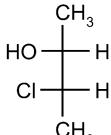
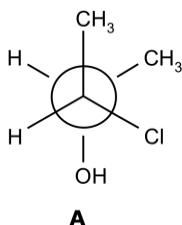
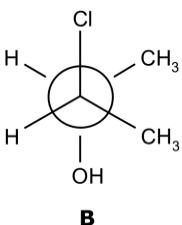
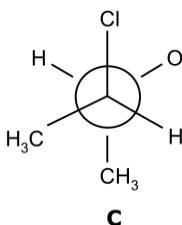
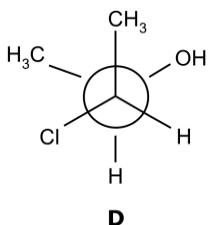
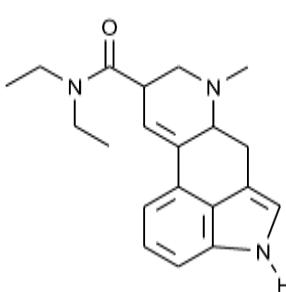
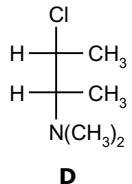
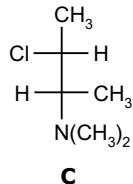
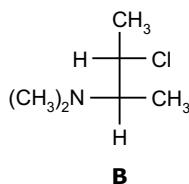
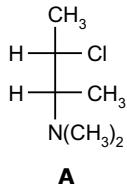
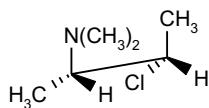


EXERCISE TEST No. 1

1.	<p>Indicate which molecule has a dipole moment.</p> <p>(1) methane; (2) ethyne.</p> <p>A) <b>1</b> = Yes; <b>2</b> = Yes. C) <b>1</b> = No; <b>2</b> = Yes.</p> <p>B) <b>1</b> = Yes; <b>2</b> = No. D) <b>1</b> = No; <b>2</b> = No.</p>
2.	<p>Indicate which compound can form hydrogen bonds with water.</p> <p>(1) <math>\text{CH}_3\text{CO}_2\text{H}</math>; (2) <math>(\text{CH}_3)_2\text{NH}</math>.</p> <p>A) <b>1</b> = Yes; <b>2</b> = Yes. C) <b>1</b> = No; <b>2</b> = Yes.</p> <p>B) <b>1</b> = Yes; <b>2</b> = No. D) <b>1</b> = No; <b>2</b> = No.</p>
3.	<p>Indicate which statement is correct..</p> <p>(1) Alkanes contain only strong sigma bonds.; (2) The electronegativities of C and H are very different; H is the negative pole.</p> <p>A) <b>1</b> = Yes; <b>2</b> = Yes. C) <b>1</b> = No; <b>2</b> = Yes.</p> <p>B) <b>1</b> = Yes; <b>2</b> = No. D) <b>1</b> = No; <b>2</b> = No.</p>
4.	<p>Indicate Newman's projection that corresponds to the following Fischer projection.</p> <p></p> <p> <b>A</b></p> <p> <b>B</b></p> <p> <b>C</b></p> <p> <b>D</b></p>
5.	<p>Indicate the molecular formula of LSD.</p> <p></p> <p>A) <math>\text{C}_{20}\text{H}_{27}\text{N}_3\text{O}</math>.      B) <math>\text{C}_{20}\text{H}_{25}\text{N}_3\text{O}</math>.      C) <math>\text{C}_{19}\text{H}_{25}\text{N}_3\text{O}</math>.      D) <math>\text{C}_{21}\text{H}_{25}\text{N}_3\text{O}</math>.</p>
6.	<p>Indicate the hybridization of carbon atom 1 and the CN bond angle in ethanenitrile.</p> <p>A) <math>\text{sp}^2</math>, <math>180^\circ</math>.      B) <math>\text{sp}</math>, <math>180^\circ</math>.      C) <math>\text{sp}^2</math>, <math>120^\circ</math>.      D) <math>\text{sp}^3</math>, <math>109^\circ</math>.</p>

7. Indicate Fischer's projection that corresponds to the following trestle structure.



8. Indicate a compound that, in its most stable conformation, does not have all its carbon atoms on the same plane.

A) *cis*-2-Butene. B) Butano. C) Benzene. D) Ciclopropano.

9. Indicate which trestle projection corresponds to the following Fischer formula.

