

1. Nov/2022/Paper_11/No.31

Which reactions produce carbon dioxide?

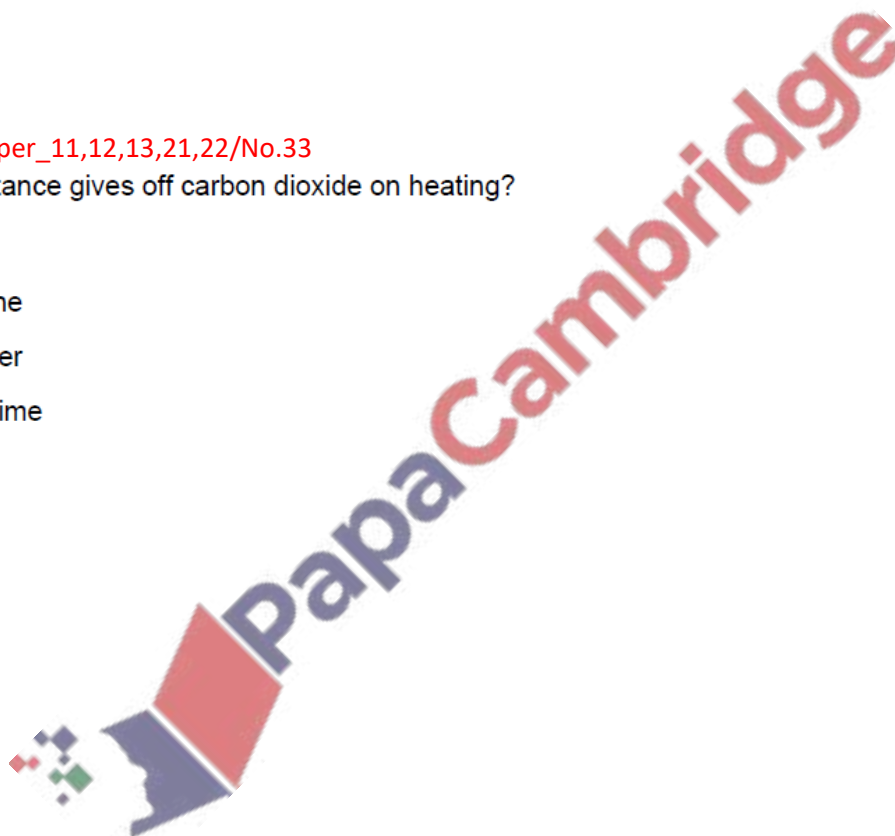
- 1 addition of dilute nitric acid to copper(II) carbonate
- 2 heating zinc carbonate
- 3 combustion of methane

A 1, 2 and 3 **B** 1 and 2 only **C** 1 and 3 only **D** 3 only

2. Nov/2022/Paper_11,12,13,21,22/No.33

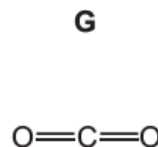
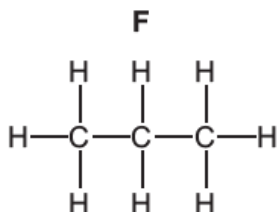
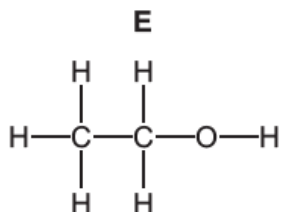
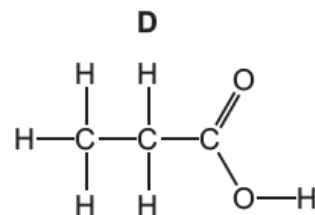
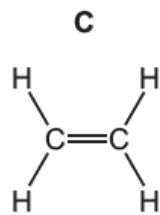
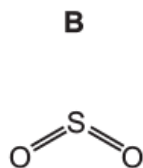
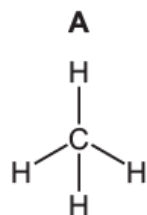
Which substance gives off carbon dioxide on heating?

- A** lime
- B** limestone
- C** limewater
- D** slaked lime



3. Nov/2022/Paper_31/No.1(a)

The structures of seven compounds, A, B, C, D, E, F and G, are shown.



Answer the following questions about these structures.

Each structure may be used once, more than once or not at all.

(a) State which structure, A, B, C, D, E, F or G, represents:

(i) a compound that contributes to acid rain

..... [1]

(ii) a product of respiration

..... [1]

(iii) a hydrocarbon that decolourises aqueous bromine

..... [1]

(iv) a carboxylic acid

..... [1]

(v) a compound that is the main constituent of natural gas.

..... [1]

4. Nov/2022/Paper_33/No.1(c)

(c) When a hydrocarbon undergoes incomplete combustion, carbon monoxide is formed.

(i) State the meaning of the term *incomplete combustion*.

..... [1]

(ii) Give **one** adverse effect of carbon monoxide on health.

..... [1]

