

## Summary Quiz (Chapter 25)

### Section A: Multiple Choice

- Which of the following statements about the combustion of fossil fuels is correct?
  - It must produce carbon dioxide.
  - It is an exothermic reaction.
  - It is one of the causes of acid rain.

A. (1) and (2) only                      B. (1) and (3) only  
C. (2) and (3) only                      D. (1), (2) and (3)
  
- Which of the following statements about suspended particulates are correct?
  - One of the sources of suspended particulates is power plants.
  - Suspended particulates can irritate the respiratory system.
  - They can be reduced by using unleaded petrol.

A. (1) and (2) only                      B. (1) and (3) only  
C. (2) and (3) only                      D. (1), (2) and (3)
  
- Which of the following measures CANNOT reduce the emission of sulphur dioxide?
  - Installing scrubbers
  - Using fuels with low sulphur content
  - Installing catalytic converters
  - Installing flue gas desulphurization system

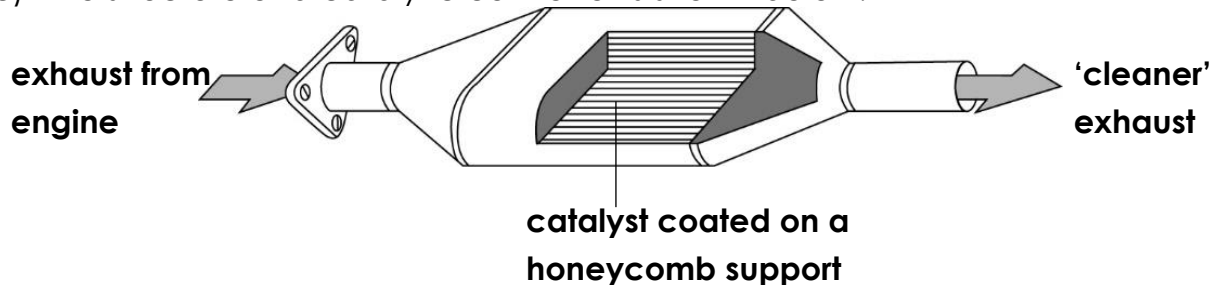
### Section B: Structural Question

The combustion of fossil fuels produces acidic gases that cause acid rain.

(a) Name TWO acidic gases that are produced from the combustion of fossil fuels.

(b) Suggest ONE harmful effect of acid rain.

(c) The structure of a catalytic converter is shown below:



- Name the catalyst in the catalytic converter.
- Explain why the catalyst is coated on a honeycomb support.
- Suggest TWO gases that can be found in the 'cleaner' exhaust.

**The End**

**Suggested Answer****Section A**

1.	D
2.	D
3.	C

**Section B**

(a) Any TWO:

Carbon dioxide / nitrogen monoxide / nitrogen dioxide / sulphur dioxide

(b) It damages plants / kills aquatic life / corrodes building materials / corrodes metal objects.

(c) (i) Platinum / rhodium

(ii) To increase the surface area for the catalytic reactions

(iii) Any TWO:

Carbon dioxide / nitrogen / water vapour

**The End**