

GOC-2

	1			
1	Which of the following is	an electrophilic reag	ent?	
	(1) <i>ROH</i>	(2) BF_{3}	(3) <i>NH</i> ₃	(4) RO^{-}
2	Most unstable resonating s	tructure is	0	
	$\ddot{\mathbf{Q}}$	0	ŏ	
	⊕			
		(2) 0		(4) All are equally stable
3	Correct statement is: (1) Resonance stab	ilizes molecule	(2) Resonant	nce affects bond length
	(1) Resonating stru	ctures are imaginary	structures (4) All	nee affects bond length
4	Which of the following is	-M group when at	tached with benzene ring	2?
	(1) <i>–COOH</i>	(2) $\overset{\oplus}{\mathrm{NH}_3}$	$(3) - CCl_3$	(4) All
			5	
5	Which of the following ha	s hyper conjugation	effect	
	$\sim CH_2$	$\sim \overset{\oplus}{C} H$		\sim
				Ĭ Ĭ Ĭ
				(4) None of
	these	(2)		
6	Which of the following is	wrong representation		G
	NH,	Stark .	- N	S.
	(1)	(2)	(3)	(4)
		\checkmark		
7	Which of the following pa	ir of structure does n	ot represent resonating s	tructure
-		H	sor represent resonating s	
	A)			
]		
		-		
]		
	C) 📎 🗸			-
	(1) (A) & (B)	(2) (B) & (C)	(3) (A) & (C) $(4)(A), (B) \& (C)$



14	Most stable carbocation is
	$1) \xrightarrow{-} (2) \bigcirc (3) \bigcirc (4) \bigcirc (4$
15	Which of the following shows the correct order of decreasing acidity(1)PhCO2H > PhSO3H > PhCH2OH > PhOH(2) PhSO3H > PhOH > PhCH2OH > PhCH2OH(3) PhCO2H > PhOH > PhCH2OH > PhSO3H(4) PhSO3H > PhCOOH > PhOH > PhCH2OH
16	75. Which type of the overlap of orbitals involves in hyperconjugation ? (1) $\pi - \pi$ (2) $\sigma - \rho$ (3) $\sigma - \sigma$ (4) $\rho - \rho$
17	The geometry of a methyl carbanion is likely to be1) Pyramidal2) Tetrahedral3) Planar4) Linear
18	Conversion of propene to n -propyl bromide in presence of peroxide involves1) free radical addition2) nucleophilic substitution3) free radical substitution4) electrophilic addition
19	$\begin{array}{c c} Decreasing(-I) \text{ power of given groups is :-} \\ (A) -CN & (B) -NO_2 & (C) -NH_2 & (D) -F \\ (1) B > A > D > C & (2) B > C > D > A & (3) C > B > D > A & (4) C > B > A > D \end{array}$
20	Which of the following pairs is /are correctly matched ? I) Carbocation : electrophile II)Free radical : Paramagnetic III)Carbene :Incomplete octet IV)Carbanion: Incomplete octet Select the correct answer using the codes given below 1) Only I 2) I and II 3) I, II, III and IV 4) I, II and III
21	Mark the true statement concerning mesomeric effect?2) It involves electrons in π 1) It occurs in conjugated compounds2) It involves electrons in π bonds3) Here electron pair is transferred completely4) All are true
22	β -elimination reaction leads to formation of1) Carbene2) $π$ -bond3) Sigma bond4) Cycliccompound
23	The reaction, $(CH_3)_3 C - Br \rightarrow (CH_3)_3 C^+ + Br^-$ is an example of 1) Homolytic fission 3)Cracking (CH_3)_3 C^+ + Br^- is an example of 2) Heterolytic fission 4) All the above
24	Which one of the compound behaves as an electrophile as well as nucleophile1) Acetone2) Cyanide ion3) nitrite ion4) Sulphite ion
L	Page 3 of 22

