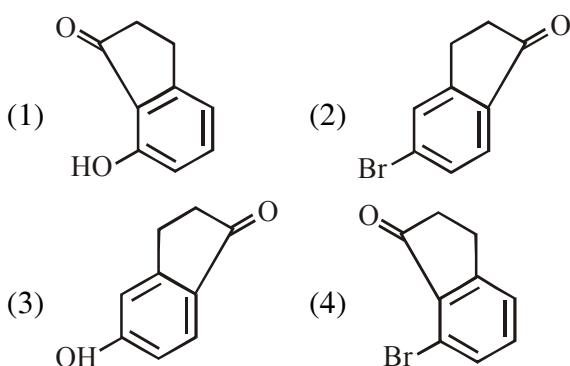
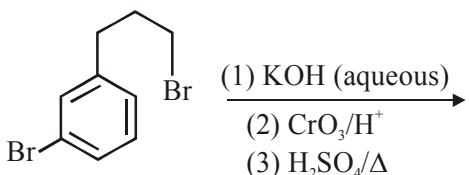
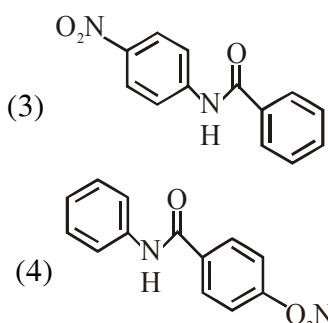
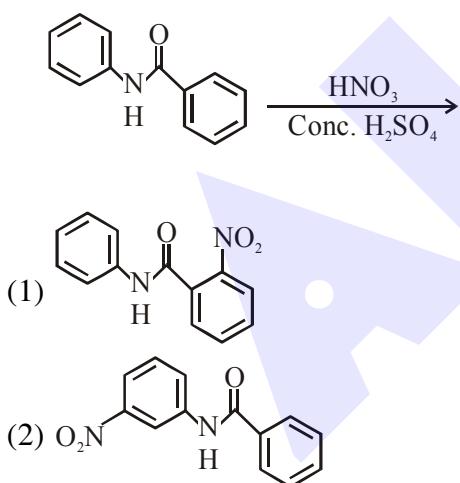


AROMATIC

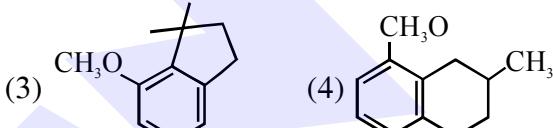
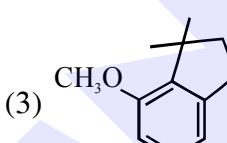
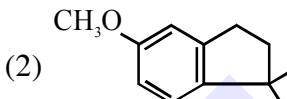
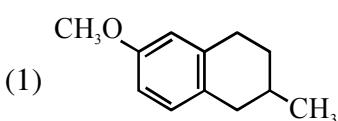
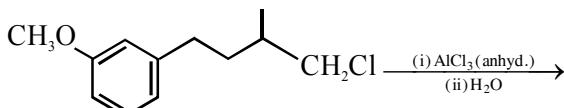
1. The major product of the following reaction is:



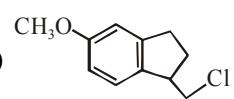
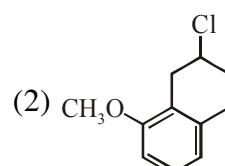
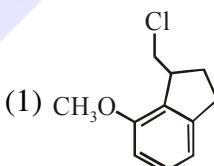
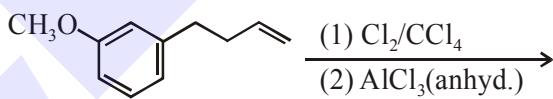
2. What will be the major product in the following mononitration reaction?



