; d4; d5; d7 and d8 of octahedral and tetrahedral complexes.
6. Explain the behaviour of plane polarized light and in detail explain the working procedure of polarimeter and its applications.
7. Write the theory of IR spectroscopy.