

**1. Nov/2020/Paper\_12/No.27**

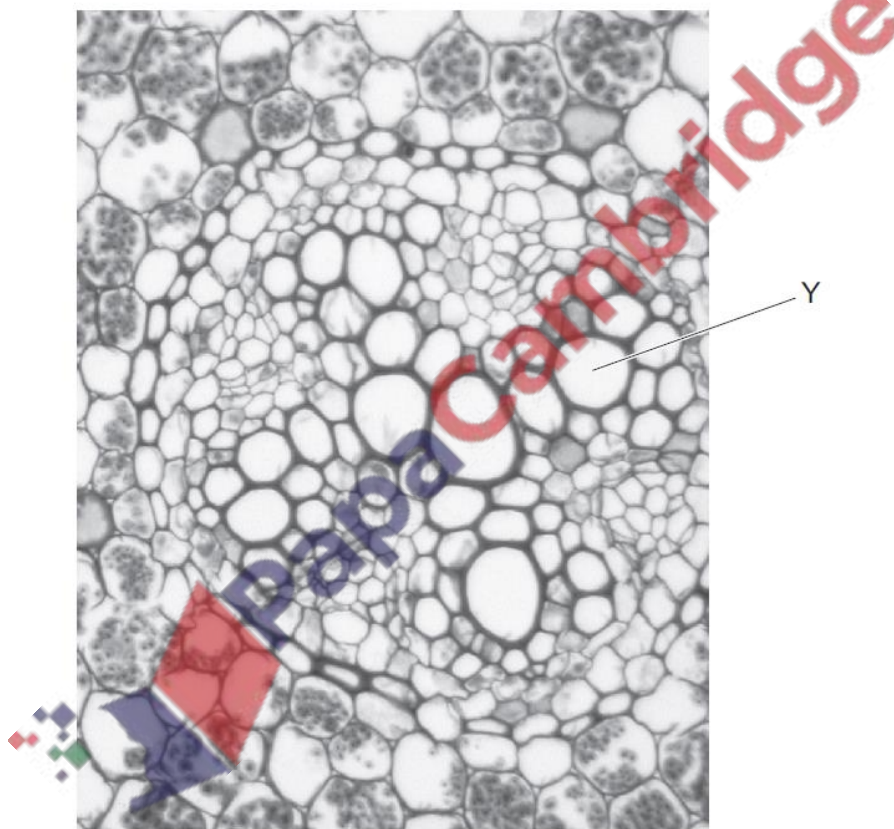
A fermenter is used to produce penicillin.

Why is continuous stirring necessary during the process of fermentation?

- A** to keep the *Penicillium* in contact with fresh oxygen and nutrients
- B** to move the *Penicillium* to the bottom of the fermenter
- C** to move the *Penicillium* to the top of the fermenter
- D** to stop the *Penicillium* reacting with the wall of the fermenter

**2. Jun/2020/Paper\_11/No.12**

The photomicrograph shows part of a section through a root.



The contents of Y are tested with Benedict's solution and with iodine solution.

Which results are expected?

	Benedict's solution	iodine solution
<b>A</b>	+	+
<b>B</b>	+	-
<b>C</b>	-	+
<b>D</b>	-	-