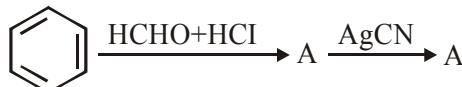
3. The major product of the following reaction is:



4. The major product of the following reaction is:



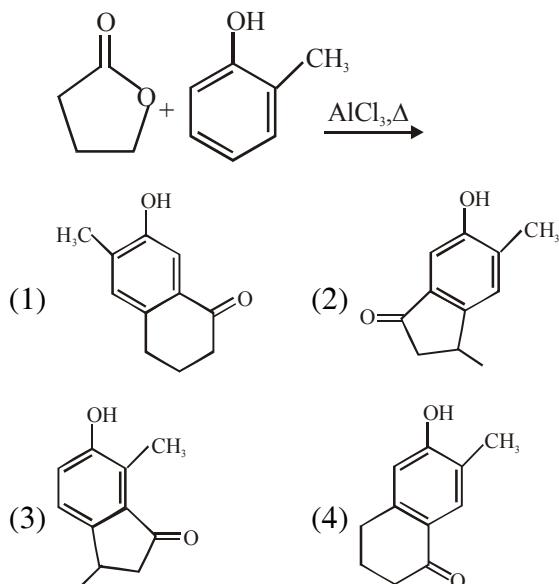
5. The compounds A and B in the following reaction are, respectively:



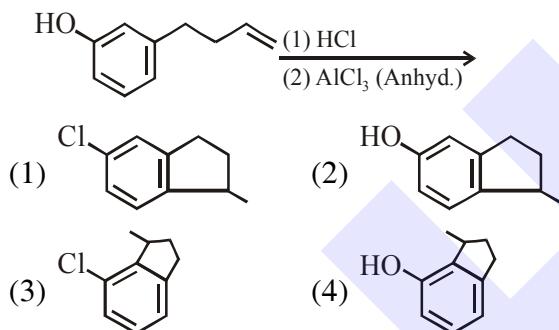
- (1) A = Benzyl alcohol, B = Benzyl isocyanide
(2) A = Benzyl alcohol, B = Benzyl cyanide
(3) A = Benzyl chloride, B = Benzyl cyanide
(4) A = Benzyl chloride, B = Benzyl isocyanide

isocyanide

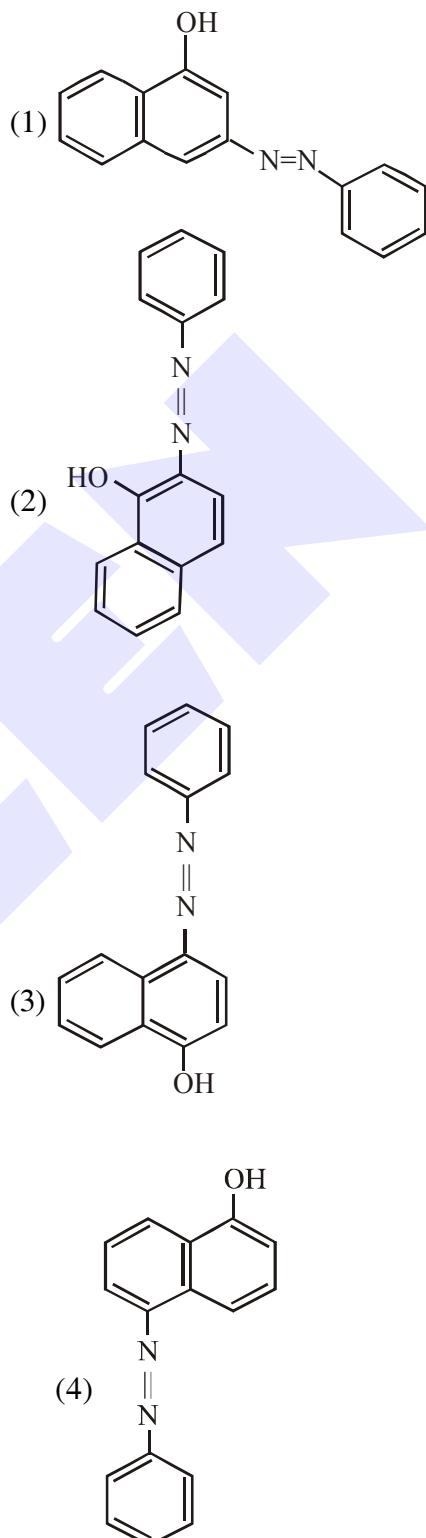
6. The major product of the following reaction is:



