

P38/HSC232/EE/20160525

Time : 3 Hours

Marks : 80

Instruction :

1. All Questions are Compulsory.
 2. Each Sub-question carry 5 marks.
 3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.
 4. Question paper of 80 Marks, it will be converted in to your programme structure marks.
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1. Solve any **four** sub-questions.
 - a) What is Alkane? Give structure, formula and number of carbon and propane, hexane, decane and butane. 5
 - b) Discuss reaction mechanism of SNI. 5
 - c) Give the reactions of bromination of m-anisole and m-hydroxy phenol. 5
 - d) What are alkynes? Enlist various methods for synthesis of alkynes. Explain any one with suitable example. 5
 - e) Explain reduction of carboxylic acid with suitable example. 5
2. Solve any **four** sub-questions.
 - a) What are Amines? Give classification with suitable example. 5
 - b) Enlist halogenation reaction of phenols with suitable example. 5
 - c) Explain in brief Fischer indole synthesis with suitable example. 5
 - d) Outline the reaction mechanism for Friedel craft acylation with an example. 5
 - e) Discuss evidence of Arenium ion mechanism. 5
3. Solve any **four** sub-questions.
 - a) What are elimination reaction? Classify its with an example. 5
 - b) Explain E and 2 and R and S nomenclature with example. 5
 - c) Discuss reaction mechanism of aromatic halogenation with an example. 5
 - d) What is hydrocarbon? Give classification with suitable example. Explain in brief about alkane. 5
 - e) Enlist various methods of alcohol and explain any two with suitable example. 5

4. Solve any **four** sub-questions.
- a) What is Oxidation? Explain oxidation of alcohol with suitable example. 5
 - b) Explain Hoffmann degradation of amide with suitable example. 5
 - c) What is diazotisation with suitable example. 5
 - d) Discuss reaction of benzyne mechanism with an example. 5
 - e) What is saytzeff rule? 5

