

**Paper Reference(s) 4HB1/01**  
**Pearson Edexcel International GCSE (9–1)**

**Human Biology**  
**UNIT: 4HB1**  
**PAPER: 01**

## **Diagram Booklet**

**In the boxes below, write your name, centre number and candidate number.**

<b>Surname</b>					
<b>Other names</b>					
<b>Centre Number</b>					
<b>Candidate Number</b>					

## **INSTRUCTIONS**

**There may be spare copies of some diagrams in case you need them.**

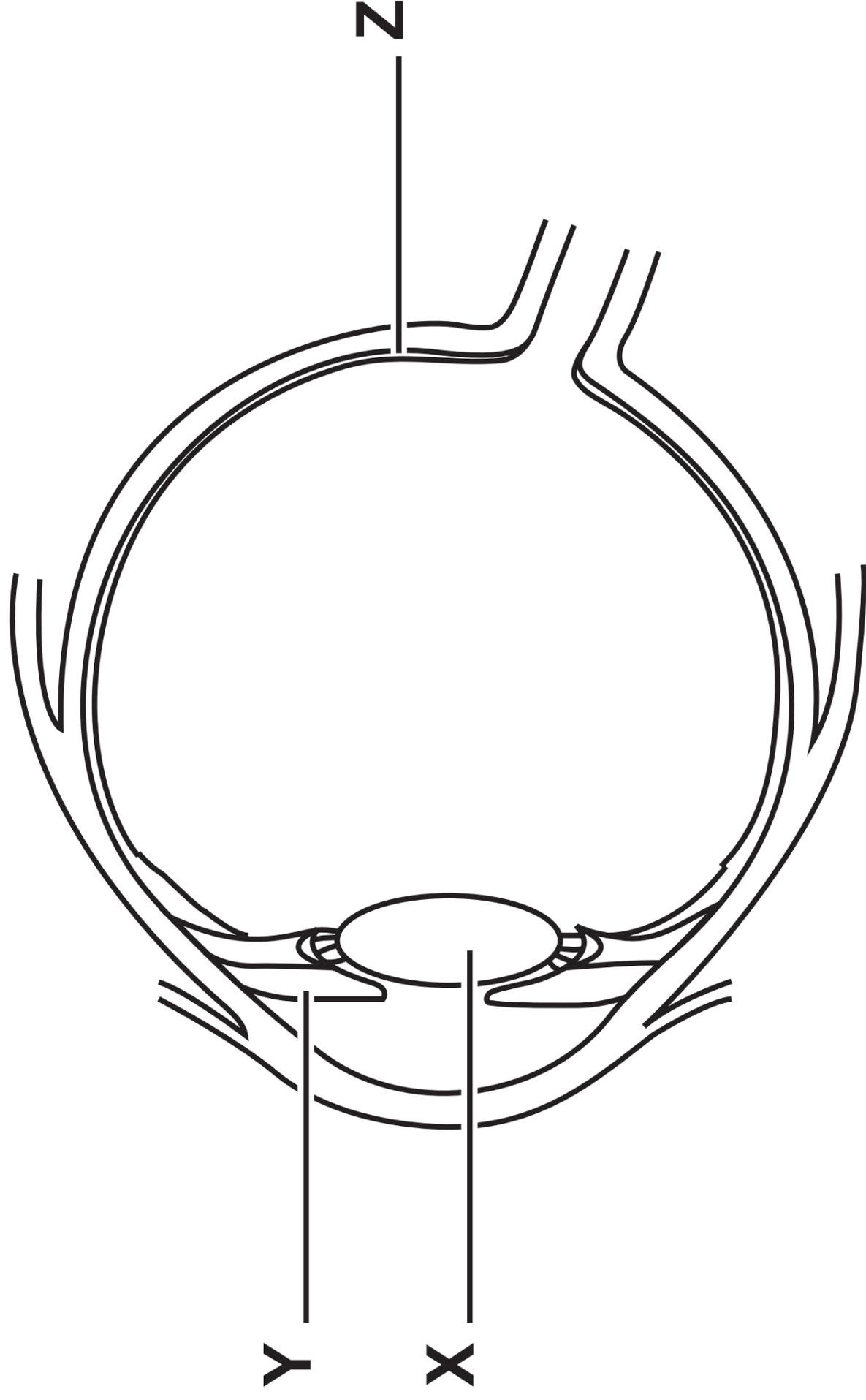
**THIS DIAGRAM BOOKLET MUST BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.**