25	Nucleophilic addition reaction will be most favoured	in			
20	1) $CH_2CH_2CH_2 - CO - CH_2$	$2) CH_2 - CO - CH$	2		
	$\begin{array}{c} 1, 1, 1, 2, \dots, 2 \\ 3 \end{array}) CH CH CH - CHO \end{array}$	4) CH - CHO	3		
		, ch ₃ cho			
26	Which one of the following does not exhibit hyperconjugation ?				
	1) Ethanal2) Toluene	3) Isobutylene	4) Trifluro		
	acetaldehyde				
27	Pick up the incorrect statement				
	1) Electromeric effect is a temporary effect				
	2) Inductive effect is transmitted over only qu	ite a short length			
	3) -Cl is o.p-directing but moderately deactiv	ating group			
	4) Inductive effect is a polarisability effect				
28	What is hybridization of C in triplet carbine				
	1) SP 2) SP^2	3) SP^{3}	4) SPor SP^2		
			,		
29	CH ₂				
	$\left[\begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$				
	Example of ?				
	1) Free radical addition reaction	2) Free radical subs	titution reaction		
	3) nucleophilic substitution reaction	4) electrophilic sub	stitution reaction		
30	Which is stable Alkene				
	1) $CH_2 = CH_2$	$2) CH_3 - CH = CH$	2		
		CH_{3}	, CH,		
		C = C	3		
		, H	CH_3		
	3) $CH_3 - CH = CH - CH_3$	4) 11			
21	Which of the following is exhibit 1 & 1 M offect				
31	which of the following is exhibit $+1 \approx +10$ effect	2) <i>CH</i>			
	$1) - NO_2$ 2) $-CT_3$	$5) - C \Pi_3$	4) 0		
32	Which of the following compound has zero dipole	moment			
	1) 1,1—Dichloro ethylene				
	2) <i>cis</i> —1,2—dichoroethylene				
	3) <i>trans</i> —1,2—dichoroethylene				
22	4) Both 2& 3 Onticel inputivity of mage isomer is due to				
33	1) element of asymmetry				
	2) internal compensation				
	3) due to lack of asymmetric carbon				
	4) External compensation				
			Page 4 of 22		

34	Correct relation between the following two
	CH. CH.
	H—————————————————————————————————————
	Н
	CH ₂ OH CH ₂ OH
	1) both are identical
	2) pair of enantiomers
	3) pair of diasteriomers
	4) pair of mesoisomers
35	An enentiomerically pure acid is treated with racemic mixture of an alcohol having chiral
	carbon, the ester formed will be
	1) mixture of diastereomers
	2) mixture of enantiomers
	3) meso compound
	4) racemic mixture
36	Which of the following is a false statement
	1) n-butanol and isobutanol are chain isomers
	2) n-propanol and isopropanol are position isomers
	3) 1-butene and Isobutene are position isomers 4) Ethylang diablarida and Ethylidana ablarida and positional isomera
	4) Ethylene diction de and Ethylidene chion de are positional isomers
37	HCN and HNC are
	1) Metamers 2) Tautomers
	3) Positional isomers 4) Chain isomers
38	Which of the following compounds will show metamerism
	1) CH ₃ -CO-C ₂ H ₅ 2) C ₂ H ₅ -S-C ₂ H ₅
	3) CH_3 -O-C H_3 4) CH_3 -O-C $_2H_5$
39	The absolute configuration of
•••	HO.C. CO.H
	H OH
	1) S, S 2) R, R
	3) R, S 4) S,R



	Which of the following biphenyls is optically active	
		O_2N
	CH₃ ∠Br Br	
	3)	
		an Bh Bharan Thu gið S Anna H anna S (199
47	How many structur	ally different dibromobenzenes are possible
	3) 3	4) 4
		·
48	Which functional gi	coup can be represented in compound having molecular formula $C_4H_{10}O$
	3) Acid	4) Alcohol
40	TT 1 (1 (
49	1) 1	terminal alkynes exist with a molecular formula C_5H_8 2) 2
	3) 3	4)4
50	In alu din a tha aircon	and in total have many positional increases and possible for
50	Including the given	one, in total now many positional isomers are possible for
	\sim	
	1) 6	2) 3
	3) 4	4) 5
51	$CH_2 - CH_2 - $	CO_2H ; $CH_2 - CH - CH_2$;
01	(A)	(B)
		CO_2H
	(A) and (B) are 1) Chain	2) Positional
	3) Functional	4) Metamers
52		
	\sim	••••••••••••••••••••••••••••••••••••••
	Ö (A)	(B)
	1) Chain isome	rs 2) Functional isomers
	3) Metamers	4) Positional isomers
53	Total number of ste	reoisomer for 2.3-dichlorobutane are
	1) 3	2) 4
	3) 5	4) 6
54	How many cyclic st	ructural isomers possible for C5H10
	1) 4	2) 5
	3) 6	4) 7