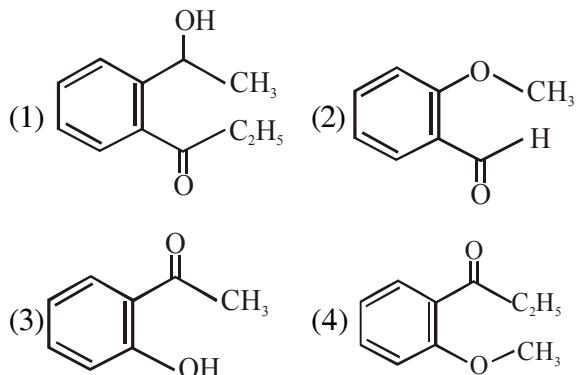
7. The major product of the following reaction is :-



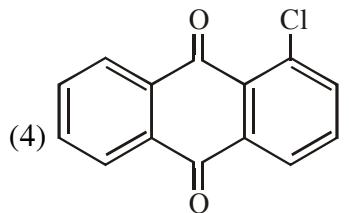
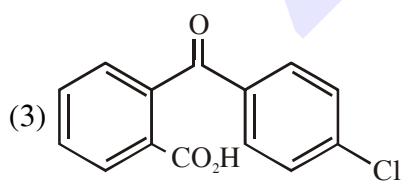
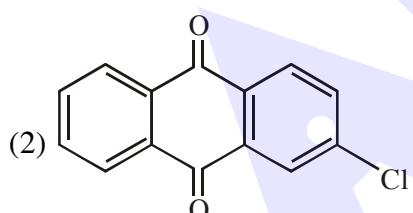
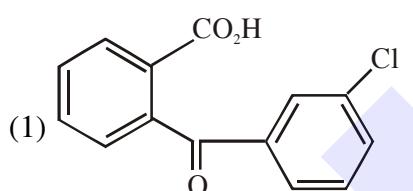
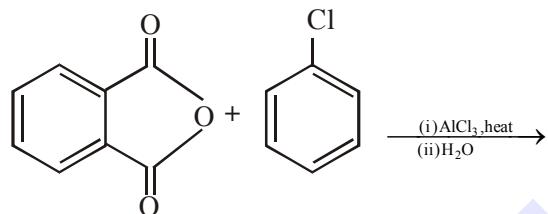
8. Coupling of benzene diazonium chloride with 1-naphthol in alkaline medium will give



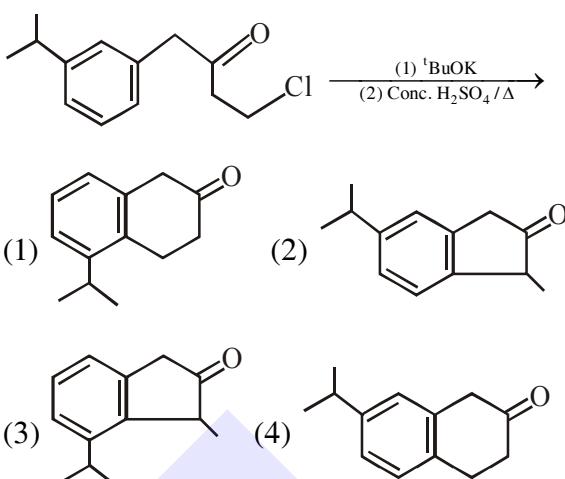
9. An organic compound neither reacts with neutral ferric chloride solution nor with Fehling solution. It however, reacts with Grignard reagent and gives positive iodoform test. The compound is -



10. The major product of the following reaction is:



11. The major product of the following reaction is:



12. Polysubstitution is a major drawback in:

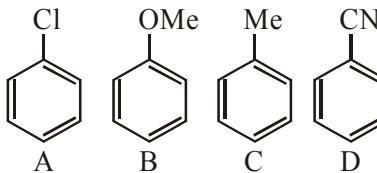
- (1) Reimer Tiemann reaction
 (2) Friedel Craft's acylation
 (3) Friedel Craft's alkylation
 (4) Acetylation of aniline

