Pramukh Swami Science & H.D. Patel Arts College, Kadi

Bachelor of Vocation Pharmaceutical Chemistry Semester-III

Internal Examination, October-2017,

(PC-311) Advance Organic chemistry

Time: 2 hours 28/10/2017 Total Marks: 60

Que-1.Answer any 12 questions. Each question carries 1 mark[12]

1. Arrange the following in order of increasing acidity

   (Ethane, Ethyne, Ethane ,Methane)

2. Increasing C chain between two terminal –COOH group this stabilization effect_____
3. Propionic acid is _____than acetic acid.
4. What is resonance effect?
5. An acid is a proton-donor species. (True or false)
6. Which definition is true according to an acid?
   (a) Produces $H_3O^+$when dissolved in later.
   (b) Any substance with a pH ofg
   (c) Is bitter, has the ability to change color in an indicator and is reactive metal.
   (d) None of these
7. The conjugate base of CH3COOH is_____
8. Define: Substitution Reaction
9. Define: Elimination Reaction.
10. Weak bases will favour_____(elimination/substitution)
11. 3^0 Haloalkane will follow_____mechanism.(SN_1/SN_2)
12. Define: Nucleophile with example.
13. Define: protic & aprotic solvent.

Que.2.Answer any fivequestions. Each question carries 4marks [20]

1. Draw the resonance structure of (I) Nitrobenzene (II) Phenoxide ion.
2. Why chloroacetic acid is strong acid than acetic acid.
3. Greater acidity of ortho and para-nitro phenol compared to meta nitro phenol.
4. Explain why formic acid is a stronger acid compared to acetic acid.
5. Explain Nucleophilic substitution reaction with example.
6. Write down diffrence between SN_1&SN_2 reaction.
7. Explain effect of solvent on SN_1&SN_2 reaction.

Que.3.Answer any fourquestions. Each question carries7 marks [28]

1. Short note on steric effect with suitable example
2. Explain tautomerism effect with suitable example
3. Short not on hyper conjugation.
4. Explain E_1 reaction with mechanism & examples.
5. Explain SN_1 reaction with mechanism & examples.
6. Explain E_2 reaction with mechanism & examples.