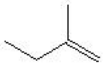
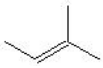
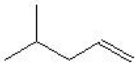
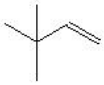
Complete the following reactions. Circle the most favored products.

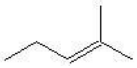
1. + H_2 (g) →

2.  + $KMnO_4 + H_2O$ →

3.  + HCl →

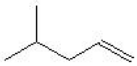
4.  + H_2O →

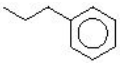
5.  + $KMnO_4 + H_2O$ →

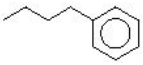
6.  + H_2O →

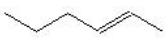
7. + →

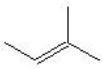
8. $\xrightarrow{[o]}$

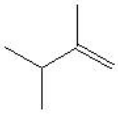
9.  + H_2 (g) →

10.  $\xrightarrow{[o]}$

11.  $\xrightarrow{[o]}$

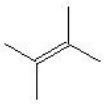
12.  + H_2O →

13.  + $KMnO_4 + H_2O$ →

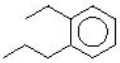
14.  + H_2O →

15. + →

16. + $KMnO_4 + H_2O$ →

17.  + HCl →

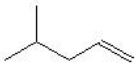
18. + Cl_2 →

19.  $\xrightarrow{[o]}$

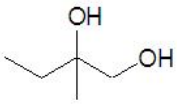
20. + HCl →

21. + $KMnO_4 + H_2O$ →

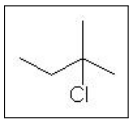
22. + $KMnO_4 + H_2O$ →

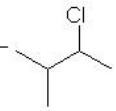
23.  + HCl →

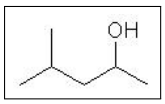
Question 1:

Question 2: 

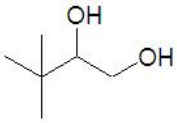
+ MnO_2 + KOH

Question 3: 

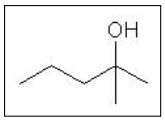
+ 

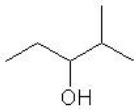
Question 4: 

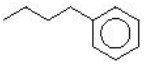
+

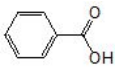
Question 5: 

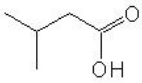
+ MnO_2 + KOH

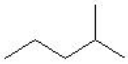
Question 6: 

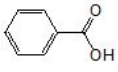
+ 

Question 7: 
+ HCl

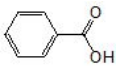
Question 8: 

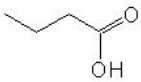
+ 

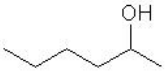
Question 9: 

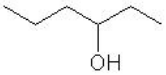
Question 10: 

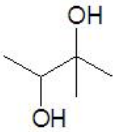
+

Question 11: 

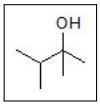
+ 

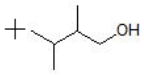
Question 12: 

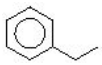
+ 

Question 13: 

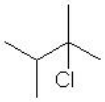
+ MnO_2 + KOH

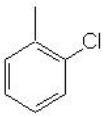
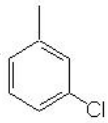
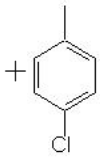
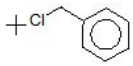
Question 14: 

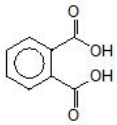
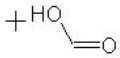
+ 

Question 15:  + HCl

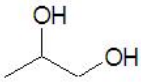
Question 16: + MnO_2 + KOH

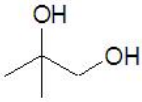
Question 17: 

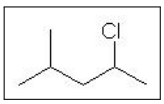
Question 18:  +  +  +  + HCl

Question 19:  +  +

Question 20:

Question 21:  + MnO_2 + KOH

Question 22:  + MnO_2 + KOH

Question 23:  +