Answer on Question#52200 - Chemistry - Organic Chemistry

14. Write the representative reaction for the following: (5)

a) Sandmeyer reaction

$$N_2$$
+ Cl -
 Cl
 Cu
 HCl
 $+ N_2$

b) Reimer-Tiemann reaction

c) Mannich reaction

d) Willgerodt reaction

e) Knoevenagel reaction

15. i) How will you obtain 2-methylbutanoic from 2-chlorobutane?

ii) Write the mechanism of sulphonation of benzene.

Step 1
$$2 ext{ H}_2 ext{SO}_4 \implies ext{SO}_3 ext{ H}_3 ext{O}^+ ext{ H}_5 ext{O}_3 ext{ H}_5 ext{O}_4 ext{ H}_5 ext{O}_5 ext{O}$$