Based on Latest

NCERT | NEET Syllabus &

NTA Guidelines

GLOBAL SUPER-40

MEDICAL/ENGINEERING/FOUNDATION

For

NEET 2025

Topic & Chapter Wise

Home Assignment

NEET

CHEMISTRY

CLASS XI & XII

Scoring Grid	HOME ASSIGNMENTS CHAPTERWISE CC26- CHEMISTRY			
	Total Questions	45	Total Marks	180
	Attempted		Correct	
	Incorrect		Net Score	
	Cut-off Score	45	Qualifying Score	60
	Success Gap = Net Score – Qualifying Score			
	Net Score = (Correct × 4) – (Incorrect × 1)			

Contents

Class XI

Contents

Class XII

Home Assignments

Chapter-wise Sheets

Date : Start Time : End Time :

CHEMISTRY (CC26)

SYLLABUS : Aldehydes, Ketones and Carboxylic Acids

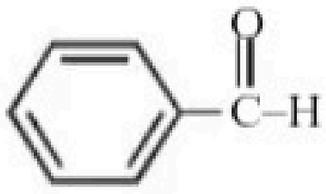
Max. Marks : 180 Marking Scheme : + 4 for correct & (–1) for incorrect Time : 60 min.

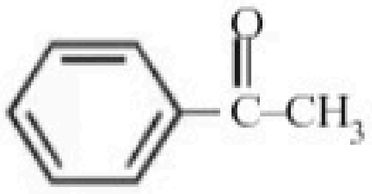
INSTRUCTIONS : This Daily Practice Problem Sheet contains 45 MCQ's. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.

1. Which of the following compounds is most reactive towards nucleophilic addition reactions?

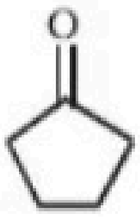
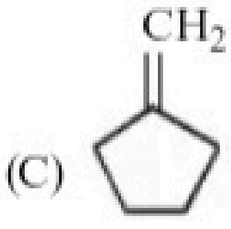
(a) 

(b) 

(c) 

(d) 

2. Arrange the following in order of decreasing acidity

(A)  (B)  (C) 

(a) B>A>C (b) C>B>A

(c) A>C>B (d) A>B>C

3. A and B in the following reactions are

(a) A = RR'C(CN)(OH), B = $LiAlH_4$

(b) A = RR'C(OH)(COOH), B = NH_3

(c) A = RR'C(CN)(OH), B = $H_3O^{\oplus}$

(d) A = $RR'CH_2CN$, B = NaOH

4. Acetaldehyde reacts with

(a) Electrophiles only

(b) Nucleophiles only

(c) Free radicals only

(d) Both electrophiles and nucleophiles

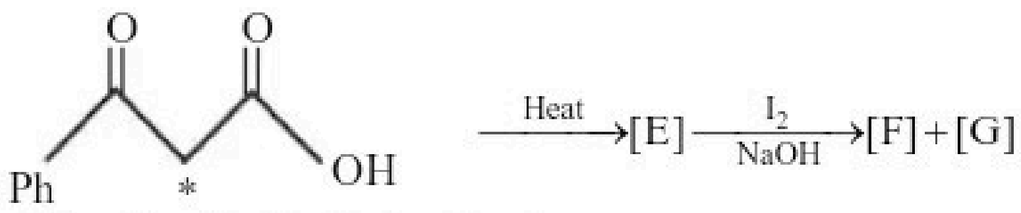
RESPONSE GRID	1. (a) (b) (c) (d)	2. (a) (b) (c) (d)	3. (a) (b) (c) (d)	4. (a) (b) (c) (d)