# Contents

## Page

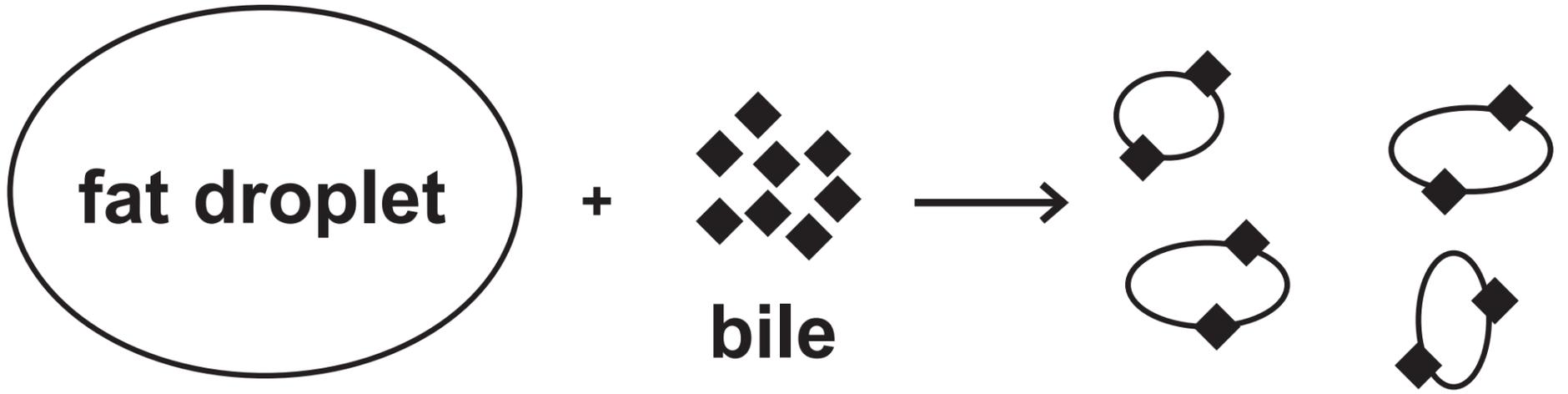
4	Question 1(a)
5	Question 2(b)(i)
6	Question 3(a)
7	Question 3(b)
8	Question 4(a)
9	Question 4(c)
10	Question 5(b)
11	Question 6
12	Question 6(c)
13	Question 7(c)
14	Question 7(c)(ii)
<b>Spare copies</b>	
15	Question 2(b)(i)
16	Question 7(c)(ii)

# Question 1(a)



**Question 2(b)(i)****sperm****egg**


# Question 3(a)

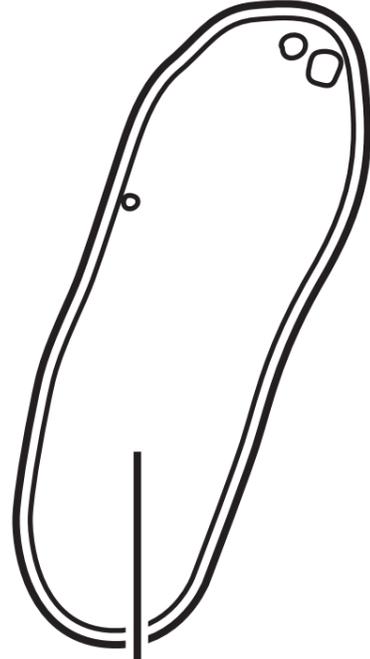


**Question 3(b)**

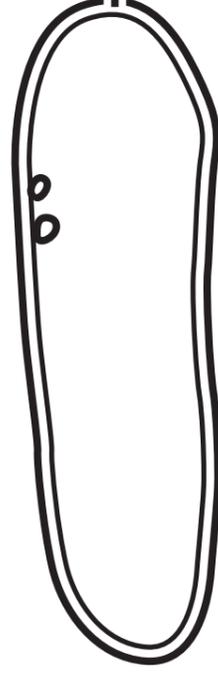
<b>Reagent used</b>	<b>Colour of the food solution after the test</b>
<b>iodine solution</b>	<b>blue / black</b>
<b>biuret solution</b>	<b>purple</b>
<b>Benedict's solution</b>	<b>blue</b>