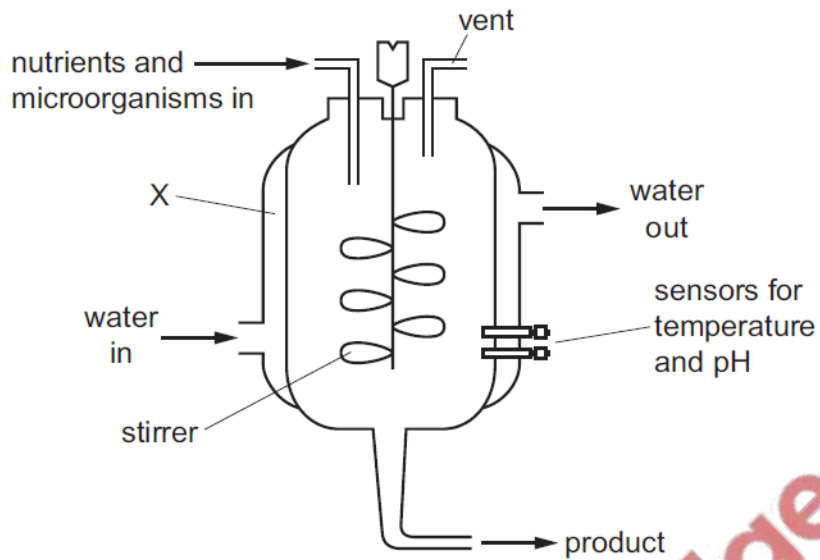
key

+ = positive result

- = negative result

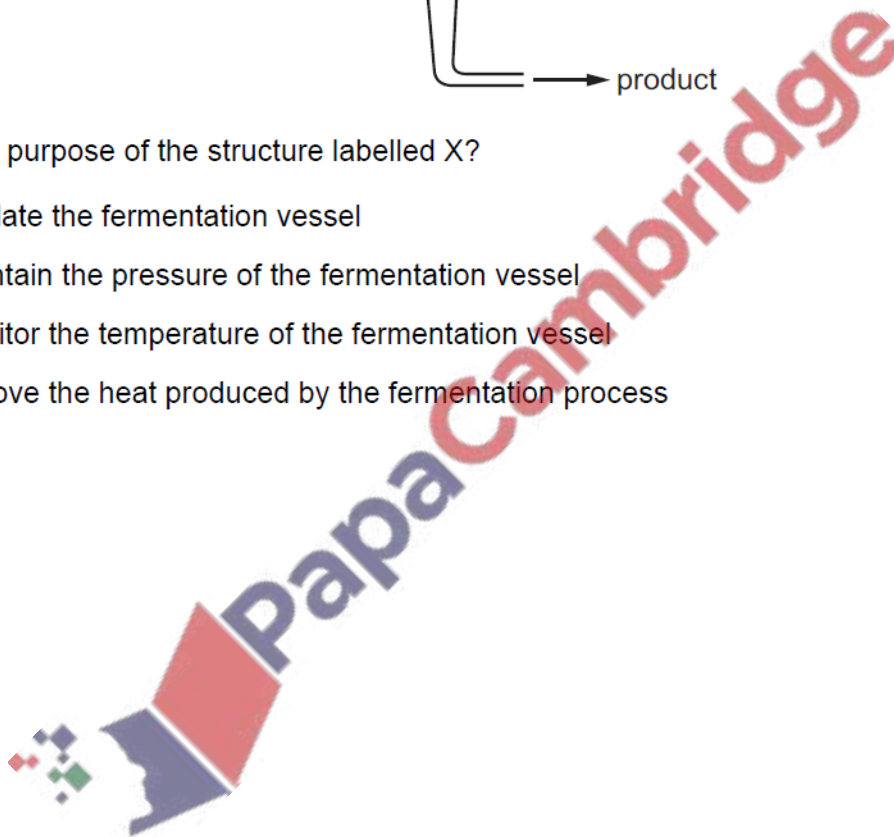
3. Jun/2020/Paper\_11/No.27

The diagram shows the equipment used in the industrial production of penicillin.



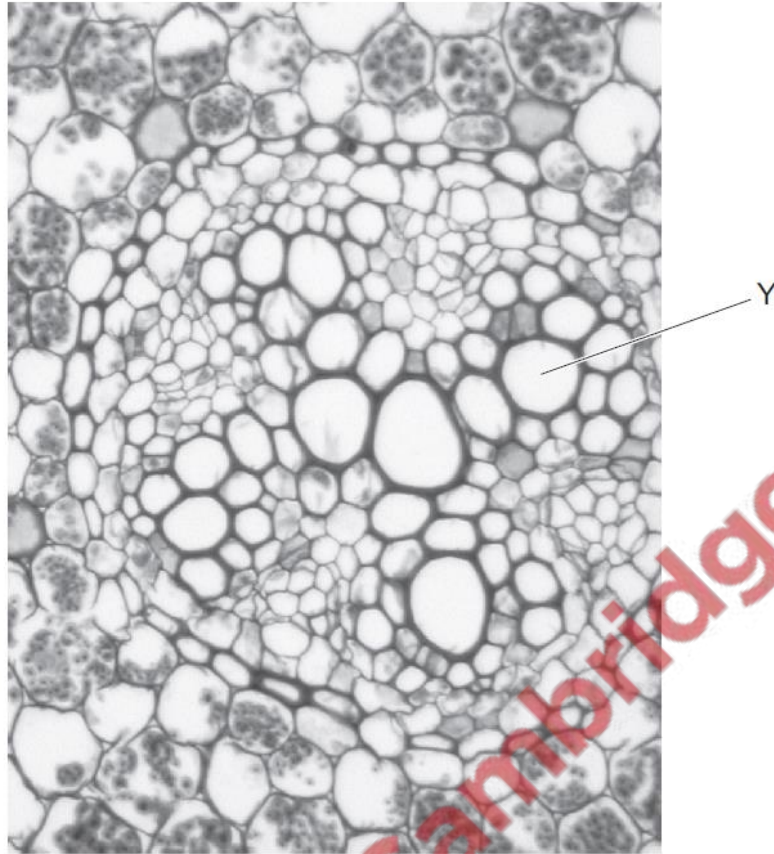
What is the purpose of the structure labelled X?

- A to insulate the fermentation vessel
- B to maintain the pressure of the fermentation vessel
- C to monitor the temperature of the fermentation vessel
- D to remove the heat produced by the fermentation process



4. Jun/2020/Paper\_12/No.12

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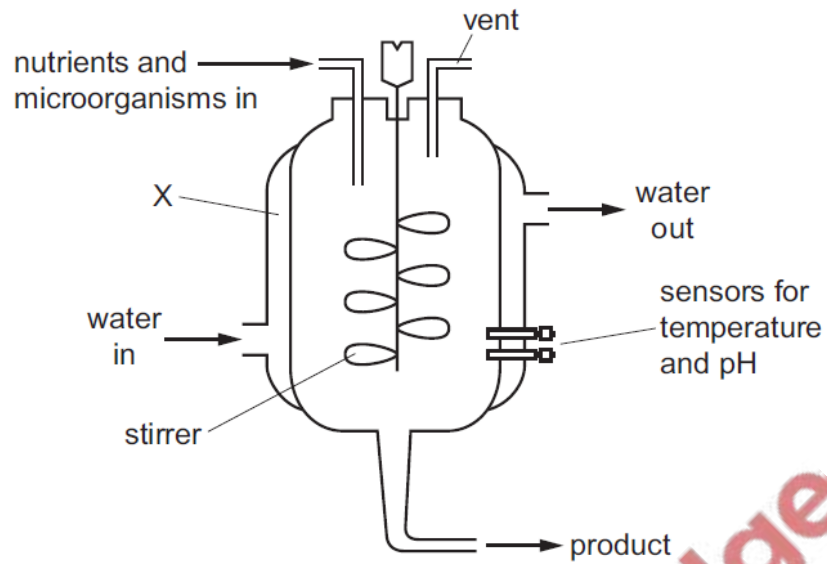


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<b>B</b>	+	-	
<b>C</b>	-	+	
<b>D</b>	-	-	

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