Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B4 Bioenergetics

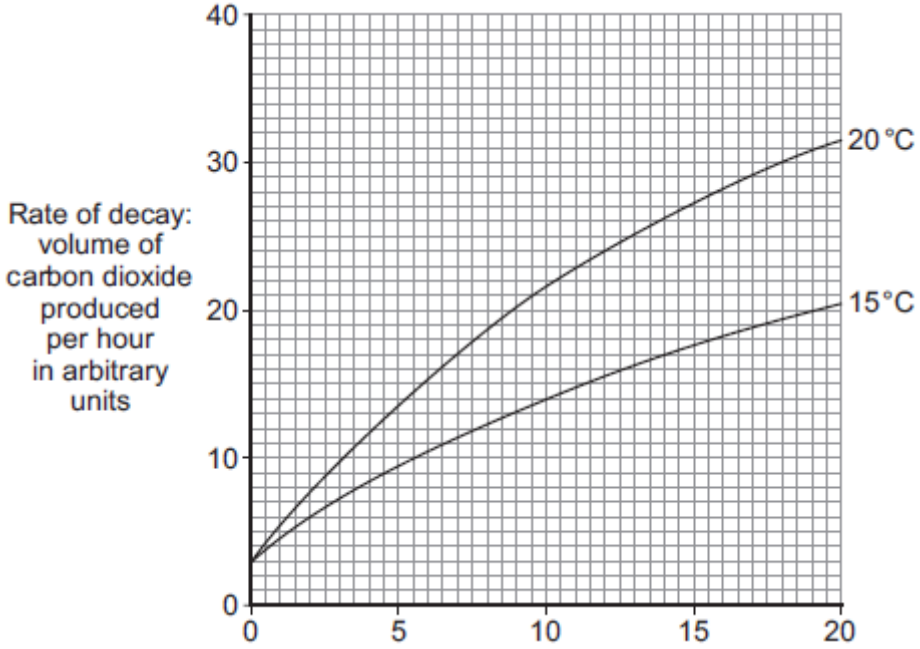
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Name of the Student:_____
Max. Marks : 23 Marks **Time : 23 Minutes**

Q1.

A scientist investigated the effect of oxygen concentration and temperature on the rate of decay of leaves in a container.

The scientist's results are shown in the graph.



(a) The rate of decay is measured as the volume of carbon dioxide produced per hour.

Explain why carbon dioxide is produced during the process of decay.

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(3)

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(b) Give **two** conclusions that can be made from the results shown in the graph.

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(2)

(Total 5 marks)

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Q2.

In a stable community, the processes that remove carbon are balanced by processes that return carbon.

The figure below shows a woodland community.



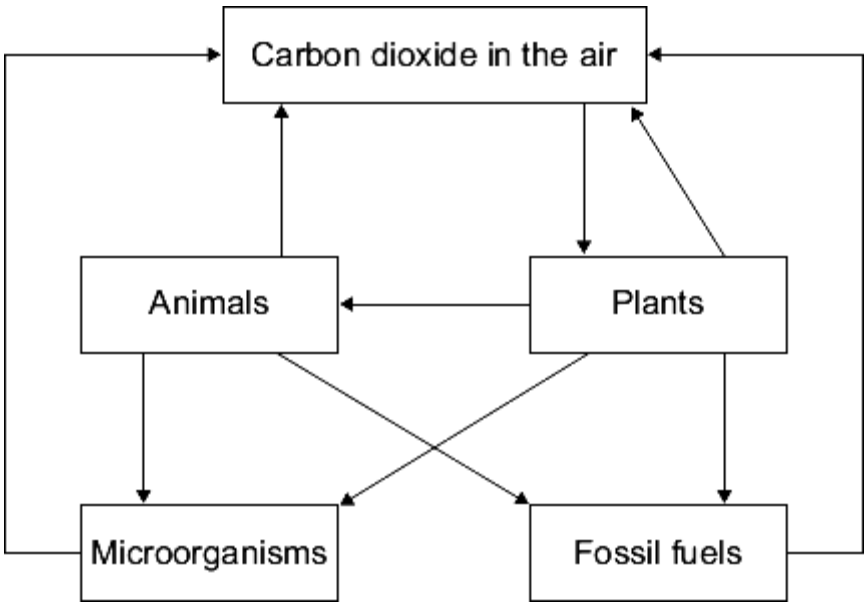
Describe how carbon is recycled in a woodland community.

(Total 6 marks)

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Q3.

The diagram shows part of the carbon cycle.



Use the information in the diagram and your own knowledge to describe in detail how carbon is cycled between living organisms and the air.

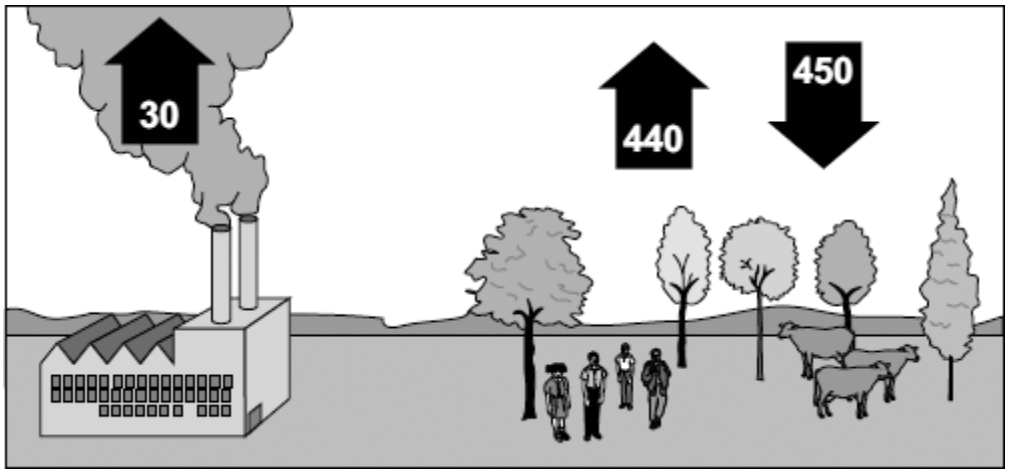
Your answer should include the names of any processes involved.

(Total 6 marks)

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Q4.

The diagram shows the mass of carbon dioxide released into and removed from the air each year in billions of tonnes.



Describe the processes **shown on the diagram** that exchange carbon dioxide with the air.

Explain the overall effect of these processes on the mass of the carbon dioxide in the air.

(Total 6 marks)

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