55	What is the relationship between trans-2-butene and cis-2-butene 1) unrelated compounds 2) constitutional isomers 3) enantiomers
	4) diastereomers
56	Determine the double bond stereochemistry (E or Z) for the following molecules $F \rightarrow H_3C$ H H H I H I H I I H I I H I
57	i) CH ₂ =CH-CH ₂ -CH=CH ₂ ii) CH ₂ =CH-CH=CH-CH ₃ iii) CH ₃ -CH=CH-CH=CH-CH ₃ The number of possible geometric isomers for the above compounds respectively are 1) 0,2,4 2) 2,2,4 3) 0,3,3 4) 0,2,3
58	How many stereoisomers are there for following structure 1) 1 2) 2 3) 3 4) 4 Sol: No. of stereo isomers = 2^n where n=1, which is 4^{th} carbon
59	$\begin{array}{c} ^{CH_3}\\ How \ many \ chiral \ centers \ are \ present \ in \ above \ compound\\ 1) 1 & 2) 2\\ 3) 3 & 4) 4 \end{array}$
60	Which of the following compounds is never chiral 1) 2,3-dibromobutane 2) 1,3-dibromobutane 3) 1,2-dichlorobutane 4) 1,4-dibromobutane
61	Which of the following groups has the highest priority using the Cahn, Ingold, Prelog rules 0 1)C_OH 3)OH 0 2)C_H 4)O_CH_3
L	Page 8 of 22

62	Which of the following is/are optically inactive1) a 50-50 mixture of R and S enantiomers2) a meso compound3) every achiral compound4) all of the above
63	A mixture of equal amounts of two enantiomers 1) is called a racemic mixture 2) is optically inactive 3) implies that the enantiomers are meso forms 4) both 1 and 2
64	What is the relationship between the following compounds CH_3 CH_3 CH_3 $H+Cl$ $H+Cl$ $H+Cl$ CH_3
65	Number of chain isomers possible for C_6H_{14} is1) 22) 33) 54) 7
66	Primary, secondary and tertiary amines are1) Chain isomers2) Position isomers3) Functional isomers4) Tautomers
67	The number of structural isomers possible from the molecular formula C3H9N1) 22) 33) 44) 5
68	The order or stability of the following tautomeric compound is OH O $ $ $CH_2 = C - CH_2 - C - CH_3 \square$ I O O $ $ $CH_3 - C - CH_2 - C - CH_3 \square$ I O $ $ $CH_3 - C - CH_2 - C - CH_3 \square$ II OH O III OH OH OH III $CH_3 - C = CH - C - CH_3$ $IIII$
	$1) III > II > I \qquad 2) II > I > III$



