ORGANIC CHEMISTRY QUIZ

CHM 1046 SUMMER 2013

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

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| 3. | What is the IUPAC name for the alcohol (CH3)2CHCH2CH2OH? | |
| A) | 3-methyl-1-butanol |
| B) | isoamyl alcohol |
| C) | 3,3-dimethyl-1-propanol |
| D) | 2-isopropyl-1-ethanol |
| E) | isopentyl alcohol |

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| 7. | Which compound is a ketone? | |
| A) | (CH3)2CHOCH3 |
| B) | (CH3)2C(OH)CH3 |
| C) | (CH3)2CHCOCH3 |
| D) | (CH3)2CHCHO |
| E) | (CH3)2CHCOOH |

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| 12. | Four of the following compounds are structural isomers. Which one is not? | |
| A) |  |
| B) |  |
| C) |  |
| D) |  |
| E) |  |

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| 14. | Which is the correct condensed structural formula for 3,3-diethylhexane? | |
| A) |  |
| B) |  |
| C) |  |
| D) |  |
| E) |  |

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| 16. | What is the compound represented by the following structure? | |
| A) | cyclohexatriene, C6H12 |
| B) | cyclohexene, C6H10 |
| C) | benzene, C6H6 |
| D) | cyclohexatriene, C6H9 |
| E) | cyclohexane, C6H12 |

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| 24. | How many hydrogen atoms are needed to complete the following hydrocarbon structure? | |
| A) | 6 |
| B) | 8 |
| C) | 2 |
| D) | 3 |
| E) | 4 |

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| 27. | Based on the three condensed structural formulas below, which of the following statements is true?   |  |  |  | | --- | --- | --- | | **1** | **2** | **3** | |  |  |  | | |
| A) | Formulas 2 and 3 describe geometric isomers. |
| B) | Formulas 2 and 3 describe enantiomers. |
| C) | Formulas 1 and 2 describe structural isomers. |
| D) | Formulas 1, 2, and 3 all describe the same compound. |
| E) | Formulas 1 and 3 describe different compounds. |

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| 28. | Name the following: | |
| A) | 3-methyl-1-pentyne |
| B) | 2-ethyl-3-butyne |
| C) | 1-hexyne |
| D) | 3-methyl-4-pentyne |
| E) | 2-ethynyl butane |

**Answer Key**

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| 3. | A |
| 7. | C |
| 14. | B |
| 16. | C |
| 24. | A |
| 27. | D |
| 28. | A |