

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination (Supplementary) – Dec. 2018

Course: B. Tech (All Branches)

Subject: Engineering Chemistry

Date: 01/12/2018

Marks: 60

Semester: I/II

Sub Code: CHM103/ CHM203

Duration: 3 Hr.

Instructions to the Students

1. Each question carries 12 marks.
2. Attempt any five questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

(Marks)

Q.1. Attempt Any Two questions of the following.

- | | |
|---|----|
| a) Explain Zeolite process of softening of water with its advantages and disadvantages. | 06 |
| b) How does the Hardness of water determined by EDTA Complexometric method? | 06 |
| c) Write note on: Dissolved Oxygen. | 06 |

Q. 2. a) Explain the term Components and Degrees of Freedom involved in it with examples.

06

b) Explain one component Sulphur system with phase diagram.

06

Q.3. a) Explain any two physical methods of concentrations of ore.

06

b) Describe the process of Electrolytic Refining of crude copper metal.

06

Q.4. Attempt Any Two questions of the following.

- | | |
|--|----|
| a) What are the types of fuels and characteristics of good fuel? | 06 |
| b) Explain in detail the Proximate Analysis of Coal. | 06 |
| c) Describe the Thick film and Extreme pressure lubrication with examples? | 06 |

Q.5. a) How does Ethyl alcohol manufactured from molasses by Fermentation process?

06

b) Explain synthesis, physical-chemical properties and uses of Pyridine.

06

Q.6. Attempt Any Two questions of the following.

- | | |
|--|----|
| a) Explain Quinonoid theory of Acid Base Indicator. | 06 |
| b) Write note on: Glass Electrode. | 06 |
| c) What is Cell Constant and how it can be determined? | 06 |

*** End***