13. The organic compound that gives following qualitative analysis is :

Test	Inference
(a) Dil. HCl	Insoluble
(b) NaOH solution	Soluble
(c) Br ₂ /water	Decolourization

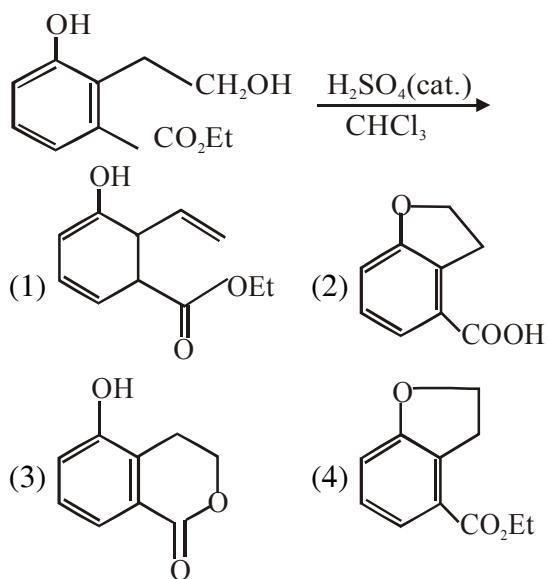


14. The increasing order of reactivity of the following compounds towards aromatic electrophilic substitution reaction is :

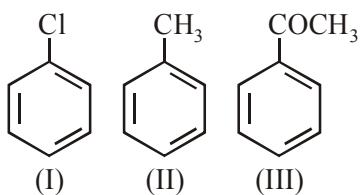


- (1) D < B < A < C (2) A < B < C < D
 (3) D < A < C < B (4) B < C < A < D

15. The major product of the following reaction is:

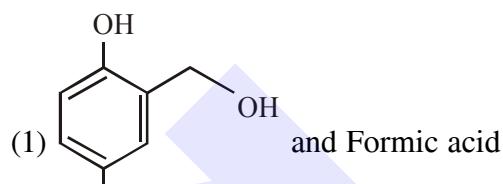
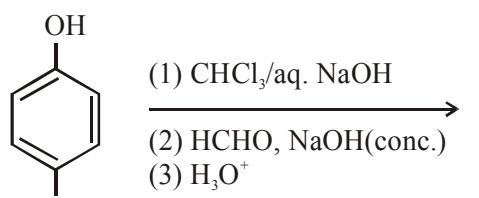


16. The increasing order of the reactivity of the following compounds towards electrophilic aromatic substitution reactions is :-



- (1) I < III < II
 (3) III < I < II
- (2) II < I < III
 (4) III < II < I

17. The major products of the following reaction are :



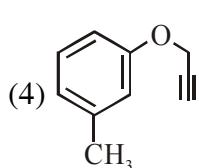
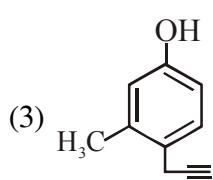
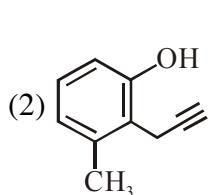
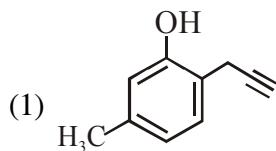
and Formic acid

