**King Saud University College of Science**

**145 Chem. Final Exam. 2nd term 1429-1430 Time: 2 Hours**

Student name: Student no.:

Group no.: Serial no.:

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**Choose the best answer (major product)**

1)

is:

A) (Z)-3-Bromo-4-methyl-2-hexene. B) (Z) -4-Bromo-3-methyl-4-hexene.

C) (E)-3-Bromo-4-methyl-2-hexene D) (E) -3-Bromo-4-ethyl-2-pentene.

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2)

is:

A) 2,3-Dimethyl-1-hexen-5-ol. B) 4,5-Dimethyl-5-hexen-2-ol.

C) 4-Propenyl-2-pentanol. D) 5-Hydroxy-2,3-dimethyl-1-hexene.

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3)

is:

A) 3-Bromo-3-ethoxy-1-propene. B) 3-Bromo-3-methoxy-1-propene.

C) 4-Bromo-5-hexene. D) 1-Bromo-1-ethoxy-2-propene.

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4)

is:

A) 2-Amino-3-bromo-5-hexanone. B) 3-Bromo-5-hexanon-2-amine.

C) 4-Acetyl-2-amino-3-bromobutane. D) 5-Amino-4-bromo-2-hexanone.

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5)

is:

A) Methylphenylaniline. B) Benzylmethylamine.

C) N-Methylaniline. D) N-Methyl-N-phenylammonia.

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6)

is:

A) Benzylpropionate. B) Phenylpropanoate.

C) Ethylphenylketone. D) Ethylbenzoate.

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7)

is:

A) N-Methylbenzamide. B) N,N-Dimethylbenzoic acid.

C) Dimethylbenzoylamine. D) N,N-Dimethylbenzamide.

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8)

Which of the following compounds is a secondary amine?



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9)

 is:

A) 4-Chloro-2-hexen-5-yne. B) 3-Chloro-4-hexen-1-yne.

C) 2-Chloro-4-penten-1-yne. D) 3-Chloro-1-hexyn-4-ene.

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10) 2-Cyclohexene carboxylic acid is:



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11)



is:

(A) 4-Bromo-3-ethyl-1-hydroxycyclohexane. (B) 3-Ethyl-4-bromocyclohexanol.

(C) 1-Bromo-2-ethyl-4-cyclohexanol. (D) 4-Bromo-3-ethylcyclohexanol.

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12) Salicylic acid is:



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13) 6-Bromo-2-ethyl-3-hydroxyhexanal is:



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14) Which of the following is structural **isomer of 3-hexyne**?



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15) Which of the following is **not** aromatic?



16) Which of the following is ketal?

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17) 2-Chloro-3-hydroxy-3-methylbutanoic acid is:



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18)



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19) Which of the following has the **lowest** boiling point?

A) 2-Methylhexane. B) n.Heptane.

C) 2,3-Dimethylpentane. D) 2,2,3-Trimethylbutane.

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20)



A) CH3CHO B) CH3CH2OH C) CH3COOH D) CH3CH2Cl

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21)





22)





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23)





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24)





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25)





26)





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27)





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28)





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29) Cyclopentanol is:

A) 2o Alcohol. B) Phenol. C) 1o Alcohol. D) 3o Alcohol.

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30)



A) CH3CH2CHO B) CH3CH2COCl C) (CH3CO)2O D) CH3CH2CH2Cl

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31)



A) CH3CH2CH2CH2OH B) CH3CH2CH2CH=NOH

C) CH3CH2CH2CH2NH2 D) None of these.

32)





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33)





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34)





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35) Which of the following compounds gives a positive Iodoform test?

A) 3-Pentanone. B) Cyclopentanone. C) 3-Pentanol. D) 2-Pentanone.

36)





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37)





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38) Propanal reacts with LiAlH4 / H3O+ to give:

A) CH3OCH3 B) CH3CH2CHO

C) CH3CH2CH2OH D) C2H5COOH

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39)





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40)



A) n. Butane. B) Cis-2-butene.

C) 1-Butyne. D) Trans-2-butene.

41)





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42)





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43)



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44)





45) Which of the following is the most acidic?



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46)





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47)





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48) Which of the following can not undergo aldol condensation?



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49)





50) Which of the following is the **most basic**?



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