

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE
Winter End Semester Examination – Dec 2019

Course: F.Y.B. Tech

Subject: Engineering Chemistry (CHM103/CHM203)

Date: 16/12/2019

Sem: I

Marks: 60

Duration: 3 Hr.

Instructions to the Student:

- 1 Each question carries 12 marks.
- 2 Attempt any FIVE questions of the following.
- 3 Illustrate your answers with neat sketches, Diagram etc. Whenever necessary.

		(Level / CO)	Marks
Q.1	Solve Any Two questions of the following. A) Explain Zeolite process of softening of water with its advantages and disadvantages B) Write a note on Biological Oxygen Demand (BOD). C) How does the hardness of water determined by using EDTA method.	01 01 01	06 06 06
Q.2	Attempt the following questions. A) Explain in detail Phase diagram of Water system B) State Phase Rule equation. Explain the term Phase and Component with suitable examples.	02 02	06 06
Q.3	Attempt the following questions. A) Explain the Froth-Flotation & Magnetic separation method for concentration of ore. B) Explain the reduction of ore by Smelting process	03 03	06 06
Q.4	Solve Any Two questions of the following. A) Explain Proximate Analysis of Coal. B) Give the classification of fuel and explain characteristics of a good fuel. C) Discuss the type of Lubrication with examples.	04 04 04	06 06 06
Q.5	Attempt the following questions. A) Explain Synthesis, Physical, Chemical properties and uses of Pyridine. B) How does ethyl alcohol manufacture from molasses by fermentation Process	05 05	06 06
Q.6	Solve Any Two questions of the following. A) Write a note on : Conductometric titrations B) Explain Ostwald's theory of acid base indicators. C) Write a note on: Glass electrode.	06 06 06	06 06 06

Paper End