

END OF SEMESTER EXAMINATIONS, MAY - 2013
ORGANIC CHEMISTRY -II
SUBJECT CODE: 08UACH10

MAJOR: B.Sc. CHEMISTRY
TIME : 3 HOURS

SEMESTER : VI
MAX. MARKS : 75

SECTION – A (10 X 1 = 10)

Answer all questions:

1. Define quantum efficiency.
2. What is an energy transfer process?
3. Describe Electrocyclic reactions?
4. What is cyclo addition reactions?
5. State mutarotation.
6. What is epimerization?
7. How alkaloids are classified?
8. What is Herzig Mayer's method?
9. State Aromaticity.
10. Write down the oxidation reaction of furan.

SECTION – B (5 X 4 = 20)

Answer all questions:

11. a) Write a note on Norrish type-I process.
(OR)
b) Explain Jablonski diagram.
12. a) Explain Diels- Alder reaction.
(OR)
b) What are the symmetry properties of molecular orbitals.
13. a) Describe inter conversion of D glucose to D mannose.
(OR)
b) Give any three reactions of glucose.
14. a) How does conine is synthesized from α -Picoline.
(OR)
b) Write a note on Hoffmann's exhaustive methylation.
15. a) Explain Fischer-Indole synthesis.
(OR)
b) Write any five electrophilic substitution reactions of pyrrole.

SECTION – C (5 X 9 = 45)

Answer all questions:

16. a) Explain in detail the mechanism of Paterno-Buchi reactions.
(OR)
b) Give a detailed mechanism of photo reduction reaction.
17. a) Describe electrocyclic reactions of 1, 3 Butadiene with correlation diagram.
(OR)
b) Explain electrocyclic reactions of cyclohexadiene system in detail.
18. a) Elucidate the structure sucrose.
(OR)
b) Explain in detail the chemistry of starch.
19. a) Elucidate the structure of Nicotine.
(OR)
b) Elucidate the structure of Piperine.
20. a) i) How isoquinoline is synthesized by Bischler- Napieralski synthesis (5)
ii) Write down the electrophilic substitution reactions of quinoline (4)
(OR)
b) i) Write a note on Skraup's synthesis. (5)
ii) Explain the reduction reactions of quinoline (4)
