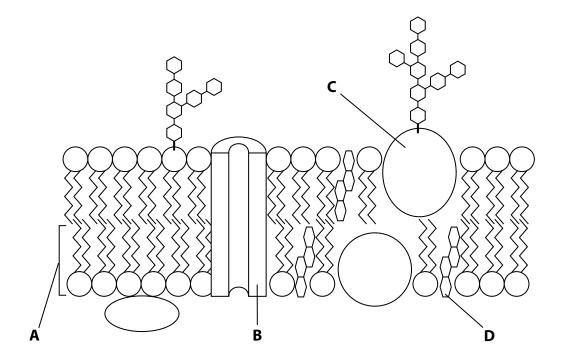
## **Answer ALL questions.**

## Write your answers in the spaces provided.

Some questions must be answered with a cross in a box  $\boxtimes$ . If you change your mind about an answer, put a line through the box  $\boxtimes$  and then mark your new answer with a cross  $\boxtimes$ .

1 Cell membranes are involved in the transport of molecules.

The diagram shows the structure of a cell membrane.



| 1 | (a) | Which    | letter in  | the | diagram   | lahels | a r | hosp   | hο  | lini | h | 7 |
|---|-----|----------|------------|-----|-----------|--------|-----|--------|-----|------|---|---|
| ı | (a) | VVIIICII | iettei iii | uie | ulaulalli | iabeis | aι  | טצטוונ | ΙIO | IIDI | u | : |

(1)

- ΧΔ
- R
- X C
- $\boxtimes$  D
- (b) Which of the following statements is true about a phospholipid?

(1)

- A it has a hydrophobic tail of three fatty acids
- B it has a hydrophilic tail of three fatty acids
- C it has a hydrophobic tail of two fatty acids
- **D** it has a hydrophilic tail of two fatty acids

| (c) Describe how the structure labelled <b>B</b> is involved in passive transport. | (3)      |
|--|----------|
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| (Total for Question 1 = 5  | o marks) |
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