

CODE: 196301  
NOVEMBER 2020

TIME: 3Hrs  
MAX. MARKS : 50

*PART A*

(10 x 2=20)

*Answer any TEN questions*

1. Define the term homo aromatic system with example?
2. What are called diazonium coupling? Give an example.
3. Write the Taft equation and explain the terms involved?
4. What is Scholl reaction?
5. What is Oxymercuration reaction?
6. What are called racemic modifications? Give an Example.
7. Draw the structure of (2R.3S)-2.3-dichloro pentane.
8. What is Cope elimination reaction?
9. Write the 1.4 addition reaction with suitable example?
10. Give an example for neighbouring group participation reaction ?
11. What is Sandmeyer reaction?
12. Give an example for the substitution reaction of vinylic carbon.

*PART B*

(2 x 5=10)

*Answer any TWO questions*

13. What are neutral and charged aromatic systems? Explain with an example.
14. Write the following reactions and its mechanism  
a) Gatterman (Koch) reaction, b) Duff reaction
15. Explain the McMurry coupling reaction?
16. Describe the isotopic and substituent effects with suitable examples?
17. Explain the stereochemistry and absolute configuration of binaphthyls?
18. Explain in detail the conformational analysis of decalins with example.
19. Describe the mechanism of E1 reactions?
20. Discuss the Von – Richter rearrangements?

*PART C*

(2x10=20)

*Answer any TWO questions*

21. Discuss the following name reactions  
a) Diazonium coupling, b) Haworth reaction.
22. a) Explain the Structure and stability of carbocations in halolactonisation reaction?  
b) Explain the isotopic and substituent effects with examples.
23. a) Explain the symmetrical and unsymmetrical chiral molecules with suitable examples?  
b) Discuss in detail the Curtin-Hammett principle?
24. Explain the following aromatic nucleophilic substitution reactions with examples  
a) Sandmeyer , b) Chichibabin reaction
25. Discuss the mechanism for the following stereochemical studies,  
a) isotopic effects b) substituent effects

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