

MAHAVIR EDUCATION TRUST'S SHAH & ANCHOR KUTCHI ENGINEERING COLLEGE,
CHEMBUR

Internal Term Test - I

FE SEM-1

SUBJECT: APPLIED CHEMISTRY -1

TIME: 1HR

DATE: - 26.10.2015

MARKS: 20

- (1) Question no.1 is compulsory.
- (2) Attempt any one - question from Q2. & Q3
- (3) All question carry equal marks.

Q: 1 Attempt any five of the following

- a. Define Gibbs phase rule.
 - b. Explain cloud pt and pour pt.
 - c. What is RCC ?
 - d. What are ~~some~~ nano materials ?
 - e. How are refractories classified ?
 - f. 1.3 ml of oil required 0.8 ml of 0.001 N KOH for neutralisation. The calculate the acid value
Density = 0.89
- [10]
- Handwritten notes:*
D.W. //
M.C.D.
20/10/15

Q: 2

- a) 3.0 g of liquid lubricant was saponified with KOH solution . After saponification, the mixtures was titrated against 0.5 N HCL solution. The burette reading was found to be 12 ml. If blank titration reading was 36 ml, calculate the saponification value of the lubricant. [05]

OR

- b) Draw a neat phase diagram of the one component water system and explain with reference to (i) curves ,(ii) Triple pt . [05]

Q: 3

- a) Explain manufacturing of Portland cement (wet process) with a labelled diagram of rotary kiln. [05]
- b) What are carbon nanotubes? Give their preparation and properties. (any two methods) {05}