**Question 4(a)**

**Magnification × 60,000**



**bacterium X**



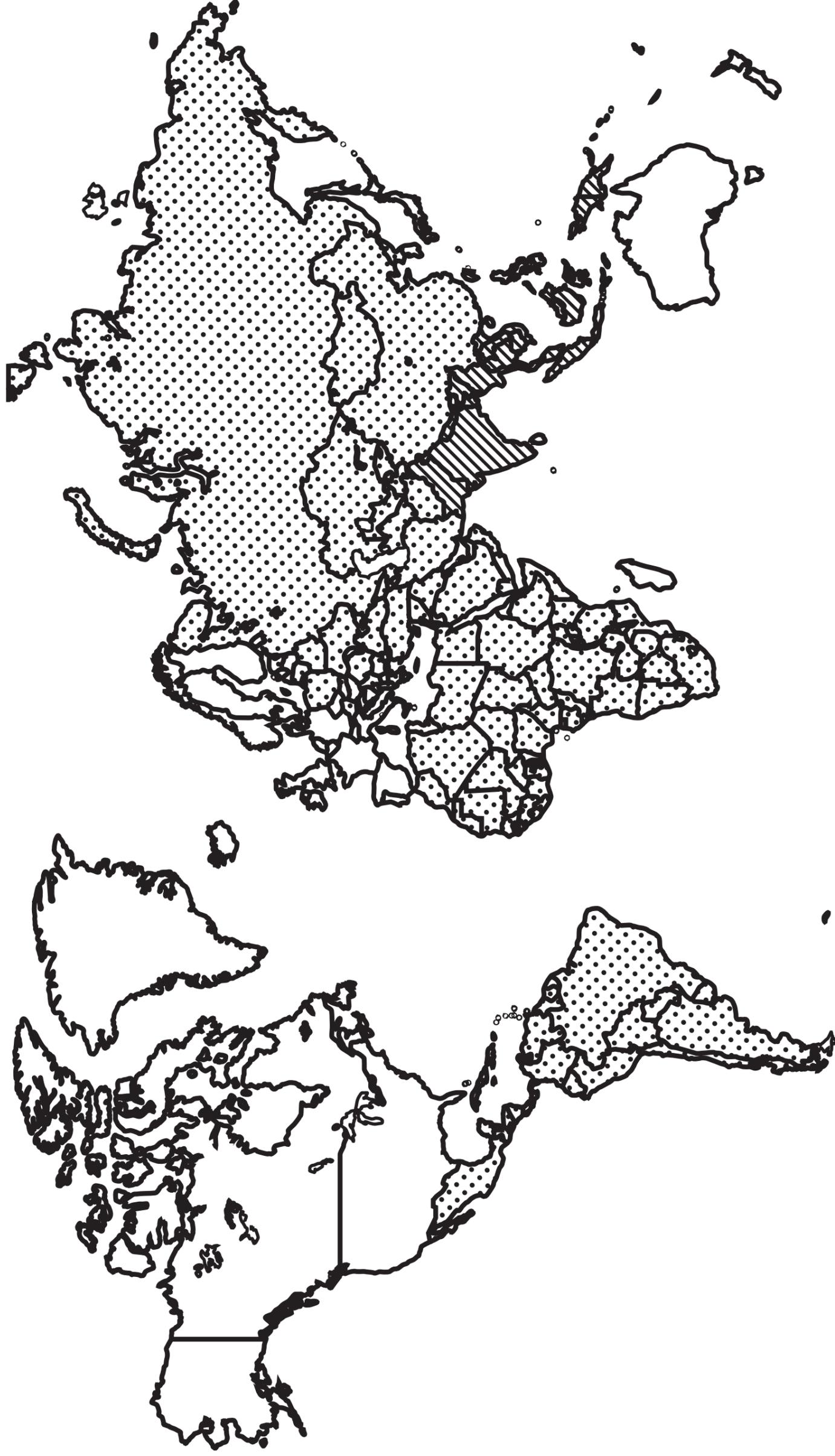
**cell structure Y**

## Question 4(c)

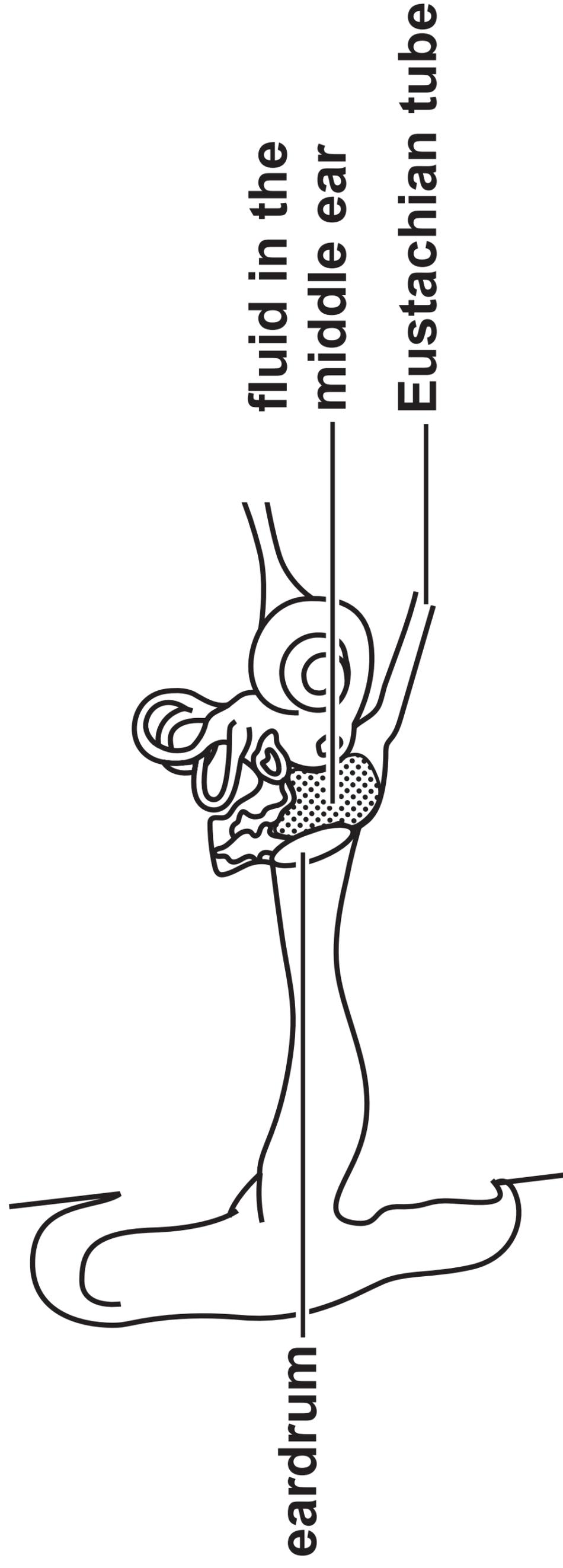