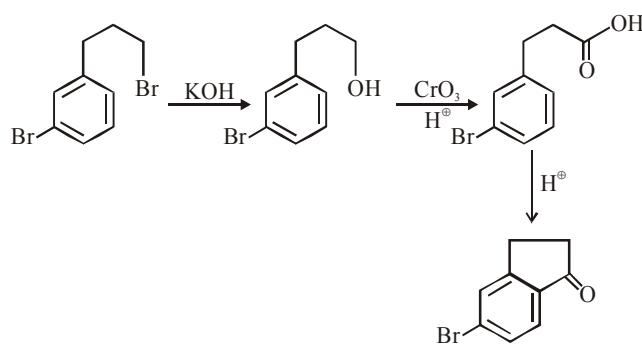
and Methanol

and Formic acid

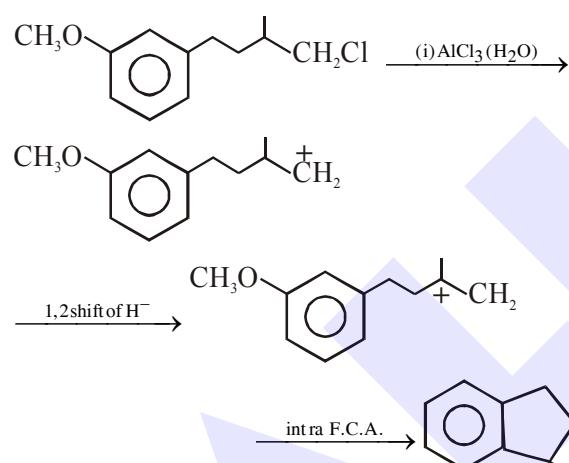
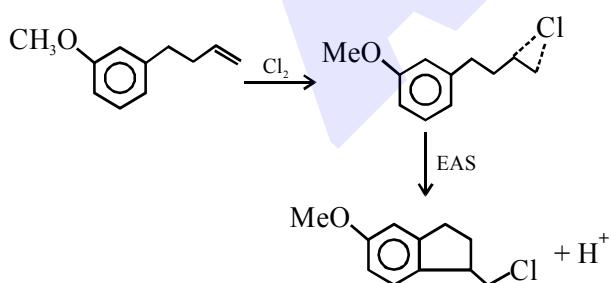
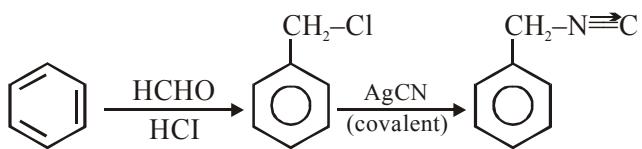
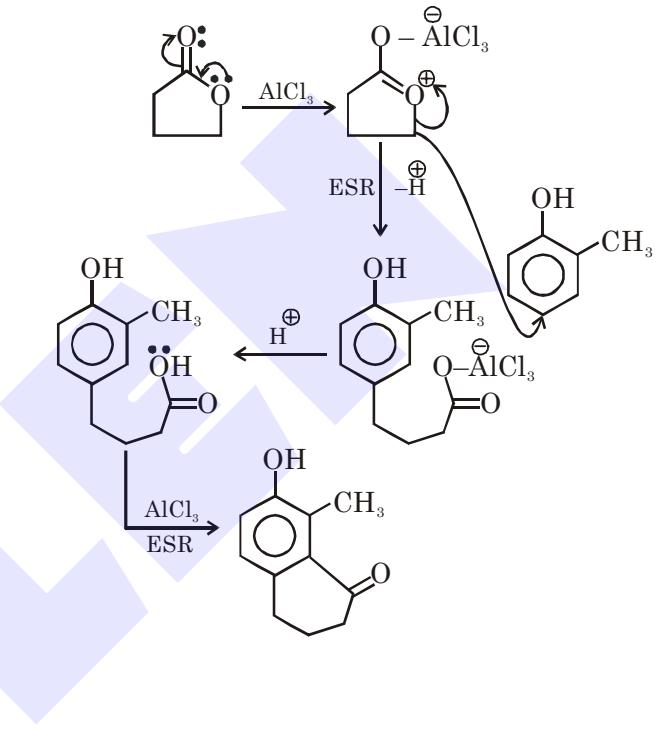
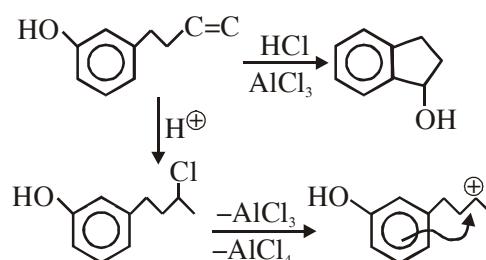
and Methanol