Space for Rough Work

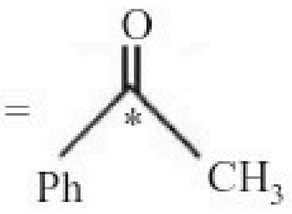
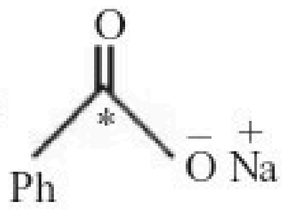
5. $C_6H_5CH=CHCHO \xrightarrow{X} C_6H_5CH=CHCH_2OH$
In the above sequence X can be :
(a) H_2/Ni (b) $NaBH_4$
(c) $K_2Cr_2O_7/H^+$ (d) Both (a) and (b)

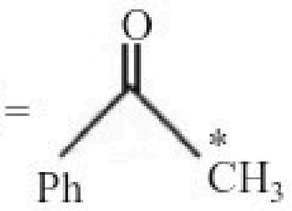
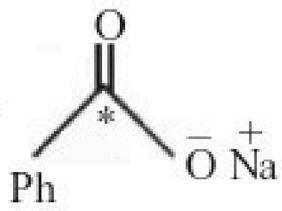
6. Which one of the following can be oxidised to the corresponding carbonyl compound?
(a) 2-hydroxy-propane
(b) Ortho-nitro-phenol
(c) Phenol
(d) 2-methyl-2 hydroxy-propane

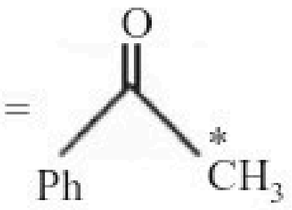
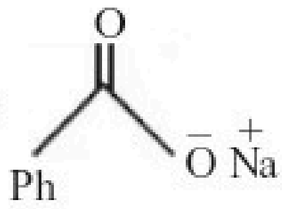
7. In the following reaction sequence, the correct structures of E, F and G are

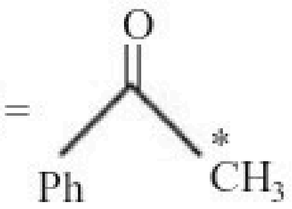
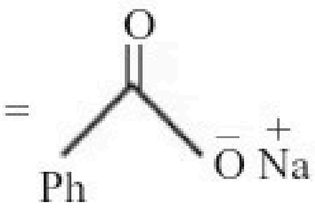


[* implies ^{13}C labelled carbon)

(a) E =  F =  $G = CHI_3$

(b) E =  F =  $G = CHI_3$

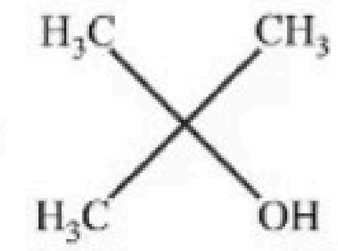
(c) E =  F =  $G = \overset{*}{C}HI_3$

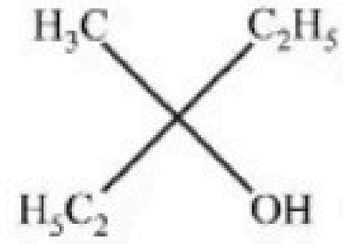
(d) E =  F =  $G = \overset{*}{C}H_3I$

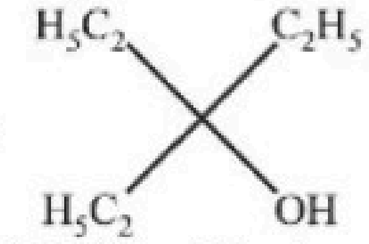
8. Ketones
[$R-\overset{\overset{O}{\|}}{C}-R_1$, where $R = R_1$ = alkyl groups]
can be obtained in one step by
(a) oxidation of primary alcohols
(b) hydrolysis of esters
(c) oxidation of tertiary alcohols
(d) reaction of acid halides with alcohols

