

**AQA, OCR, Edexcel**

**A Level**

# **A Level Biology**

## **Biological Membrane Questions**

Name:

**M M E**

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**Total Marks: /15**

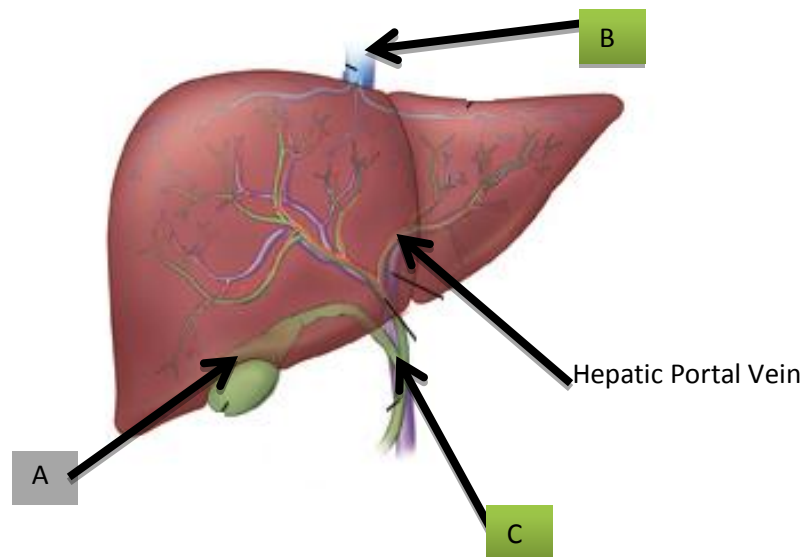
## The Liver

The liver is a vital organ found in all vertebrates. It is involved in a number of different processes from detoxification to protein synthesis to blood glucose control.

1. The structure of the liver is adapted to allow it to carry out its functions efficiently.

a) The diagram below shows the structure of the liver

i) Identify labels A - C. (3 marks)



ii) What is the role of the Hepatic Portal Vein? (1 mark)

b) The liver plays a role in controlling blood glucose levels.

i) Explain the negative feedback mechanisms that take place in the hepatocytes to maintain homeostatic control of blood glucose concentration. (3 marks)

2. One of the biggest functions of the liver is in the excretion of waste products from the body.

a) Many organisms consume larger amounts of amino acids via proteins than the body can use, these excess amino acids are converted to other products in the liver.

i) Explain the process of deamination of amino acids. (5 marks)

c) Transamination also occurs in the liver.

i) What is the purpose of transamination? (2 mark)

ii) What enzyme is involved in transamination? (1 mark)