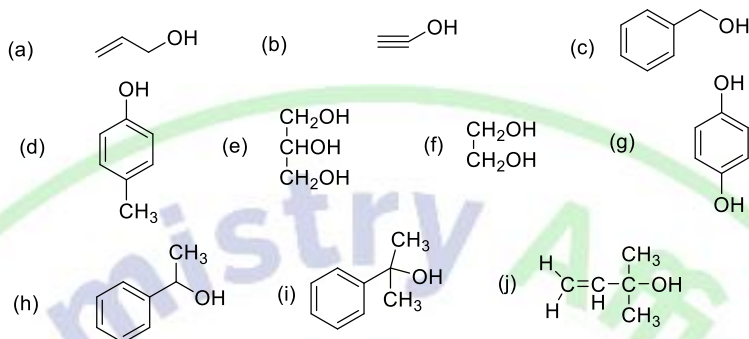
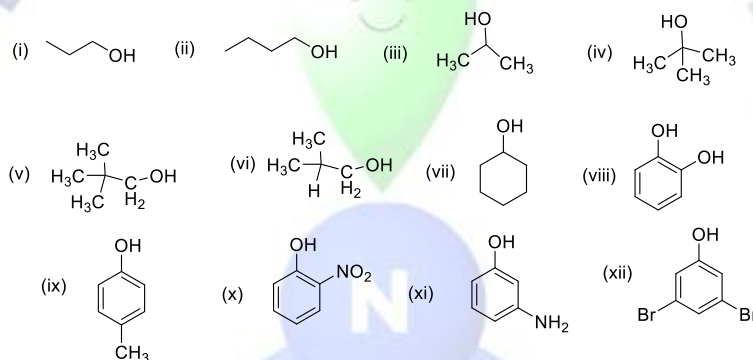


Fundamental Concepts on Organic Chemistry: Part 2

1. Write down IUPAC nomenclatures of below mentioned alcohols



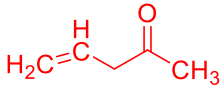
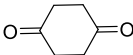
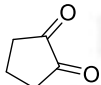
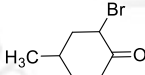
2. Write down common names of below mentioned alcohols



3. What are important structural differences between methanol and phenol. 4. Mention the hybridization of each carbon and oxygen in prop-1-ene-ol and phenol.

5. Fill in the blanks

Entry	Structure	Common name (if any)	IUPAC name
1.		Formaldehyde	
2.		Acetaldehyde	
3		Benzaldehyde	
4		Acetone	
5.			

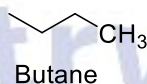
6.			
7.			1-phenylethanone
8.			diphenylmethanone
9.		o-Tolualdehyde	
10.			2-methylpropanal
11.			3-methylbutan-2-one
12.		cyclopentanone	cyclopentanone
13.		4-hydroxycyclohexanone	4-hydroxycyclohexanone
14.			
15.			
16.			
17.			4-hydroxybutanal
18.			4-hydroxy-2-butanone
19.			1,5-dihydroxy-3-pentanone
20.			4-pentene-2-one

6. Predict all molecules.

(a) You have been given a butane molecule. If one hydrogen (terminal) of butane is replaced with (i) -CHO group, (ii) -OH, (iii) -COOH, (iv) -Cl respectively which type of new molecules will form. Give IUPAC name of each new compound.

(b) How can you introduce a keto functional group in butane molecule. Justify

© If you want to incorporate a double bond in butane molecule how will you adjust hydrogen atoms. (d) Is it possible to incorporate a triple bond? Adjust hydrogen atoms accordingly.



7. Name or draw out the following molecules:

(a) 4,4-dimethyl-2-pentyne,	(b) 4-Penten-1-yne	(c) 1-ethyl-3-dimethylnonyne
(d)	(e)	(f)
(g)	(h)	(i)
(j) pentanedial	(k) butanedial	(l) 2,4-pentanedione

All the best