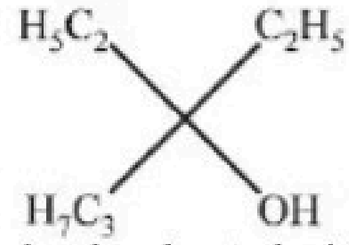
9. The compound that neither forms semicarbazone nor oxime is
(a) HCHO (b) CH_3COCH_2Cl
(c) CH_3CHO (d) $CH_3CONHCH_3$

10. Ethyl ester $\xrightarrow[\text{excess}]{CH_3MgBr}$ P . The product P will be

(a) 

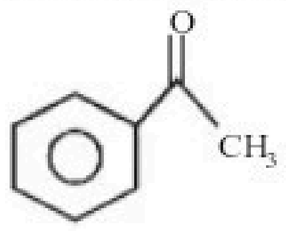
(b) 

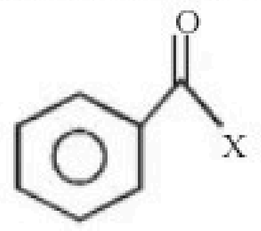
(c) 

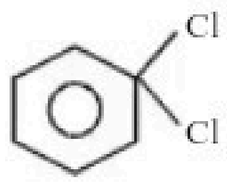
(d) 

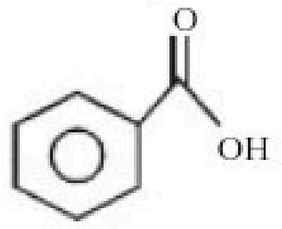
11. Which of the following compounds when heated with CO at 150°C and 500 atm pressure in presence of BF_3 forms ethyl propionate ?
(a) C_2H_5OH (b) CH_3OCH_3
(c) $C_2H_5OC_2H_5$ (d) $CH_3OC_2H_5$

12. Benzaldehyde is obtained from Rosenmund's reduction of

(a) 

(b) 

(c) 

(d) 

13. Acetone oxime is obtained by reacting acetone with
(a) NH_3 (b) NH_2OH (c) NH_2Na (d) $NH_2.NH_2$

14. $2C_6H_5CHO \xrightarrow[H_2O]{OH^-} C_6H_5CH_2OH + C_6H_5COO^-$
Which of the following statements are correct regarding the above reduction of benzaldehyde to benzyl alcohol?
(i) One hydrogen is coming from H_2O as H^+ and another from C_6H_5CHO as H^-
(ii) One hydrogen is coming from H_2O as H^- and another from C_6H_5CHO as H^+
(iii) One hydrogen from H_2O and another from C_6H_5CHO, both in the form of H^-
(iv) The reduction is an example of disproportionation reaction
(a) (i), (ii) and (iii) (b) (i) and (iv)
(c) (ii), (iii) and (iv) (d) (iii) and (iv)

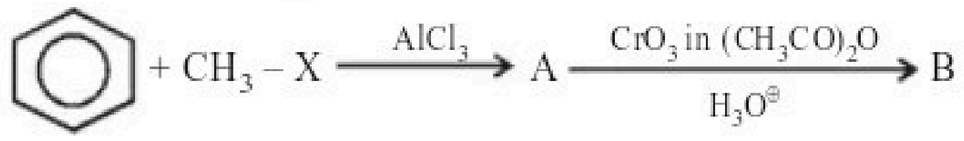
15. A carboxylic acid can best be converted into acid chloride by using
(a) PCl_5 (b) $SOCl_2$
(c) HCl (d) ClCOCOCl

16. Among the given compounds, the most susceptible to nucleophilic attack at the carbonyl group is
(a) MeCOCl (b) MeCHO
(c) MeCOOMe (d) MeCOOCOMe

RESPONSE GRID					
	5. (a)(b)(c)(d)	6. (a)(b)(c)(d)	7. (a)(b)(c)(d)	8. (a)(b)(c)(d)	9. (a)(b)(c)(d)
	10. (a)(b)(c)(d)	11. (a)(b)(c)(d)	12. (a)(b)(c)(d)	13. (a)(b)(c)(d)	14. (a)(b)(c)(d)
	15. (a)(b)(c)(d)	16. (a)(b)(c)(d)			

