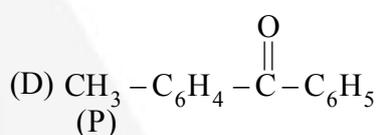
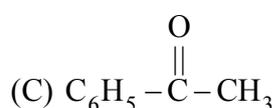
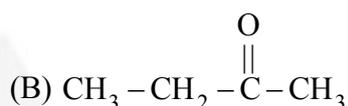
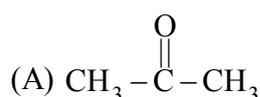


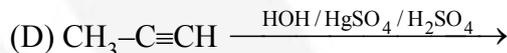
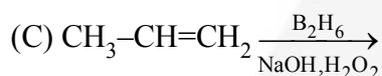
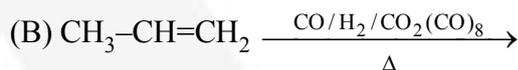
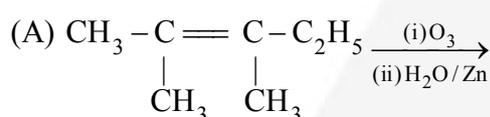
## NEET CHEMISTRY

### Topic : Carbonyl Compound

Q.1 Which one of the following is mixed ketone:



Q.2 In which of the following reactions product will be aldehyde?



Q.3 Gem dihalide on hydrolysis gives:

(A) Vic diol

(B) Gem diol

(C) Carbonyl compound

(D) Carboxylic acid

Q.4 Which one of the following alcohols cannot be oxidised by  $\text{K}_2\text{CrO}_4$ ?

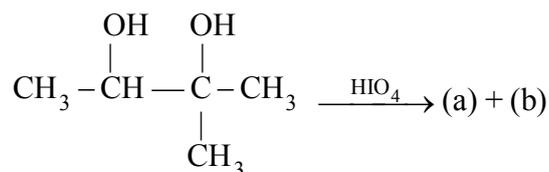
(A) Ethanol

(B) Tert butyl alcohol

(C) Isopropyl alcohol

(D) Allyl alcohol

Q.5 In the given reaction:



(a) and (b) respectively be:

(A)  $\text{CH}_3\text{CHO}$  and  $\text{CH}_3\text{CHO}$

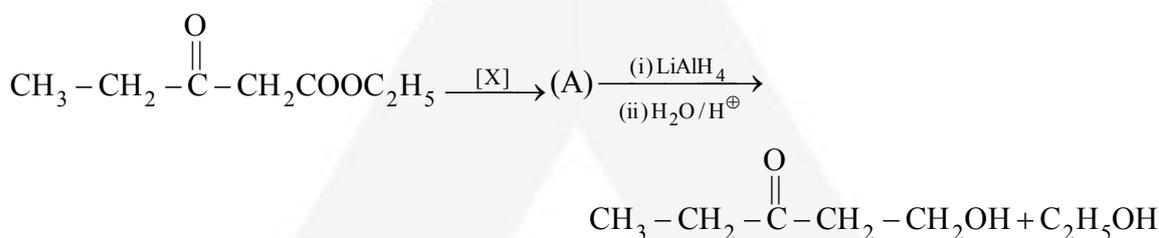
(B)  $\text{CH}_3\text{COCH}_3$  and  $\text{CH}_3\text{CHO}$

(C)  $\text{CH}_3\text{COCH}_3$  and  $\text{CH}_3\text{COCH}_3$

(D)  $\text{CH}_3\text{COOH}$  and  $\text{CH}_3\text{COCH}_3$

- Q.6 Acetophenone can be obtained by the distillation of:  
 (A)  $(C_6H_5COO)_2Ca$  (B)  $(CH_3COO)_2Ca$   
 (C)  $(C_6H_5COO)_2Ca$  and  $(CH_3COO)_2Ca$  (D)  $(C_6H_5COO)_2Ca$  and  $(HCOO)_2Ca$
- Q.7 Arrange these compounds in decreasing order of reactivity for the nucleophilic addition reaction:  
 (I) Acid chloride (II) Aldehyde (III) Ketone (IV) Ester  
 Select the correct answer from the codes given below:  
 (A) I > II > III > IV (B) IV > III > II > I (C) III > II > I > IV (D) I > IV > II > III
- Q.8 Two isomeric ketones, 3-pentanone and 2-pentanone can be distinguished by :  
 (A)  $I_2 / NaOH$  only (B)  $NaSO_3H$  only (C)  $NaCN / HCl$  (D) Both (A) and (B)
- Q.9 Acetal or ketal is:  
 (A) Vic dialkoxy compound (B)  $\alpha, \omega$ -dialkoxy compound  
 (C)  $\alpha$ -alkoxy alcohol (D) Gem dialkoxy compound

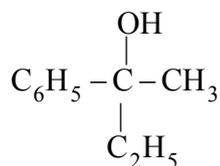
- Q.10 In the given reaction



[X] will be:

