

**Unit**  
12

**Lesson**  
5

**AIM**

- Functional Group Practice

**AGENDA**

- U12L5 Lesson video
- Functional Group Naming Practice

**YOYO**

- Watch the lesson video on YouTube (U12L5)

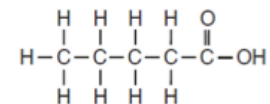
**HOMEWORK**

- CL#22 – Functional Groups – due TONIGHT by 11:59 pm
- Follow calendar

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### Question 1

Given the formula for an organic compound:



This compound is classified as an

- Aldehyde
- Amine
- Ester
- Organic acid

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### Question 2

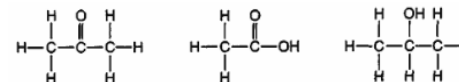
What is the total number of carbon atoms in a molecule of ethanoic acid?

- 1
- 2
- 3
- 4

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### Question 3

Given the three organic structural formulas shown below:



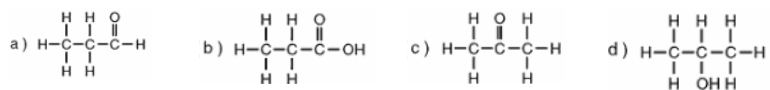
Which organic compound classes are represented by these structural formulas, as shown from left to right?

- ester, organic acid, ketone
- Ester, aldehyde, organic acid
- Ketone, aldehyde, alcohol
- Ketone, organic acid

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### Question 4

Given the formulas of four organic compounds:



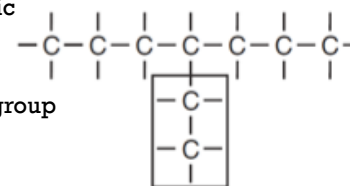
Which pair below contains an alcohol and an acid?

- a and b
- a and c
- b and d
- c and d

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### Question 5

Given the formula for an organic compound:



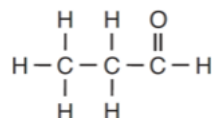
What is the name given to the group in the box?

- Butyl
- Ethyl
- Methyl
- Propyl

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### Question 6

Given the formula:



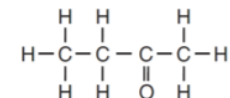
What is the chemical name of this compound?

- Propane
- Propanal
- Propanol
- propanone

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### Question 7

Given the formula for a compound:



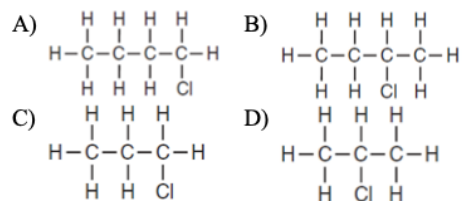
A chemical name for this compound is

- Butanal
- Butanol
- Butanone
- Butanoic acid

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### Question 8

Which formula represents a molecule of 2-chlorobutane?



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### Question 9

Which class of compounds contains *at least one* element from Group 17 of the Periodic Table?

- a. Aldehyde
- b. Amine
- c. Ester
- d. Halide

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### Question 10

Ethanoic acid and 1-butanol can react to produce water and a compound classified as an

- a. Aldehyde
- b. Amide
- c. Ester
- d. Ether

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### Question 11

The reaction between an organic acid and an alcohol produced

- a. An aldehyde
- b. A ketone
- c. An ether
- d. An ester

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### Question 12

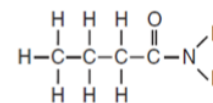
Which class of organic compound contains nitrogen?

- a. Aldehyde
- b. Alcohol
- c. Amine
- d. Ether

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### Question 13

Given the formula:



This compound is classified as

- a. An aldehyde
- b. An amide
- c. An amine
- d. A ketone

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### Question 14

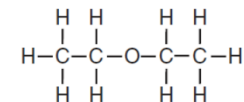
Which compound is classified as an ether?

- a.  $\text{CH}_3\text{CHO}$
- b.  $\text{CH}_3\text{OCH}_3$
- c.  $\text{CH}_3\text{COCH}_3$
- d.  $\text{CH}_3\text{COOCH}_3$

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### Question 15

Given the structural formula:



The compound represents by this formula can be classified as an

- a. Organic acid
- b. Ether
- c. Ester
- d. Aldehyde

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