Space for Rough Work

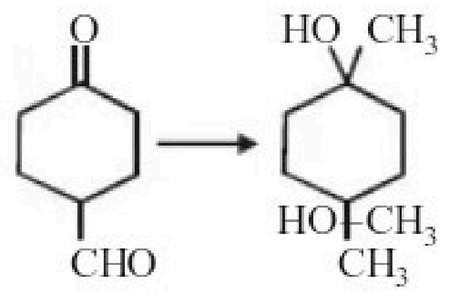
17. Find out B in the given reactions



(a) acetophenone
(b) benzaldehyde
(c) cyclohexyl carbaldehyde
(d) benzoic acid

18. Pinacolone is
(a) 2,3-Dimethyl-2,3-butanediol
(b) 3,3-Dimethyl-2-butanone
(c) 1-Phenyl-2-propanone
(d) 1,1-Diphenyl-1,2-ethandiol

19. The correct sequence of reagents for the following conversion will be :



(a) $[Ag(NH_3)_2]^+ OH^-, H^+/CH_3OH, CH_3MgBr$
(b) $CH_3MgBr, H^+/CH_3OH, [Ag(NH_3)_2]^+ OH^-$
(c) $CH_3MgBr, [Ag(NH_3)_2]^+ OH^-, H^+/CH_3OH$
(d) $[Ag(NH_3)_2]^+ OH^-, CH_3MgBr, H^+/CH_3OH$

20. Benzaldehyde reacts with ethanoic KCN to give
(a) $C_6H_5CHOHCN$ (b) $C_6H_5CHOHCOC_6H_5$
(c) $C_6H_5CHOHCOOH$ (d) $C_6H_5CHOHCHOHC_6H_5$

21. Which gives lactic acid on hydrolysis after reacting with HCN ?
(a) HCHO (b) CH_3CHO
(c) C_6H_5CHO (d) CH_3COCH_3

22. Reduction of $>C=O$ to $>CH_2$ can be carried out with
(a) catalytic reduction
(b) Na/C_2H_5OH
(c) Wolff-Kishner reduction
(d) $LiAlH_4$

23. The end product B in the sequence of reactions

$$R-X \xrightarrow{CN^-} A \xrightarrow{NaOH} B \text{ is}$$

(a) an alkane
(b) a carboxylic acid
(c) sodium salt of carboxylic acid
(d) a ketone

24. Phenylmethyl ketone can be converted into ethylbenzene in one step by which of the following reagents?
(a) $LiAlH_4$ (b) Zn-Hg/HCl
(c) $NaBH_4$ (d) CH_3MgI

25. Conversion of acetaldehyde into ethyl acetate in presence of aluminium ethoxide is called
(a) Aldol condensation (b) Cope reaction
(c) Tischenko reaction (d) Benzoin condensation

26. Match the columns

	Column-I		Column-II
A.	Etard reaction	I.	Alcoholic KOH
B.	Hydroxylation	II.	Anhydrous $AlCl_3$
C.	Dehydrohalogenation	III.	Chromyl chloride
D.	Friedel-Crafts reaction	IV.	Dilute alkaline $KMnO_4$

(a) A – I; B – II; C – III; D – II
(b) A – IV; B – III; C – I; D – II
(c) A – III; B – IV; C – I; D – II
(d) A – II; B – I; C – IV; D – III

27. An organic compound A upon reacting with NH_3 gives B. On heating B gives C. C in presence of KOH reacts with Br_2 to given $CH_3CH_2NH_2$. A is :
(a) CH_3COOH (b) $CH_3CH_2CH_2COOH$
(c) $CH_3-\underset{\displaystyle CH_3}{\underset{|}{CH}}-COOH$ (d) CH_3CH_2COOH

28. Which one of the following can be oxidised to the corresponding carbonyl compound?
(a) 2-hydroxypropane
(b) Ortho-nitrophenol
(c) Phenol
(d) 2-methyl-2 hydroxypropane

