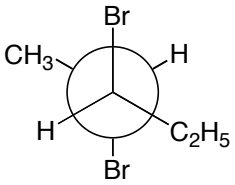
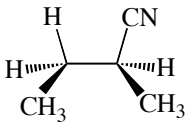
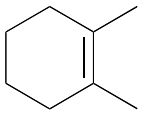
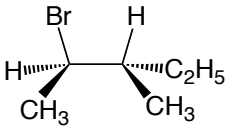
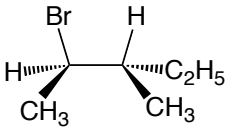
Licence Sciences de la Vie et de la Terre – L2
Chimie des Polyfonctionnels

CC – durée : 1h – Lundi 3 mai 2010

La calculatrice n'est pas autorisée. L'utilisation du téléphone portable est interdite.

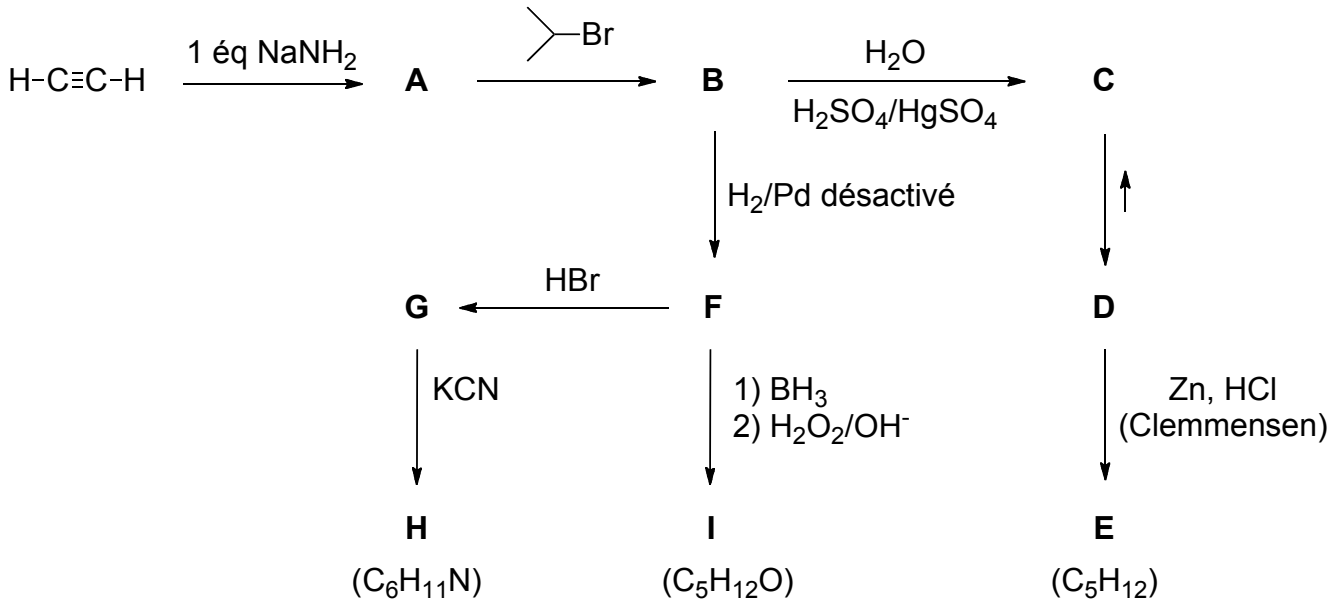
<u>Exercice 1</u>

Compléter les équations suivantes (**1 case = 1 composé organique ou inorganique**).

	+ Br_2 →		+	*projection de Newman*	
(*Z*)-but-2-ène	**+ HOCl →**		+		
	+ NaCN →		+	NaBr	
	+ EtONa →		+		NaBr
	**+ KOH dilué →**		+		
	**+ KOH concentré →**		+		

Exercice 2 (20 min)

Donner la formule semi-développée des composés **A** à **I** pour la suite de réactions suivante. Préciser pour chaque réaction son type (substitution, addition, élimination, oxydation, réduction, acide-base, …).



Type : **A :**	**Type :** **B :**	**Type :** **C :**
Type : **D :**	**Type :** **E :**	**Type :** **F :**
Type : **G :**	**Type :** **H :**	**Type :** **I :**