73	On catalytic reduction 1) 2	(H ₂ /Pt) how many alke 2) 3	nes will give 2- methyl b 3) 4	utane? 4) 1
74	The molecular struct	ture of diphenylmetha	ne is	
	CH ₂ —CH ₂ —	$\langle \bigcirc \rangle$		
	How many stru	ctural isomers are pos	ssible when one of the h	ydrogen atom is replaced
	1) 3 2) 4	$\frac{1}{3}8$	4) 7	
	1) 5 2)	370	·) /	
75	The absolute configu	uration of the followin	g compound is	
	1) 2S, 3R	2) 2S, 3S		
	3) 2R, 3S	4) 2R, 3R		
76	Total number of ster	eoisomers of the com	pound 2.4-dichlorohept	ane are
	1) 2 2) 1	3 3) 4 4	4) 6	
77	Which of the fallow	ing is compated at of th	vicial proparties of the	anatrical isomars?
	H ₃ C	$H_{\rm H}$ H ₃ C	Usical properties of the CH₃	geometrical isomers?
	c = c			
	c == c	c =	= C	
			= C	
		С = С =	= C H	
	$\begin{array}{c} c = c \\ H \\ I \\ \hline \end{array}$	CH_3 H II	H H Melting point	Stability
	$\begin{array}{c} c = c \\ H \\ \hline \\ I \\ \hline \\ \hline$	$C = CH_3 \qquad H$ II $I > II$	= с н 	Stability I > II
	C = C H I Dipole moment 1) I > II 2) II > I	$C = CH_3 \qquad H$ I $I > II$ $I > II$ $I > I$	= с <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u>	Stability I > II II > I
	c = c H I	$C = CH_3 \qquad H$ II $I > II$ $I > II$ $I > I$ $I > I$ $I > I$	= с H Melting point II > I II > I I > I I > II	Stability I > II II > I II > I I > II
	$ \begin{array}{c} c = c \\ H \\ \hline I \\ \hline I \\ \hline Dipole moment \\ \hline 1) I > II \\ \hline 2) II > I \\ \hline 3) I > II \\ \hline 4) II > I \end{array} $	$C = CH_3 \qquad H$ I $I > II$ $I > II$ $I > I$	= с H Melting point II > I II > I I > I I > II I > II I > II I > II	Stability I > II II > I II > I I > II I > II
	C = C H I	$C = CH_3 \qquad H$ I $I > II$ $I > II$ $I > I$	= с H Melting point II > I II > I I > II I > II I > II I > II I > II	Stability I > II II > I II > I I > II I > II
78	c = c H I	CH ₃ H I I I > II I > II I > II I > II I > I I > I	= C H H $II > I$ $II > I$ $I > II$ H H H H H	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$
78	c = c H I	CH ₃ H $C = \frac{II}{I}$ Boiling point I > II II > I I > I	= C H H $II > I$ $II > I$ $I > I$ $I > I$ $I > II$ $I > II$ $I > II$ H H H H	Stability I > II II > I I > II I > II I > II ds
78	c = c H $C = c$ I	CH ₃ H $C = \frac{II}{I}$ Boiling point I > II II > I I > I I > I I > I I > I I > I I = I I = I I = I I = I I = I	= C H H $II > I$ $II > I$ $I > I$ $I > II$ $I > II$ $I > II$ $I > II$ H H H H H	Stability I > II II > I I > II I > II I > II ds
78	c = c H I	CH ₃ H $C = \frac{II}{I}$ Boiling point I > II II > I I > I I > I I > I I > I I = I I = I I = I I = I I = I	= C H H $II > I$ $II > I$ $I > I$ $I > II$ $I > II$ $I > II$ $I > II$ H	Stability I > II II > I I > II I > II I > II ds
78	C = C H I	CH ₃ H C = II $I > II$ $I > II$ $I > I$ $I > I$ $I > I$ $I > I$ $I = I$	= C H	Stability I > II II > I I > II I > II I > II ds
78	c = c H I	$C = CH_3 \qquad H$ II $I > II$ $I > II$ $I > I$ $I = I$	= C H H $II > I$ $II > I$ $I > II$ $I > II$ $I > II$ $I > II$ H H H H	Stability I > II II > I I > II I > II ds
78	C = C H I	CH ₃ H Boiling point I > II I > II I > II I > I I > I	= C H	Stability I > II II > I I > II I > II ds
78	$ \begin{array}{c} $	CH ₃ H CH ₃ H C H C H H C H H C H H C H H C H H C H H C H H H H H H H H H H H H H	= C H	Stability I > II II > I I > II I > II
78	C = C H I	CH ₃ H Boiling point I > II I > II I > I I	= C H H H H H H H H H H	Stability I > II II > I I > II I > II ds
78	C = C H I	CH ₃ H H H H H H H H H H H H H	= C H H H H H H H H H H	Stability I > II II > I I > II I > II ds
78	C = C H I	CH ₃ H $C = \frac{1}{CH_3}$ H Boiling point I > II I > II I > I I > I > I I > I I > I I > I > I > I I > I > I > I I = I > I I = I > I > I > I I = I > I > I > I > I I = I > I > I > I > I > I I = I > I > I > I > I > I > I > I > I >	= C H H H H H H H H H H	Stability I > II II > I I > II I > II ds