- (A) HCHO (B)  $\begin{array}{c} CH_2 - OH \\ | \\ CH_2OH \end{array} + H^{\oplus}$   
 (C)  $\begin{array}{c} CH_2 - OH \\ | \\ CH_2 - OH \end{array} + \overset{\ominus}{O}H$  (D) HCN

- Q.11 Consider the structure of given alcohol:

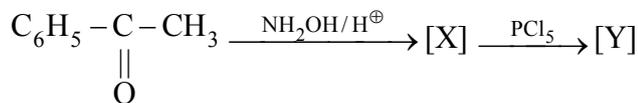


This alcohol can be prepared from:

- (A)  $C_6H_5 - \overset{\overset{O}{\parallel}}{C} - CH_3$  and  $C_2H_5MgBr$  (B)  $CH_3 - CH_2 - \overset{\overset{O}{\parallel}}{C} - CH_3$  and  $C_6H_5MgBr$   
 (C)  $C_6H_5 - \overset{\overset{O}{\parallel}}{C} - C_2H_5$  and  $CH_3MgBr$  (D) All of these

- Q.12 Stability of gemdiol depends on:  
 (A) Steric hindrance (B) Presence of -I group on gemdiol carbon  
 (C) Intramolecular hydrogen bonding (D) All of these

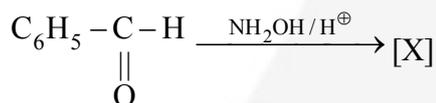
- Q.13 In the reaction sequence:



[Y] will be:

- (A)  $\text{C}_6\text{H}_5 - \underset{\text{O}}{\underset{\parallel}{\text{C}}} - \text{NHCH}_3$  (B)  $\text{CH}_3 - \underset{\text{O}}{\underset{\parallel}{\text{C}}} - \text{NH} - \text{C}_6\text{H}_5$   
 (C)  $\text{C}_6\text{H}_5 - \text{CH}_2 - \underset{\text{O}}{\underset{\parallel}{\text{C}}} - \text{NH}_2$  (D) Mixture of (A) and (B)

- Q.14 In the given reaction:



[X] will be:

- (A) Only syn oxime (B) Only anti oxime  
 (C) mixture of syn and anti oxime (D) secondary amide
- Q.15 Schiff's base is prepared from:  
 (A) Carbonyl compound and primary amine (B) Carbonyl compound and secondary amine  
 (C) Carbonyl compound and tertiary amine (D) All of these
- Q.16 Schiff's reagent is used for the differentiation between:  
 (A) HCHO and CH<sub>3</sub>CHO  
 (B) CH<sub>3</sub>COCH<sub>3</sub> and CH<sub>3</sub>CHO  
 (C)  $\text{C}_6\text{H}_5 - \text{CH}_2 - \underset{\text{O}}{\underset{\parallel}{\text{C}}} - \text{CH}_3$  and  $\text{C}_6\text{H}_5 - \underset{\text{O}}{\underset{\parallel}{\text{C}}} - \text{CH}_2 - \text{CH}_3$   
 (D) HCHO and C<sub>6</sub>H<sub>5</sub>CHO

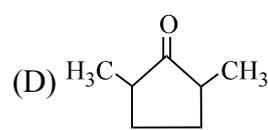
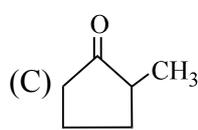
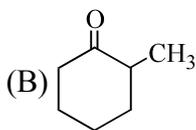
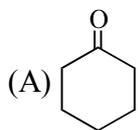
- Q.17 Fehling solution gives red precipitate with:  
 (A) Aromatic aldehyde (B) Saturated aliphatic aldehyde  
 (C) Unsaturated aliphatic aldehyde (D) Both (B) and (C)

- Q.18 Silver mirror test with Tollens reagent is given by :  
 (A) C<sub>6</sub>H<sub>5</sub>CHO (B) CH<sub>2</sub>=CH-CHO  
 (C) C<sub>6</sub>H<sub>5</sub>-CH=CH-CHO (D) All of these

Q.19 In the reaction sequence, [X] is ketone :



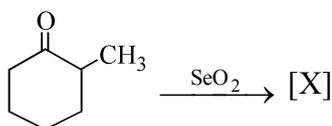
[X] will be:



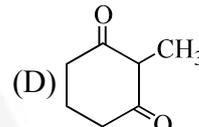
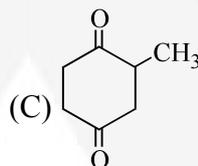
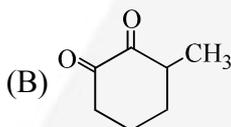
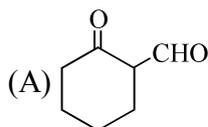
Q.20 Which one of the following compounds will give dimethyl glyoxal with  $\text{SeO}_2$ :