29. The reagent which can be used to distinguish acetophenone from benzophenone is
(a) 2,4- dinitrophenylhydrazine
(b) aqueous solution of $NaHSO_3$
(c) benedict reagent
(d) I_2 and Na_2CO_3

30. $R-CH_2-CH_2OH$ can be converted into RCH_2CH_2COOH. The correct sequence of reagents is
(a) PBr_3, KCN, H^+ (b) PBr_3, KCN, H_2
(c) KCN, H^+ (d) HCN, PBr_3, H^+

31. Sodium salt of an organic acid 'X' produces effervescence with conc. H_2SO_4. 'X' reacts with the acidified aqueous $CaCl_2$ solution to give a white precipitate which decolourises acidic solution of $KMnO_4$. 'X' is :
(a) C_6H_5COONa (b) HCOONa
(c) CH_3COONa (d) $Na_2C_2O_4$

RESPONSE GRID					
	17. ⓐ ⓑ ⓒ ⓓ	18. ⓐ ⓑ ⓒ ⓓ	19. ⓐ ⓑ ⓒ ⓓ	20. ⓐ ⓑ ⓒ ⓓ	21. ⓐ ⓑ ⓒ ⓓ
	22. ⓐ ⓑ ⓒ ⓓ	23. ⓐ ⓑ ⓒ ⓓ	24. ⓐ ⓑ ⓒ ⓓ	25. ⓐ ⓑ ⓒ ⓓ	26. ⓐ ⓑ ⓒ ⓓ
	27. ⓐ ⓑ ⓒ ⓓ	28. ⓐ ⓑ ⓒ ⓓ	29. ⓐ ⓑ ⓒ ⓓ	30. ⓐ ⓑ ⓒ ⓓ	31. ⓐ ⓑ ⓒ ⓓ

Space for Rough Work

32. In a set of the given reactions, acetic acid yielded a product C.

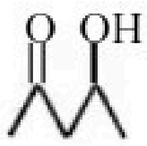
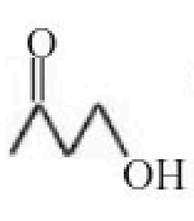
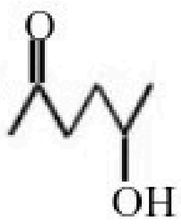
$$CH_3COOH + PCl_5 \longrightarrow A \xrightarrow[\text{Anh.}AlCl_3]{C_6H_6} B \xrightarrow[\text{Ether}]{C_2H_5MgBr} C$$

Product C would be

(a) $CH_3-C(OH)C_6H_5$ (b) $CH_3CH(OH)C_2H_5$

(c) $CH_3COC_6H_5$ (d) $CH_3CH(OH)C_6H_5$

33. Which one of the following will most readily be dehydrated in acidic condition ?

(a)  (b)  (c)  (d) 

34. Which of the following contain an aldehyde?

(a) Vanilla beans (b) Meadow sweet

(c) Cinnamon (d) All of these

35. Heating mixture of sodium benzoate and soda-lime gives

(a) benzene (b) methane

(c) sodium phenoxide (d) calcium benzoate

36. Observe the following structures and pick up the correct statement.

$>C=O$ $>C=\overset{+}{O}H$

I II

(a) Carbonyl carbon of I is more electrophilic than that of II

(b) Carbonyl carbon of I is less electrophilic than that of II

(c) Carbonyl carbon of both structures have equal electrophilic character

(d) It depends upon the complete structure of the compound

37. An enantiomerically pure acid is treated with a racemic mixture of an alcohol having one chiral carbon. The ester formed will be

