



Laxmi Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai)
(Accredited by National Board of Accreditation, New Delhi)*

A - Block, Thakur Educational Campus,
Shyamnarayan Thakur Marg, Thakur Village,
Kandivali (East), Mumbai - 400 101.

Tel.: 6730 8000 / 8106 / 8107

Fax : 2846 1890

Email : tcet@thakureducation.org

Website : www.tcetmumbai.in • www.thakureducation.org

* Accredited Programmes : • Computer Engineering • Electronics & Telecommunication Engineering • Information Technology (w.e.f.: 16-09-2011 for 3 years)



ISO 9001 : 2008 Certif

TERM TEST-II APPLIED CHEMISTRY-II

YEAR/SEM: F.E. /II
BRANCH: All

DATE : 16/04/2015
TIME : 1:30-2:30 pm

MARKS: 15

Note: Question No. 1 is compulsory.

Atomic weight:-C=12,H=1,O=16,N=14,S=32

Q. 1 Answer the following:

(5M)

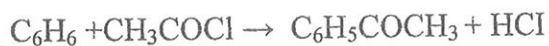
- What is power alcohol?
- What are the advantages of catalytic cracking over thermal cracking?
- What is fiber reinforced composites?
- What is the concept of Green solvent?
- Write compositions of Duralium?

Q.2 What is cracking? Discuss the fixed bed catalytic cracking method in detail with neat labeled diagram.

(5M)

OR

Q.2a) Calculate % Atom economy for the following reaction w.r.t to Acetophenone



(2M)

b) A gaseous fuel has the following composition by volume $\text{H}_2=50\%$, $\text{CH}_4=30\%$, $\text{C}_2\text{H}_4=5\%$, $\text{CO}=10\%$, $\text{CO}_2=2\%$, $\text{N}_2=1\%$, $\text{O}_2=2\%$ Calculate the volume of air required for complete combustion of 1m^3 of this gas.

(3M)

Q.3 Give conventional and greener route of production of indigo and express the green chemistry principle addressed in this case.

(5M)

OR

Q.3 What are the different methods to obtain metal powder? Explain any two methods in detail.

(5M)