

## ALDEHYDES, KETONS & CARBOXYLIC

1. Which of the following will give a positive Fehling's test?

- A) Formaldehyde
  - B) Acetone
  - C) Benzaldehyde
  - D) Acetophenone
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2. Which of the following does not give silver mirror with Tollen's reagent?

- A) Formaldehyde
  - B) Acetaldehyde
  - C) Acetone
  - D) Benzaldehyde
- 

3. The product formed when acetaldehyde reacts with hydrogen cyanide is:

- A) Ethanol
  - B) Cyanohydrin
  - C) Acetic acid
  - D) Ethene
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4. Which of the following compounds gives a pleasant smell?

- A) Formic acid
  - B) Ethanoic acid
  - C) Ester
  - D) Ketone
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5. Which of the following undergoes Cannizzaro reaction?

- A) Acetaldehyde
  - B) Benzaldehyde
  - C) Propanal
  - D) Acetone
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6. Which of the following is least acidic?

- A) Acetic acid
  - B) Formic acid
  - C) Phenol
  - D) Ethanol
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7. Aldehydes are more reactive than ketones due to:

- A) Presence of -OH group

- B) Presence of two alkyl groups
  - C) Less steric hindrance and no +I effect
  - D) Hydrogen bonding
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8. The reagent used to distinguish between aldehydes and ketones is:

- A)  $\text{LiAlH}_4$
  - B) Tollen's reagent
  - C) NaOH
  - D) HCl
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9. The IUPAC name of  $\text{CH}_3\text{COCH}_3$  is:

- A) Acetone
  - B) Propanone
  - C) Butanone
  - D) Ethyl ketone
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10. Reduction of aldehydes and ketones with  $\text{LiAlH}_4$  gives:

- A) Alkanes
  - B) Acids
  - C) Alcohols
  - D) Esters
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11. Which of the following compounds gives effervescence with  $\text{NaHCO}_3$ ?

- A) Alcohol
  - B) Carboxylic acid
  - C) Phenol
  - D) Aldehyde
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12. What is the functional group in acetic acid?

- A)  $-\text{CHO}$
  - B)  $-\text{COOH}$
  - C)  $-\text{OH}$
  - D)  $-\text{CO}-$
- 

13. The compound formed when an aldehyde reacts with alcohol in acid medium is:

- A) Alcohol
  - B) Ether
  - C) Hemiacetal/Acetal
  - D) Ester
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14. Which of the following is an alpha-hydroxy acid?

- A) Formic acid
  - B) Acetic acid
  - C) Lactic acid
  - D) Benzoic acid
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15. Which test is not given by ketones?

- A) 2,4-DNP test
  - B) Tollen's test
  - C) Sodium bisulfite test
  - D) Iodoform test (some)
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16. Which of the following gives Iodoform test?

- A)  $\text{CH}_3\text{CHO}$
  - B)  $\text{CH}_3\text{CH}_2\text{OH}$
  - C)  $\text{CH}_3\text{COCH}_3$
  - D) All of these
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17. On oxidation with  $\text{KMnO}_4$ , a ketone gives:

- A) Acid
  - B) Alcohol
  - C) Ester
  - D) No reaction
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18. Which of the following is most acidic?

- A) Phenol
  - B) Ethanol
  - C) Acetic acid
  - D) Acetone
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19. Which of the following contains a ketone group?

- A)  $\text{CH}_3\text{CHO}$
  - B)  $\text{CH}_3\text{COCH}_3$
  - C)  $\text{HCOOH}$
  - D)  $\text{CH}_3\text{CH}_2\text{OH}$
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20. The presence of  $-\text{COOH}$  group in a compound can be confirmed by:

- A)  $\text{Br}_2$  water
- B) Tollen's reagent
- C)  $\text{NaHCO}_3$  test
- D) Lucas reagent

 **Answer Key**

1. A

2. C

3. B

4. C

5. B

6. D

7. C

8. B

9. B

10. C

11. B

12. B

13. C

14. C

15. B

16. D

17. D

18. C

19. B

20. C