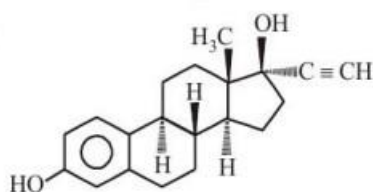


4. The antifertility drug "Novestrol" can react with :  
[Sep. 03, 2020 (I)]
- (a)  $\text{ZnCl}_2/\text{HCl}$ ;  $\text{FeCl}_3$ ; Alcoholic HCN
  - (b)  $\text{Br}_2/\text{water}$ ;  $\text{ZnCl}_2/\text{HCl}$ ;  $\text{FeCl}_3$
  - (c) Alcoholic HCN;  $\text{NaOCl}$ ;  $\text{ZnCl}_2/\text{HCl}$
  - (d)  $\text{Br}_2/\text{water}$ ;  $\text{ZnCl}_2/\text{HCl}$ ;  $\text{NaOCl}$

4. (d)



Novestrol has phenolic, alcoholic and terminal alkyne groups, so it can react with  $\text{Br}_2/\text{water}$ ,  $\text{ZnCl}_2/\text{HCl}$  as well as  $\text{FeCl}_3$ .