Sanjay Ghodawat University, Kolhapur

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

2020-21

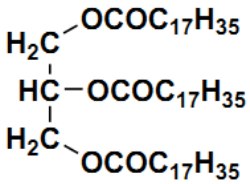
EXM/P/09/00

Year and Program: 2020-21/ T.Y. B.Sc.	**School of Science**	**Department of Chemistry**
Course Code: CHS301	**Course Title: Organic Chemistry**	**Semester : V**
Day : Tuesday **Date :15.12.2020**	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

Instructions: 1) All Questions are compulsory.

Q.1	**Answer the following (any Two)**	**Marks**	Bloom's Level	CO
a)	Write all possible conformations of cyclohexane and their energies. Comment on the stability of these conformations.	**8**	L2	CO1
b)	Give the classification of the poly-nuclear aromatic hydrocarbons. Explain *Howarth* method for the preparation of naphthalene. Give any two reaction of naphthalene.	**8**	L3	CO2
c)	Explain *Paal-Knorr* synthesis of furan with mechanism. Write *Vilsmeier–Haack* reaction of furan.	**8**	L2	CO3

Q.2	**Answer the following (any two)**			
a)	How indole is prepared by *Madelung* Synthesis? Explain why electrophilic substitution take place at 3-postion in indole?	**8**	L4	CO3
b)	Explain *Hoffmann's* exhaustive methylation and *Emde's* degradation method used to find out structural fragment of alkoid molecules,	**8**	L3	CO4
c)	What is the significance of the acid value, saponification value, and iodine value? Calculate saponification value of the following ester.	**8**	L3	CO5



Q.3 Answer the following (any two)

a)	How will you prepare quinoline by using i) o-amino benzaldehyde and acetaldehyde and ii) Aniline and aldehydes? List the applications / uses of quiunoline.	**9**	L5	CO3
b)	Write in detail isolation, structure elucidation and synthesis of Nicotine.	**9**	L3	CO4
c)	Explain with detailed reactions involved how will you prepare paracetamol and Ibuprofen? Give it's the medical application.	**9**	L4	CO5