

Q1.Which statement about $(\text{CH}_3)_2\text{CHCH}_2\text{COOH}$ is correct?

- A In aqueous solution it reacts with magnesium to form carbon dioxide.
- B It can form hydrogen bonds.
- C It has optical isomers.
- D It has the IUPAC name 2-methylbutanoic acid.

(Total 1 mark)**Q2.**

Which compound forms a white precipitate when added to aqueous silver nitrate?

- A bromoethane
- B ethanal
- C ethanoic anhydride
- D ethanoyl chloride

(Total 1 mark)**Q3.**

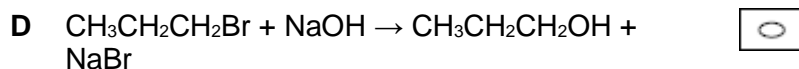
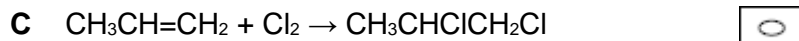
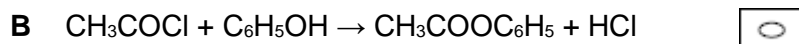
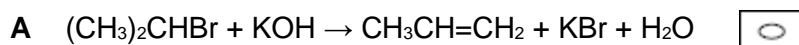
Which compound reacts with warm dilute aqueous sodium hydroxide?

- A C_6H_6
- B $\text{CH}_3\text{CH}=\text{CH}_2$
- C $\text{CH}_3\text{CH}_2\text{CH}_2\text{NH}_2$
- D $(\text{CH}_3\text{CO})_2\text{O}$

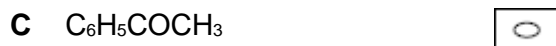
(Total 1 mark)

Q4.

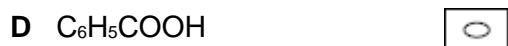
Which reaction involves addition-elimination?

**(Total 1 mark)****Q5.**

Which compound is formed when phenyl benzenecarboxylate is hydrolysed under acidic conditions?

**(Total 1 mark)****Q6.**

Which compound is formed by acid hydrolysis of phenylmethyl ethanoate?

**(Total 1 mark)**

Q7.

A student is required to dry a liquid sample of pentanoic acid.

Which drying agent is suitable?

- A Calcium oxide
- B Calcium sulfate
- C Potassium hydroxide
- D Potassium carbonate

(Total 1 mark)

Q8.

Which compound can be purified by forming a hot aqueous solution that recrystallises on cooling?

- A Cyclohexene
- B Ethanoic acid
- C Phenylamine
- D Benzoic acid

(Total 1 mark)