



# 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

**CHE/CHS 3611**

**ADVANCED ORGANIC CHEMISTRY**

**MAX : 75 MARKS**

**Time: 3 Hrs**

**(Answer any FIVE questions)**

**5X15 =75**

1. a) Outline the classification of aminoacids with suitable examples.  
a) Discuss the applications of enzymes.
2. Write notes on a) Solid phase peptide synthesis.  
b) Hydrogenation of oils. (9+6)
3. a) What are nucleosides and nucleotides? Give the laboratory synthesis of nucleotides.  
b) Explain genetic code and heredity. (4+4+7)
4. a) How is ring size of glucose determined?  
b) What are polysaccharides? Differentiate starch from cellulose. (6+3+6)
5. Explain the mechanism of a) mutarotation b) Osazone formation (8+7)
6. a) Outline the classification of alkaloids.  
b) Elucidate the structure of nicotine. (6+9)
7. State and explain isoprene rule. How is structure of camphor elucidated? (5+10)