18. What will be the major product when m-cresol is reacted with propargyl bromide ($\text{HC}\equiv\text{C}-\text{CH}_2\text{Br}$) in present of K_2CO_3 in acetone



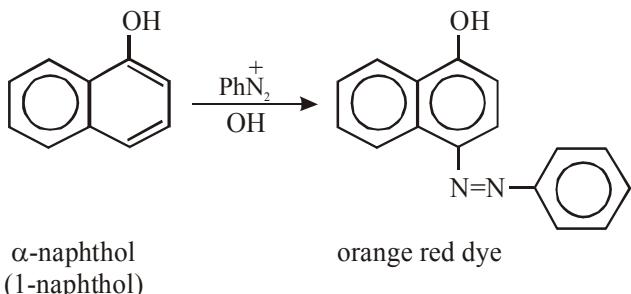
SOLUTION**1. Ans. (2)**

During AES Br is o/p directing and major product will be formed on less hindrance p position :

2. Ans. (3)**3. Ans. (2)****4. Ans.(4)****5. Ans. (4)****6. Ans. (1)****7. Ans. (2)**

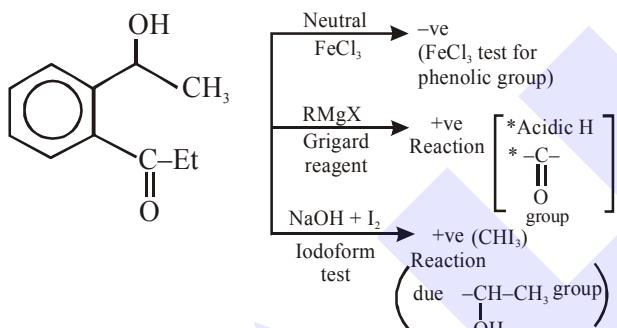
8. Ans. (3)

Sol.



9. Ans. (1)

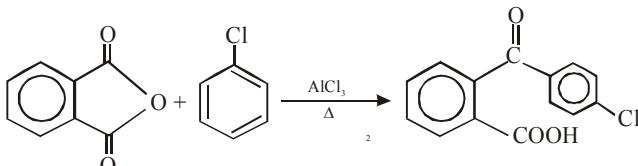
Sol.



Correct option : (1)

10. Ans. (3)

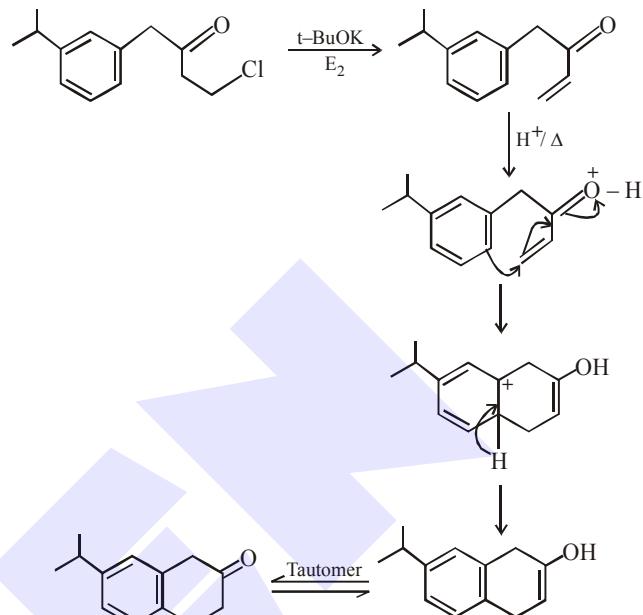
Sol.



Fridel-craft acylation. $-Cl$ group is an ortho & para directing

11. Ans. (4)

Sol.

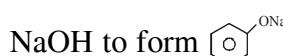


12. Ans. (3)

Sol. In Friedal crafts alkylation product obtained is more activated and hence polysubstitution will take place.