	1)I>II>III>IV	2) IV>III>II>I	3) II>I>III>IV	4) III>II>IV
		Delight o KEY	lasses	
1	ANS-2 Sol: Electron de	ficient molecules		
2	ANS-1 Sol: Resonance			
3	ANS-4 Sol: According	to Resonance		
4	ANS-4 Sol: All are $-M$	effect group		
5	ANS-3 Sol: α Hydroge	ens		
6	ANS-3 Sol: Electron pa	ir is shift towards more	electronegative atom	
7	ANS-1 Sol: Resonance	sturucture are conjugat	ion	
8	ANS-2 Sol: Basic natur	e of amions		
9	ANS-4 Sol: Strong – <i>M</i>	effect group at meta p	osition	
10	ANS-3 Sol: According	to order of stability of c	arbanion	
11	ANS-2 Sol: $-M$ effect	group		
12	ANS-2			
				Page 14 of 22

	Sol: Conjugation
13	ANS-4 Sol: Allylic > Tertiary > secondary > Primary Alkyl free radicals
14	ANS-1 Sol: Resonance
15	ANS-4 Sol: Order of Acidic character is
16	ANS-2 Sol: $-I$ effect
17	ANS-1 Sol: Free bond pairs and one lone pair (non bonded electrons)
18	ANS-1 Sol: Antimarkownikov's rule
19	ANS-1 Sol: Order of –I effect is bond $-NO_2 > -CN > -F > -NH_2$
20	ANS-3 Sol: Depending on the number of electrons
21	ANS-4 Sol: According to definition of mesomeric effect
22	ANS-2 Sol: σ is converted into π bond by elimination reactions
23	ANS-2 Sol: Fission of covalent bond
24	ANS-1 Sol: Acetone contains both electron loving and electron donating groups
25	ANS-4 Sol: + <i>I</i> effect
26	ANS-4 Sol: Trifluroacetaldehyde has no α hydrogen
27	ANS-4 Sol: Definition of inductive effect
28	ANS-4 Sol: Hybridization of triplet carbene is SP ² or SP

29	ANS-2 Sol: Allylic substitution
30	ANS-4
	Sol: Depending on the number of αCH_3 groups
31	ANS-4
	Sol: O^- is +I and +M group
32	ANS-3
	Sol: Symmetrical trans isomers have no dipole moment
33	ANS-2
	Sol: optical rotation of one half of the molecule cancels that of other half due to plane of
	symmetry
34	ANS-3
	Sol: Not mirror images
35	ANS-1
	Sol: Let acid is 'd'. It reacts with 'dl' alcohol to form dd ester and dl ester. dd & dl forms of esters are diastereomers.(Resolution of Racemic mixture)
36	ANS-3 Sale 1 butons and isobutons are chain isomers
37	ANS-2
	Sol: They are differing in the position of 'H'
38	ANS-2
	Sol: methyl propyl thioether & diethyl thio ethers are metamers
39	ANS-2
	Sol: Absolute configuration of both chiral carbons—R&R
40	ANS:2
<u>/1</u>	Sol: α -H is at bridge head carbon. But, it can not undergo sp ² hybridisation
71	Sol: phenol is stabilized by aromatic nature
42	ANS-3
	Sol: II \rightarrow Z and IV \rightarrow E
43	Key : 4 Sol: Double bonded carbons attached to different groups in 1&3
44	ANS-3
	Sol: In 3- methyl-1 pentene 3 rd carbon is chiral

