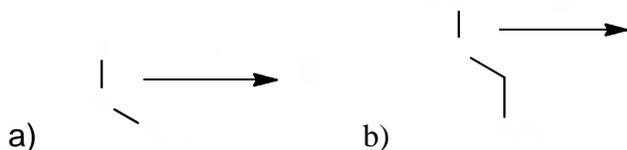




17. Predict the products of the following reactions and justify their formation.



18. How will you prepare cinnamic acid from benzaldehyde?

19. Explain Wittig reaction with a suitable example.

20. What are the products formed when acetophenone reacts with each of the following compounds? Write the reactions.

i)  $\text{LiAlH}_4$  in THF followed by hydrolysis      ii) HCN.

21. Write any one method each, to prepare Phthalic acid and Succinic acid.

22. How will you convert ethanol into methanol and methanol into ethanol?

### PART - C

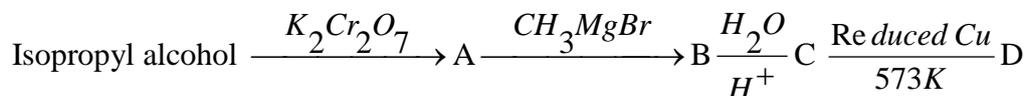
Answer any FOUR questions.

(4 x 10 = 40)

23. a) Describe  $\text{E}_1$  mechanism with an example.

b) 2, 4 -dinitro chloro benzene undergoes nucleophilic substitution much faster than chlorobenzene. Explain. (5+5)

24. a) Identify the products in the following sequence of reactions



b) Discuss the following reactions of phenol

i) Coupling reaction    ii) Kolbe's reaction

25. a) Discuss alkoxymercuration and demercuration with an example.

b.) What happens when diethyl ether is treated with the following reagents?

i) Excess of HI      ii) Con.  $\text{H}_2\text{SO}_4$ .

26. Write short notes on the following reactions:

a) Crossed Cannizzaro reaction    b) Reformatsky reaction    c) Wolf-Kishner reduction.

27. a) Compare the acidity of acetic acid, monochloro acetic acid, and dichloro acetic acid.

b) Explain stereospecific addition of  $\text{Br}_2$  to maleic acid and fumaric acid.

28. a.) Write a short note on : Perkin's reaction.

b.) Bring out the mechanism of alkaline hydrolysis of an ester.

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