

# 2025 CCO Answer Sheet

Name \_\_\_\_\_ School \_\_\_\_\_

Account Number \_\_\_\_\_

1.

a) ***2 marks***

b) ***4 marks***

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

c) ***4 marks***

|                    |      |     |  |
|--------------------|------|-----|--|
| C                  | 11.3 | N/A |  |
| O                  |      | N/A |  |
| CO                 |      |     |  |
| $\cdot\text{CO}^-$ |      |     |  |
| $\cdot\text{CO}^+$ |      |     |  |

d) ***2 marks***

**2.**

a) *4 marks*

A large, empty rectangular box with a thin black border, intended for the student's handwritten answer to part (a).A second large, empty rectangular box with a thin black border, positioned directly below the first one, also intended for the student's handwritten answer to part (a).

**b) 2 marks**

- A.     B.     C.     D.     E.

**c) 4 marks**

d) ***2 marks***

**3.**

**a) 3 marks**

**A.**

**B.**

**C.**

**D.**

**E.**

**F.**

**G.**

**H.**

**b) 3 marks**

Formation of **B**:

Formation of **D**:

Formation of **E**:

Formation of **F**:

Formation of **G**:

Reaction of **G** with ....:

c) ***6 marks***

|    |    |
|----|----|
| A. | B. |
| C. | D. |
| E. | F. |
| G. |    |

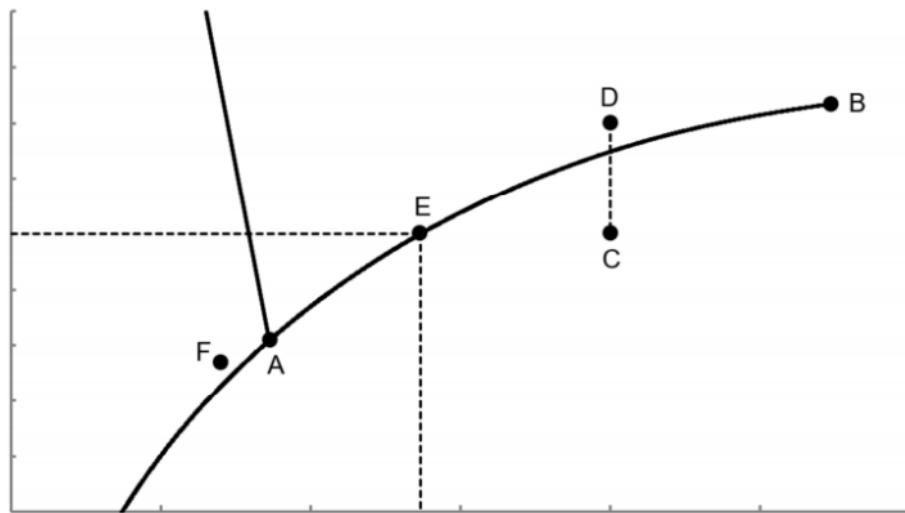
**4.**

a) **1 mark**

b) **1.5 marks**

c) **1 mark**

d) **1.5 marks**



e) ***1 mark***

A

B

C

D

E

f) ***1 mark***

g) ***1 mark***

A.

B.

C.

D.

E.

**h) 2 marks**

**i) 1 mark**

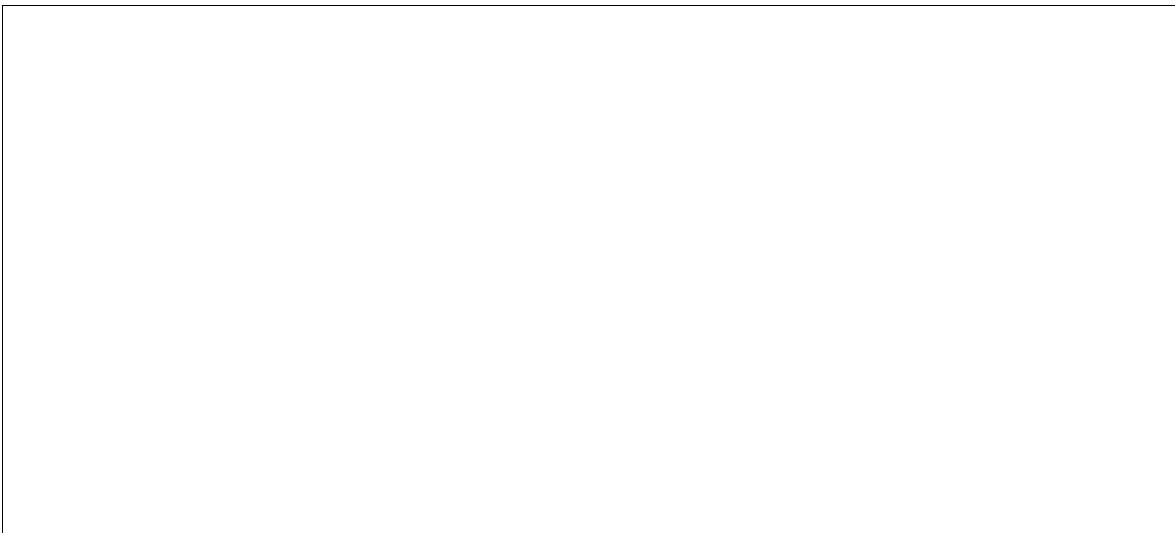
**j) 1 mark**

**5.**

a) **1 mark**

b) **1 mark**

c) **1 mark**

A large, empty rectangular box with a thin black border, occupying the bottom right portion of the page. It is intended for the student to write their answer to part c) in.

d) ***2 marks***

e) ***2 marks***

f) ***3 marks***

|    |    |
|----|----|
| C. | D. |
| E. | F. |
| G. | H. |

**g) 2 marks**

|          |                       |  |
|----------|-----------------------|--|
| <b>A</b> | 3471 cm <sup>-1</sup> |  |
| <b>A</b> | 1736 cm <sup>-1</sup> |  |
| <b>C</b> | 1746 cm <sup>-1</sup> |  |
| <b>G</b> | 1664 cm <sup>-1</sup> |  |

|          |            |  |
|----------|------------|--|
| <b>H</b> | 65(73%)    |  |
| <b>C</b> | 77(49%)    |  |
| <b>G</b> | 85 (16%)   |  |
| <b>A</b> | 91 (100%)  |  |
| <b>H</b> | 105 (100%) |  |
| <b>A</b> | 173 (12%)  |  |