 High level

 Medium level

 Low level



**Question 5(b)**

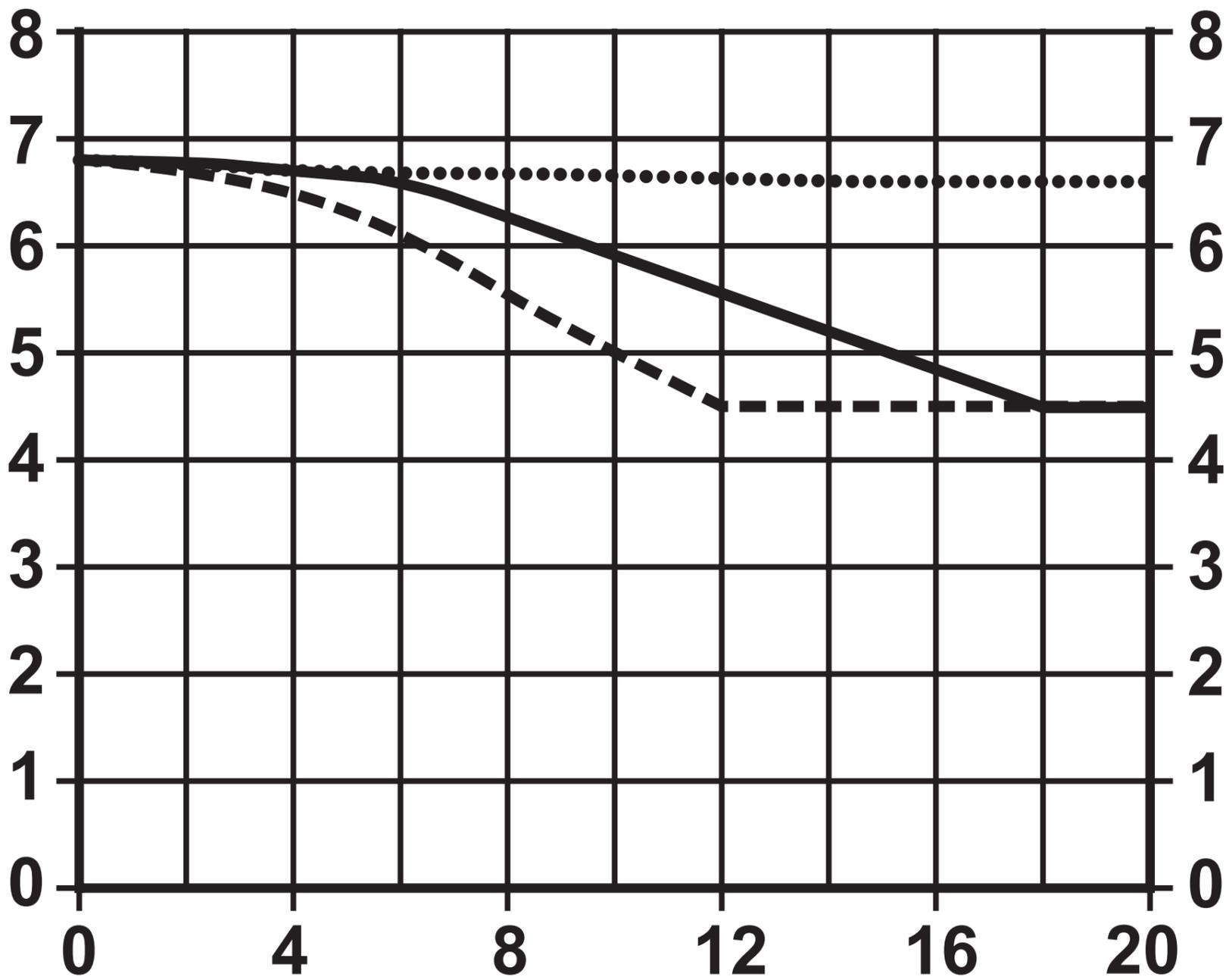


### Question 6

#### KEY

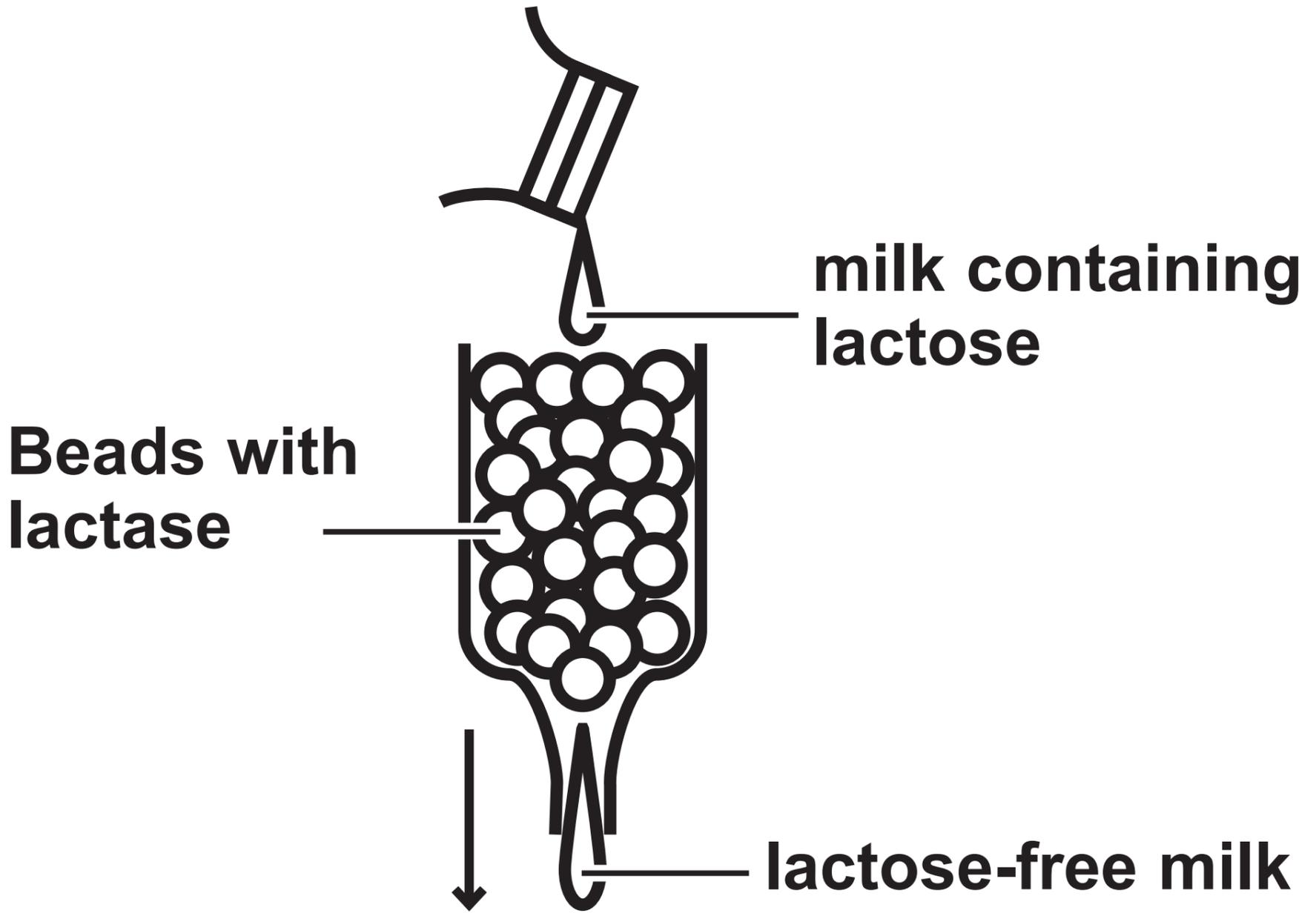
- ..... 60 °C
