

First Mid-Term Examination Even-Semester, 2017-18

Course: B.Tech.

Branch: ME, EC & EN

Year: First

Subject with Code: Engineering Chemistry (AHC-1101)

Time: 1 Hour

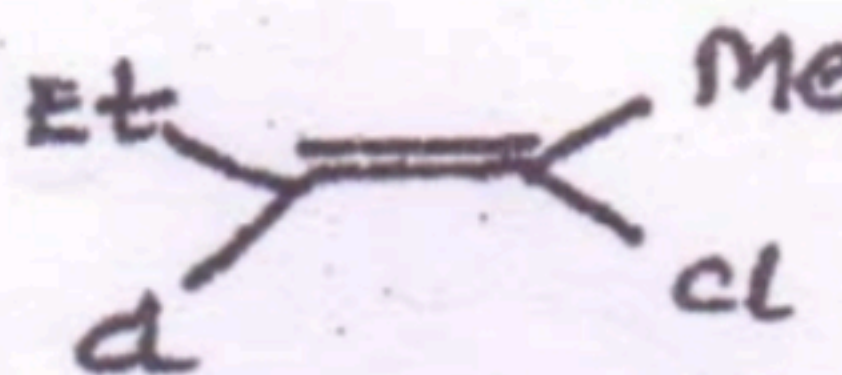
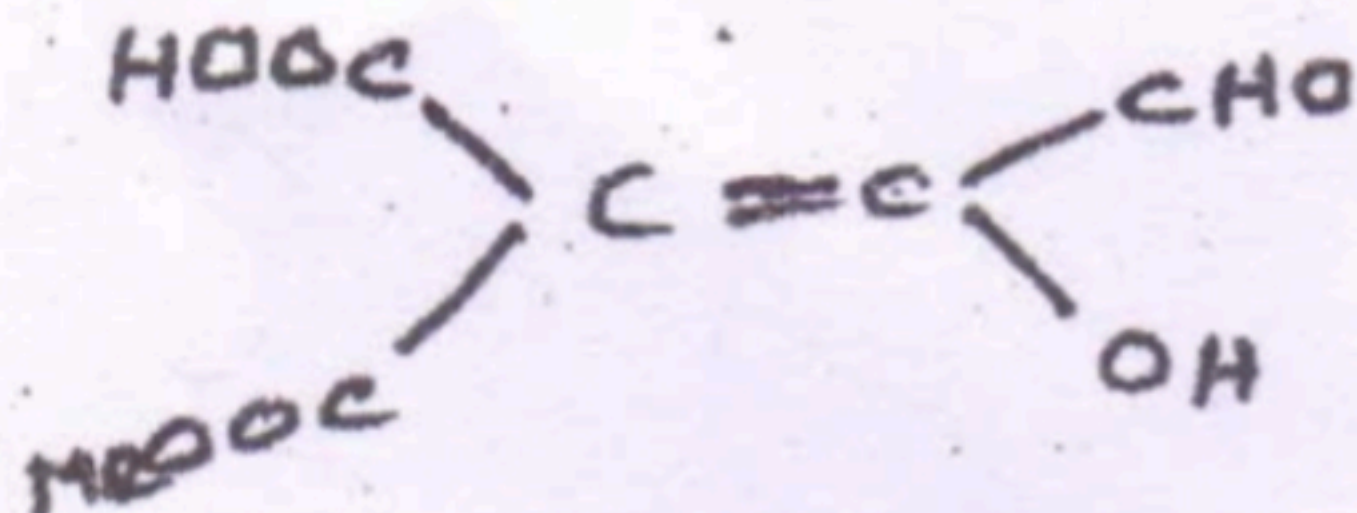
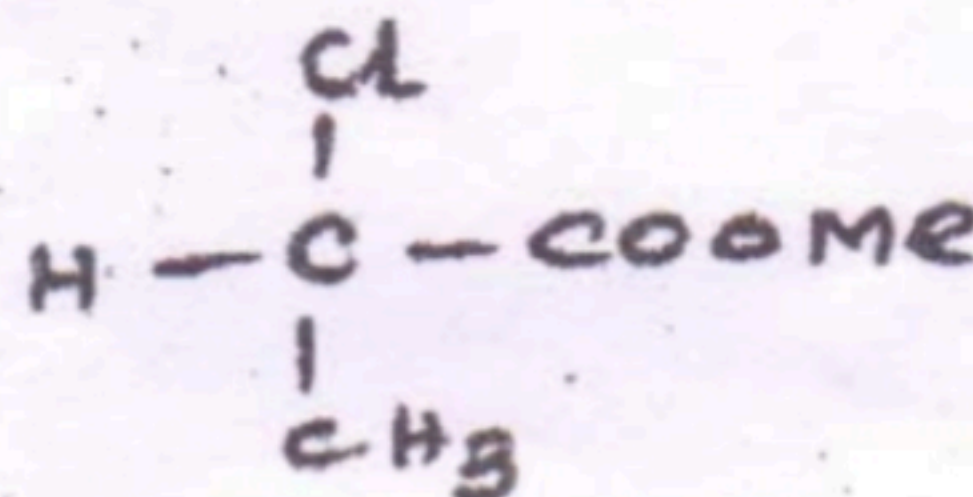
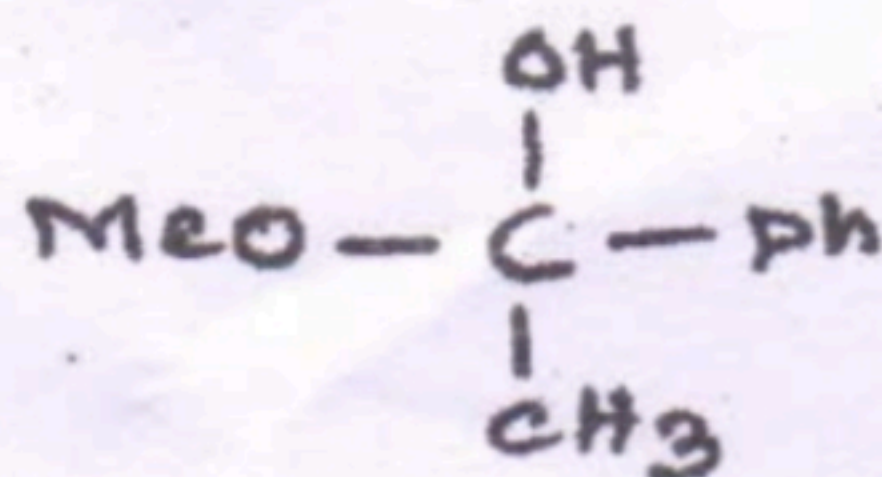
Maximum Marks: 15

Section-A

Attempt all questions

(3 × 2) = 6 Marks

1. Compute the volume of air required for the complete combustion of 1m^3 of gaseous fuel having Propene- 46%, Ethylene-2%, Methane-10%, Hydrogen-4%, Nitrogen-1% and remaining being Carbon-Dioxide.
2. Explain hydrogen bonding and its types with examples.
3. Assign R-S and E-Z notations to the followings. (with proper numbering)



Section-B

Attempt all questions

(3 × 3) = 9 Marks

1. (I) Discuss the classification of Lubricant. (2)
(II) Highlight the industrial applications of ceramics. (1)
2. Analyze the Proximate analysis of Coal with significance.
3. Draw the molecular orbital diagram of N₂ molecule. Discuss its bond order and magnetic behavior also.