(a) Optically active mixture (b) Pure enantiomer

(c) Meso compound (d) Racemic mixture

38. *m*-Chlorobenzaldehyde on reaction with conc. KOH at room temperature gives

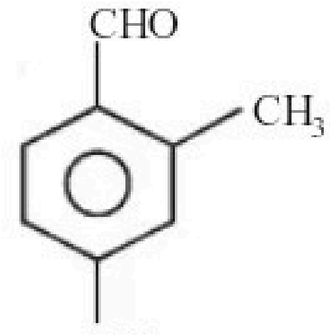
(a) potassium *m*-chlorobenzoate and *m*-hydroxybenzaldehyde

(b) *m*-hydroxybenzaldehyde and *m*-chlorobenzyl alcohol

(c) *m*-chlorobenzyl alcohol and *m*-hydroxybenzyl alcohol

(d) potassium *m*-chlorobenzoate and *m*-chlorobenzyl alcohol.

39. IUPAC name of following will be



(a) 4-formyl3-methyl 1-hydroxy benzene

(b) 4-formyl 3-methyl phenol

(c) 4-hydroxy 2-methyl benzaldehyde

(d) 4-hydroxy 2-methyl carbaldehyde

40. The correct order of increasing acid strength of the compounds

(A) CH_3CO_2H (B) $MeOCH_2CO_2H$

(C) CF_3CO_2H (D)  is

(a) D < A < B < C (b) A < D < B < C

(c) B < D < A < C (d) D < A < C < B

41. The increasing order of the rate of HCN addition to compound A – D is

(A) HCHO (B) CH_3COCH_3

(C) $PhCOCH_3$ (D) PhCOPh

(a) D < C < B < A (b) C < D < B < A

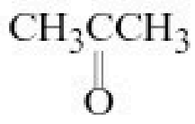
(c) A < B < C < D (d) D < B < C < A

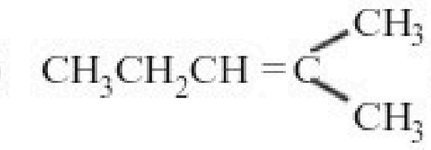
42. The carboxyl functional group (– COOH) is present in

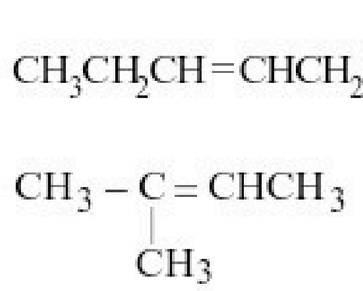
(a) picric acid (b) barbituric acid

(c) ascorbic acid (d) aspirin

43. Which alkene on ozonolysis gives CH_3CH_2CHO and



(a)  (b) $CH_3CH_2CH=CHCH_2CH_3$

(c) $CH_3CH_2CH=CHCH_3$ (d) 

44. Which one of the following is reduced with zinc and hydrochloric acid to give the corresponding hydrocarbon?

(a) Acetamide (b) Acetic acid

(c) Ethyl acetate (d) Butan-2-one

45. Acetal is produced by reacting an alcohol in the presence of dry HCl with

(a) acetaldehyde (b) ketone

(c) ether (d) carboxylic acid

RESPONSE GRID					
	32. ⓐ ⓑ ⓒ ⓓ	**33.** ⓐ ⓑ ⓒ ⓓ	**34.** ⓐ ⓑ ⓒ ⓓ	**35.** ⓐ ⓑ ⓒ ⓓ	**36.** ⓐ ⓑ ⓒ ⓓ
	37. ⓐ ⓑ ⓒ ⓓ	**38.** ⓐ ⓑ ⓒ ⓓ	**39.** ⓐ ⓑ ⓒ ⓓ	**40.** ⓐ ⓑ ⓒ ⓓ	**41.** ⓐ ⓑ ⓒ ⓓ
	42. ⓐ ⓑ ⓒ ⓓ	**43.** ⓐ ⓑ ⓒ ⓓ	**44.** ⓐ ⓑ ⓒ ⓓ	**45.** ⓐ ⓑ ⓒ ⓓ	

Space for Rough Work