- (A) Acetone (B) Acetophenone (C) Ethyl methyl ketone (D) Propanaldehyde

Q.21 In the given reaction



[X] will be:



Q.22 Consider the given reaction :



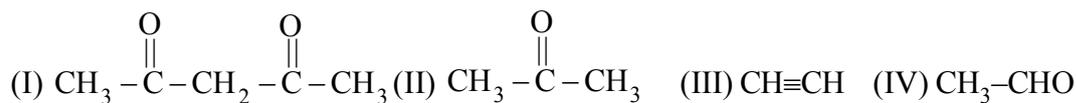
The above reaction is known as :

- (A) Baeyer-villiger oxidation (B) Oppenaur oxidation  
(C) Periodate oxidation (D) Peroxide oxidation

Q.23 Acetone can be converted into pinacol by :

- (A)  $\text{Mg}/\text{Hg}/\text{H}_2\text{O}$  (B)  $\text{Zn}/\text{Hg}/\text{HCl}$  (C)  $\text{Na}/\text{Hg}/\text{H}_2\text{SO}_4$  (D) All of these

Q.24 Arrange acidity of given four compounds in decreasing order:



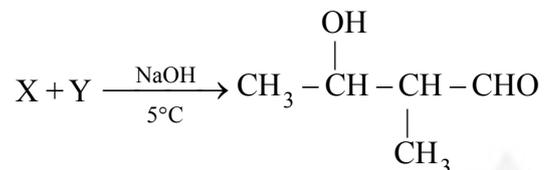
Select correct answer from the codes given below:

Codes:

- (A) I > IV > III > II (B) I > IV > II > III (C) III > I > IV > II (D) II > IV > I > III

- Q.25 Which one of the following compounds will not give aldol:
- (A)  $\text{CH}_3\text{CHO}$  (B)  $\text{CH}_3\text{-CH}_2\text{-CHO}$
- (C)  $\text{CH}_3\text{-CH}_2\text{-}\overset{\text{O}}{\parallel}\text{C}\text{-CH}_3$  (D)  $\text{C}_6\text{H}_5\text{CHO}$

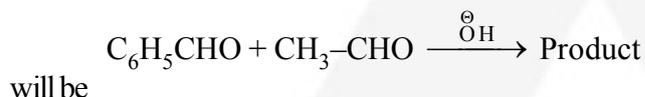
Q.26 In the given reaction



(X) and (Y) will respectively be:

- (A)  $\text{CH}_3\text{-CH}_2\text{-CHO}$  and  $\text{CH}_3\text{-CH}_2\text{-CHO}$  (B)  $\text{CH}_3\text{-CHO}$  and  $\text{CH}_3\text{-CH}_2\text{-CHO}$
- (C)  $\text{CH}_3\text{-CHO}$  and  $\text{CH}_3\text{-CHO}$  (D)  $\text{CH}_3\text{-CHO}$  and  $\text{CH}_3\text{-}\overset{\text{CH}_3}{\underset{\text{CH}_3}{\text{C}}}\text{-CHO}$

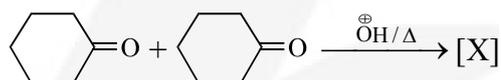
Q.27 Number of products in the given reaction :



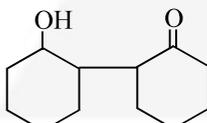
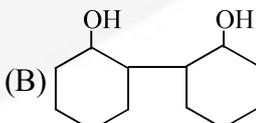
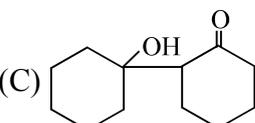
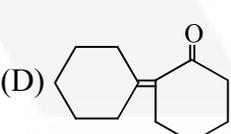
will be

- (A) One (B) Three (C) Two (D) Four

Q.28 In the reaction :



[X] will be :

- (A)  (B)  (C)  (D) 

Q.29 Perkin reaction is catalysed by :

- (A)  $\text{NaOH}$  (B)  $\text{HCl}$  (C)  $\text{NH}_4\text{Cl}$  (D) Pyridine

Q.30 Product of Perkin reaction is:

- (A)  $\alpha$ ,  $\beta$ -unsaturated aldehyde (B)  $\beta$ -cyclohexyl  $\alpha$ ,  $\beta$ -unsaturated aldehyde
- (C)  $\beta$ -Aryl- $\alpha$ ,  $\beta$ -unsaturated acid (D) All of these

## **ANSWRE KEY**

Q.1 C

Q.2 B

Q.3 C

Q.4 B

Q.5 B

Q.6 C

Q.7 A

Q.8 D

Q.9 D

Q.10 B

Q.11 D

Q.12 D

Q.13 D

Q.14 C

Q.15 A

Q.16 B

Q.17 D

Q.18 D

Q.19 B

Q.20 C

Q.21 B

Q.22 A

Q.23 A

Q.24 B

Q.25 D

Q.26 B

Q.27 C

Q.28 D

Q.29 D

Q.30 C