45	ANS 2
43	 Sol: Three monocloro derivatives are obtained by substituting chlorine atom at 2nd, 3rd & 4th position of one of the phenyl rings and fourth one is obtained by substituting on methylene group
46	Kov · 3
70	Sol: Biphenyls with unsymmetrical ortho substituents are optically active
47	ANS-3
77	Sol: Ortho, meta, para
19	ANS A
40	Sol: $CnH_{2n+1}OH$ is the general formula of alcohol
49	ANS-2
	Sol: n-pentyne, isopentyne
50	ANS-2
	Sol: 1) 1.2.3 trimethyl benzene
	2) 1.2 A trimethyl benzene
	2) 1.2.5 trimothyl bonzono
	5) 1,5,5 trinethyl benzene
51	ANS-1
01	Sol: A&B differ in length of parent chain
52	ANS-2
02	Sol: $A \rightarrow$ ketone & $B \rightarrow$ aldehyde
53	ANS-1
	Sol: For symmetrical molecules; total no of optical isomers
	$=2^{n-1}+2^{\frac{n}{2}-1}$
54	ANS-2
	Sol: 1)Cyclopentane
	2) methyl cyclobutane
	3) ethyl cyclopropane
	4) 1.1 dimethyl avelopropane
	4) 1,1—unitethyl cyclopiopate
	5) 1,2-dimetnyl cyclopropane
55	ANS-4
55	Sol: not mirror increase
56	ANS-4
00	Sol: A-Z & B \rightarrow E
57	ANS-4
	Sol: $i \rightarrow$ can't show GI: $ii \rightarrow$ one of the double bonded carbon atoms has similar groups
	n n n n n n n n n n
	iii) $= 2^{n-1} + 2^{\frac{n}{2}-1}$
58	ANS-2
58	ANS-2 Sol: No. of stereo isomers = 2^n where n=1, which is 4^{th} carbon

59	ANS-3
39	CH
	Sol:
<u> </u>	
60	ANS-4 Sala agreementatio contrare abaant
	Sol: asymmetric carbons absent
61	Kov·A
01	Sol: follow CIP rules
62	ANS-4
	Sol: Option 1: Racemic mixture
	Option 2: Internal compensation
	Option 3 : Can not show optical isomerism
63	ANS-4
	<u>Sol</u> : Equimolar d & 1 mixture is called racemic mixture, which is optically inactive
<u> </u>	
64	ANS-1 Sale. They are abject and non-immediate mirror images
	Sol: They are object and non imposable mirror images
65	ANS-3
00	Sol: n-hexane isohexane 3-methyl pentane
	2.2-dimethyl butane, 2.3-dimethyl butane
66	ANS-3
	Sol: There are functional isomers
67	ANS-3
	Sol: n-propyl amine; isopropylomine;trimethyl amine
<u> </u>	
00	AND-1 Sol: III is more stable due to intramolocular H bonding and conjugation among L D II bond & II
	bond L is less stable due to terminal double bond
	bond I is less stable due to terminal double bond
69	ANS-3
	Sol: Benzyl alcohol, anisole, o,m ¶ cresols
70	ANS-1
	Sol: $\alpha = \frac{13.4}{-126.8}$
	$\alpha = \frac{1}{0.2 \times 2.5} = +20.8$
71	ANS-3
	Sol: In Fischer form H at left side of highest numbered stereogenic carbon is D isomer
72	Key: 1
	Sol: -OH is strongly ring activating group (strong electron donating group)
73	ANS-2
	Sol: 2- methyl-1-butene, 2-methyl-2-butene 3-methyl-1-butene





84	ANS-2
	H ₃ C*
	$H_{3}C$ H^{*}
	Sol. HO
	Carbon bonded to four different atoms group of atoms is chairal
85	. ANS-4
	Sol: Unsaturated aldehydes or ketones having α -hydrogen exhibit tautomerism
86	ANS-3
	Sol: –OH group should have top priority.
87	ANS-3
	Sol: –OH group should have top priority.
88	ANS-3
	Sol: C–C–C–OH
	C - C - C - C
	OH
89	ANS-3
	Sol: $Z \Rightarrow$ Aromatic
	$X \Rightarrow$ Non aromatic
	$Y \Rightarrow$ Anti aromatic
90	ANS-1
	Sol:



FOR ANY QUERIES, PHONE INFO: 7550201255

Page **22** of **22**