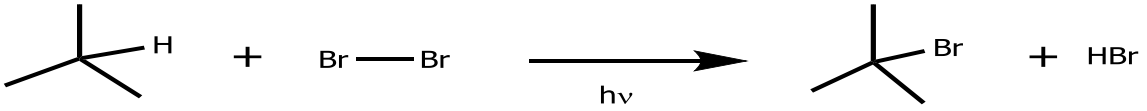
Q1: Choose and circle the correct answer: **(10 x 1=10 points)**

1. What is the type of the following reaction :



a) Substitutions b) Addition c) Elimination d) Rearrangement

2. What is the type of cleavage in the following reaction :

$$\mathbf{A:B \longrightarrow A^{\bullet} + B^{\bullet}}$$

a) Homolysis b) Heterolysis c) Hydrogenation d) none of them

3. Lewis acid–base reactions involve the transfer of …….:

a) Protons b) Neutrons c) Electrons d) none of them

4. In the following reaction, NH_3 is……..:

$$\mathbf{HCl + :NH_3 \longrightarrow Cl^- + NH_4^+}$$

a) Acid b) Conjugate acid c) Base d) Conjugate Base

5. In the following reaction, Cl^- is……..:

$$\mathbf{HCl + :NH_3 \longrightarrow Cl^- + NH_4^+}$$

a) Acid b) Conjugate acid c) Base d) Conjugate Base

6. Which of the Following is isopropyl group

a) $CH_3CH_2CH_2-$ b) $CH_3\overset{|}{C}HCH_3$ c) $CH_3CH_2CH_2CH_2-$ d) $CH_3-\overset{CH_3}{\overset{|}{C}}H-CH_3$

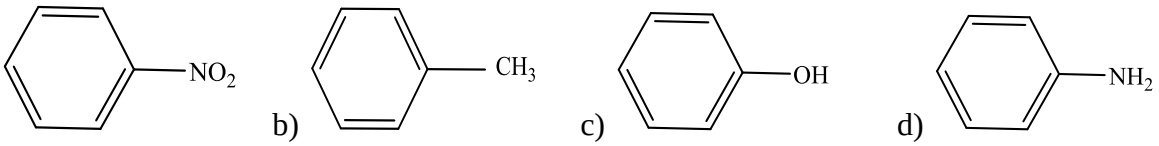
7. How many primary carbon atoms in the following structure. $CH_3-\overset{CH_3}{\overset{|}{C}}H-CH_2-CH_3$

a) 1 b) 2 c) 3 d) 4

8. Hückel's Rule states that

a) $(n + 2)\ \pi$ b) $(4\ \pi + 2)\ n$ c) $(2n + 4)\ \pi$ d) $(4n + 2)\ \pi$

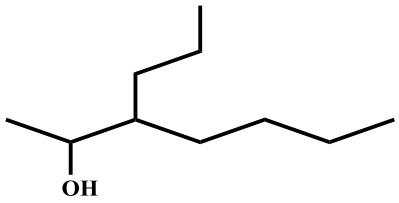
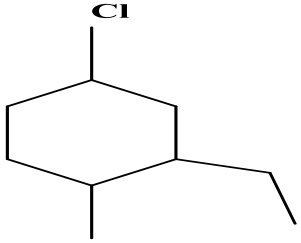
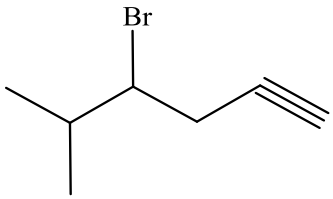
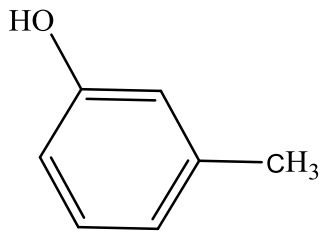
9. The structure of Toluene is



10. The general formula of alkanes is

a) C_nH_{2n+2} b) C_nH_{2n} c) C_nH_{2n-2} d) C_nH_n

Q2: Write down the IUPAC names: (5 x 1=5 points)

Structure	IUPAC name
	
	
	
	
	

Q3: draw the structures corresponding to each IUPAC name:

(5 x 1=5 points)

Structure	IUPAC name
	3-Ethyl-2-hepten-1-ol
	1,2-Dibromobenzene
	3-Methylcyclohexanol
	4-Chloro-1-butyne
	2-Methyl-5-octyn-2-ol

Best wishes