13. Ans. (1)

Sol. $\text{C}_6\text{H}_5\text{OH}$ is insoluble in dil. HCl but soluble in



$\text{C}_6\text{H}_5\text{OH}$ decolorise Br_2 water to give $\text{C}_6\text{H}_3(\text{Br})_3\text{OH}$

(2,4,6-tribromophenol)

14. Ans. (3)

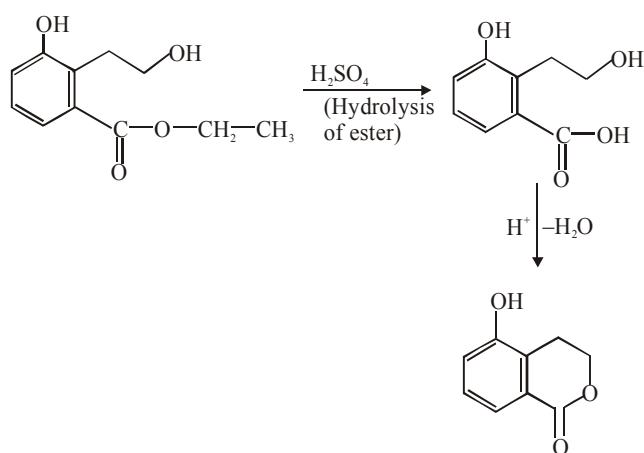
Sol. $\text{OMe} (+R \text{ effect}) > \text{Me} (+I, +H \text{ effect}) > \text{Cl} (-I > +R) > \text{CN} (-I, -R)$

ring C^- density is highest
(More is the C^- density at ring faster is the reaction towards EAS)

ring C^- density is least

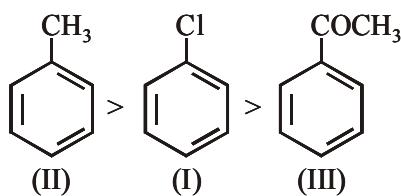
15. Ans. (3)

Sol.

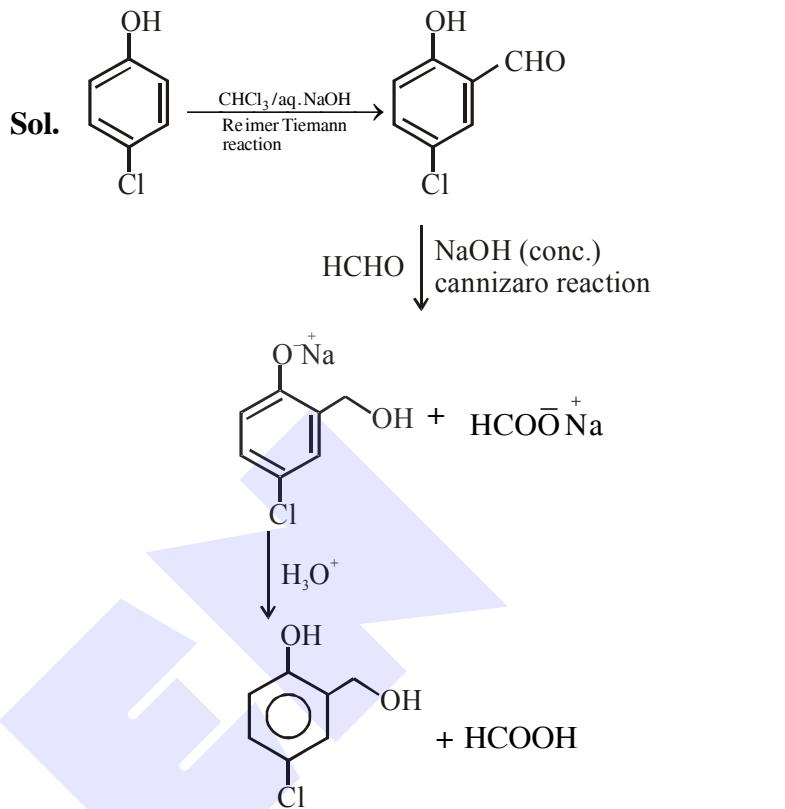


16. Ans. (3)

Sol. Rate of aromatic electrophilic substitution is



17. Ans. (3)



18. Ans. (4)