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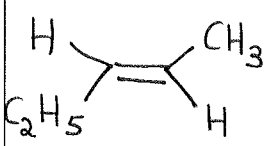
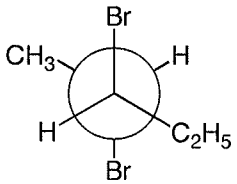
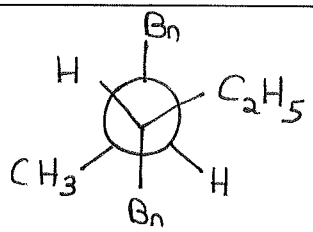
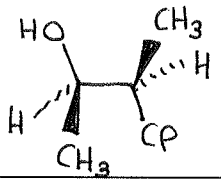
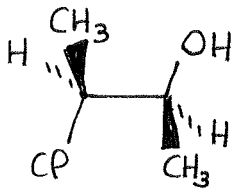
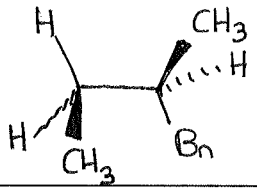
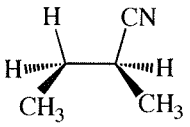
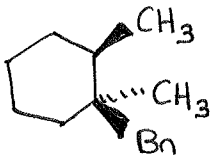
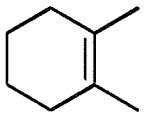
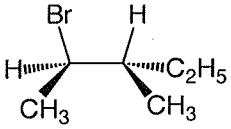
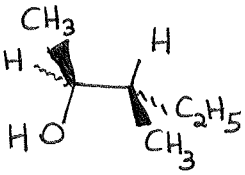
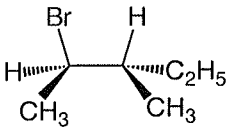
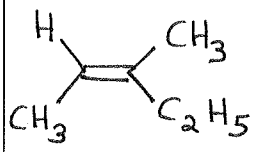
représentation dans espace fausse = 0,5/1
pas de représentation dans espace = 0,5/1

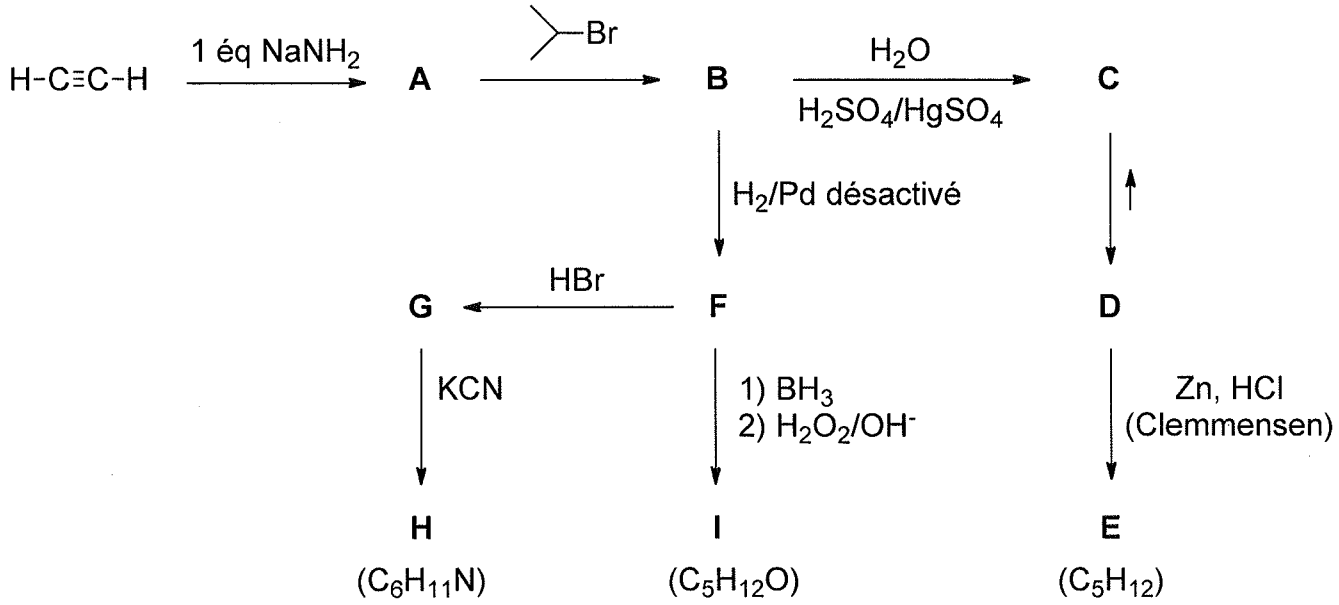
Exercice 1 /11

Compléter les équations suivantes (**1 case = 1 composé organique ou inorganique**).

	**+ Br_2 →**		+	 *projection de Newman*
(*Z*)-but-2-ène	**+ HOCl →**		+	
	**+ NaCN →**		+	NaBr
	**+ EtONa →**		+	EtOH / NaBr
	**+ KOH dilué →**		+	KBn
	**+ KOH concentré →**		+	KBn 0,5 / H_2O 0,5

Exercice 2 (20 min) /9 0,25 pour type, 0,75 pour molécule

Donner la formule semi-développée des composés **A** à **I** pour la suite de réactions suivante. Préciser pour chaque réaction son type (substitution, addition, élimination, oxydation, réduction, acide-base, …).



Type : Acide-Base **A :** H-C≡C⊖ Na⊕	**Type :** SN **B :** H-C≡C-CH(CH3)2	**Type :** Addition **C :** CH2=C(CH(CH3)2)(OH)
Type : Tautomérie **D :** CH3-C(=O)-CH(CH3)2	**Type :** Réduction **E :** CH3CH2CH(CH3)2	**Type :** cis-Addition **F :** H(H)C=C(CH(CH3)2)H
Type : Addition **G :** CH3-CH(Br)-CH(CH3)2	**Type :** SN **H :** CH3-CH(C≡N)-CH(CH3)2	**Type :** Addition **I :** CH2(OH)-CH2-CH(CH3)2