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FIRST SEMESTER

Roll No. ...
D1012 K151001/506

B.Tech.IAI

END SEMESTER EXAMINATION

Nov/Dec.-2015

AC-101 CHEMISTRY

Time: 3 Hours

Max. Marks: 40

Note: Answer any **EIGHT** questions. All questions carry equal marks
Assume suitable missing data, if any.

1. Explain any two methods of precipitation titration by taking suitable example. *6.25*

2. Find out the atom economy of fermentation of sugar to ethanol reaction. *1*

3. What is finger print region in IR spectroscopy? Write its significance.

What is Hooke's law?

4. Calculate λ_{max} using Woodward – Fiesher rule: *1*



5. What is Zeigler-Natta catalyst? Explain the mechanism of co-ordination polymerisation. *1*

6. Write six principles of green chemistry. Explain green solvents in detail. *1*

7. What do you mean by enantiotropy? Draw and explain all the triple points existing in the phase diagram of sulphur. *1*

8. What is Nitrogen rule in mass spectrometry? How many NMR signals are expected in 1-chloropentane and butanol. Show their splitting as well. *1*

9. Write short note on any two of the following:

- (a) Electroplating
- (b) Secondary batteries
- (c) Eutectic mixture