- - - 40 °C
- 20 °C

pH



Time in hours

Question 6(c)



## Question 7(c)

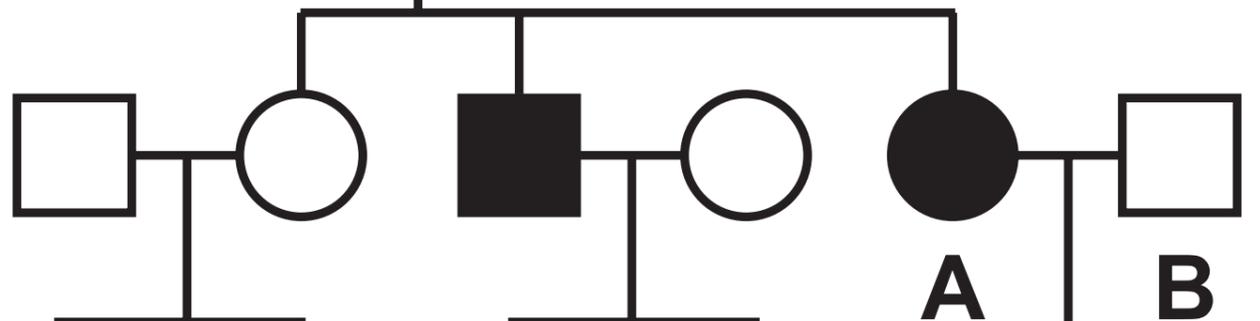
## KEY

-  unaffected male
-  affected male
-  unaffected female
-  affected female

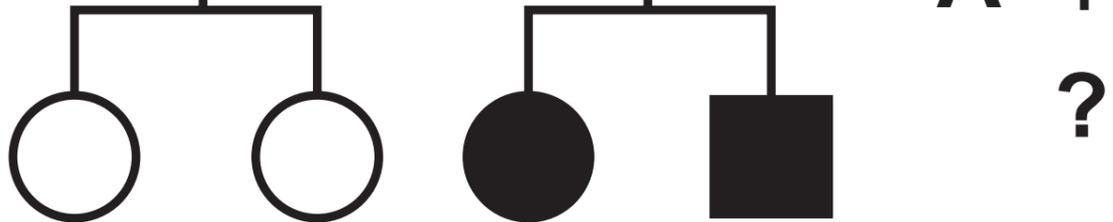
1st generation



2nd generation



3rd generation



**Question 7(c)(ii)**


**Question 2(b)(i)**

**sperm**

**egg**


**Question 7(c)(ii)**
