**Primary Defence Questions**

**1.** What is a pathogen?

A. A virus that causes a disease.

B. Any organism or virus that causes a disease.

C. A disease caused by bacteria or viruses.

D. Any organism transmitted from humans to humans.

**(Total 1 mark)**

**2.** How do skin and mucous membranes act as barriers to infection?

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| --- | --- | --- |
|  | **Skin** | **Mucous membranes** |
| A. | Skin is tough and forms an effective physical barrier. | Mucous membranes are thick and elastic so pathogens are repelled. |
| B. | Phagocytes on the skin surface trap pathogens. | Mucus is moved out of the body by the beating of hair-like cilia. |
| C. | Skin is tough and forms an effective physical barrier. | Pathogens are trapped by sticky mucus. |
| D. | Phagocytes on the skin surface trap pathogens. | The acidity of mucus kills harmful bacteria. |

**(Total 1 mark)**

**3.** Describe how human skin and mucous membranes act as barriers to pathogens.

**(Total 4 marks)**

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**4.** Which factors related to mucous membranes protect the body against microbes?

I. Production of lysozyme

II. Secretion of alkaline solutions

III. Trapping of microbes

A. I and II only

B. II and III only

C. I and III only

D. I, II and III

**(Total 1 mark)**

**5.** (a) Explain how the skin and mucous membranes prevent entry of pathogens into the body.

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**(3)**

(b) Explain why antibiotics are used to treat bacterial but not viral diseases.

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**(2)**

**(Total 5 marks)**

I have decided not to add the mark scheme yet.