

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE – 27

M.Sc. CHEMISTRY OPEN ELECTIVE-III SEMESTER

MID TERM EXAMINATION- August 2016

CHOE 9516- CHEMISTRY OF MATERIALS

Time : 1 Hour

Max. Marks: 20

PART – A

Answer any FOUR of the following :

(4 x 2 = 8)

1. Mention any four sources of organic compounds.
2. Give an example each of an industrially useful organic compound with the following functional group and any one industrial use i) carboxylic acid ii) alcohol.
3. What do you mean by octane number of gasoline? Give an example of an octane number enhancer.
4. What are the different types of chemical reactions?
5. With the help of a chart indicate composition of matter.
6. What are the important roles of a chemist?

PART – B

Answer any TWO of the following:

(2 x 6 = 12)

7. a) What do you understand by catalytic reforming? Give an example each of environmentally friendly antiknock and an antifreeze.
b) Give the industrial application of halogenated hydrocarbons. What are their disadvantages? Explain briefly. **(3+3)**
 8. a) What do you mean by essential fatty acid? What is the meaning of medical condition " artherosclerosis"
b) What is the biological significance of i) starch ii) glycogen iii) cellulose as polysaccharides **(3+3)**
- OR
9. a) Explain the effect of cyanide poison in humans. **(1.5)**
b) What is meant by green chemistry? **(1.5)**
c) Name the chemical reagent used for removing heavy metal poisoning from the body. Give its structure. **(3)**
 10. a) Give a brief account on chemical industries and its role on economic growth of the country.
b) Chemistry really is the central science: substantiate **(3+3)**