ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY HIGHER · UNIT 4 · 25 QUESTIONS

Using Food and Controlling Growth — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button so it can be fixed.

1 **Red apples are cut and left in air. Why do they turn brown?**

- A they ferment into alcohol
- B they freeze in the cold
- C they dry out in the air
- D enzymes react with oxygen

Understand It with Pulse | Flag a mistake

2 **A sandwich contains bread, cheese and lettuce. Which enzyme starts breaking down the bread in the mouth?**

- A amylase
- B pepsin
- C protease
- D lipase

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3 **A chocolate cake rises in the oven. What makes it rise?**

- A the sugar freezes
- B the flour melts
- C a gas is made
- D the egg evaporates

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4 **A school lunch tray holds a meal with bread, cheese and an apple. Which food group is the bread from?**

- A vitamins, for health
- B fats, for insulation
- C carbohydrates
- D proteins, for growth

Understand It with Pulse | Flag a mistake

5 **A peach contains a stone. What is inside the stone?**

- A a root
- B a seed
- C a leaf
- D a flower

Understand It with Pulse | Flag a mistake

6 **A yellow school bus stops at a station. What happens to its speed?**

- A it stays the same
- B it becomes negative
- C it becomes zero
- D it increases

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7 **An enzyme reaction is fastest at 30 degrees Celsius. At 50 degrees Celsius the rate is much lower. Why?**

- A the substrate runs out
- B the enzyme is digested
- C the enzyme works faster
- D the enzyme is denatured

Understand It with Pulse | Flag a mistake

8 **What do gibberellins do?**

A they start germination

B they ripen fruit

C they stop roots growing

D they bend shoots to light

Understand It with Pulse | Flag a mistake

9 **Why is equipment sterilised before growing bacteria in a culture?**

A to kill unwanted microbes

B to make the agar set firmly in the dish

C to warm the bacteria up

D to feed the bacteria

Understand It with Pulse | Flag a mistake

10 **What is the basal metabolic rate?**

A energy used in exercise

B energy from food

C energy used at rest

D energy stored as fat

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11 **Which part of a cell controls all the activities of the cell?**

A the cytoplasm

B the vacuole

C the cell membrane

D the nucleus

Understand It with Pulse | Flag a mistake

12 **A person breathes 15 times per minute. How many breaths is that in one hour?**

- A 960
- B 1800
- C 840
- D 900

Understand It with Pulse | Flag a mistake

13 **Why can plant cells keep differentiating throughout life, but most animal cells cannot?**

- A plants keep meristem tissue
- B plants have no DNA in their cells
- C animal cells have no nucleus
- D plant cells divide more slowly

Understand It with Pulse | Flag a mistake

14 **What happens to an enzyme at a very high temperature?**

A it works faster and faster

B it changes into a different enzyme

C it denatures and stops working

D it dissolves in the water

Understand It with Pulse | Flag a mistake

15 **Which cell contains chloroplasts?**

A a muscle cell

B a leaf cell

C a nerve cell

D a red blood cell

Understand It with Pulse | Flag a mistake

16 **A cell is 36 mm long in a photograph. Its real length is 40 micrometres. What is the magnification?**

- A × 900
- B × 1800
- C × 9000
- D × 90

Understand It with Pulse | Flag a mistake

17 **During mitosis, how many daughter cells are produced from one cell?**

- A 3
- B 1
- C 4
- D 2

Understand It with Pulse | Flag a mistake

18 **A single bacterium divides every 20 minutes. How many bacteria are there after 6 divisions?**

A 66

B 32

C 128

D 64

Understand It with Pulse | Flag a mistake

19 **Where is bile made?**

A the pancreas

B the gall bladder

C the liver

D the stomach

Understand It with Pulse | Flag a mistake

20 **Which pH is best for most enzymes in the small intestine?**

A strongly acidic

B very acidic

C slightly alkaline

D strongly alkaline

Understand It with Pulse | Flag a mistake

21 **Amylase breaks starch down into which substance?**

A sugars

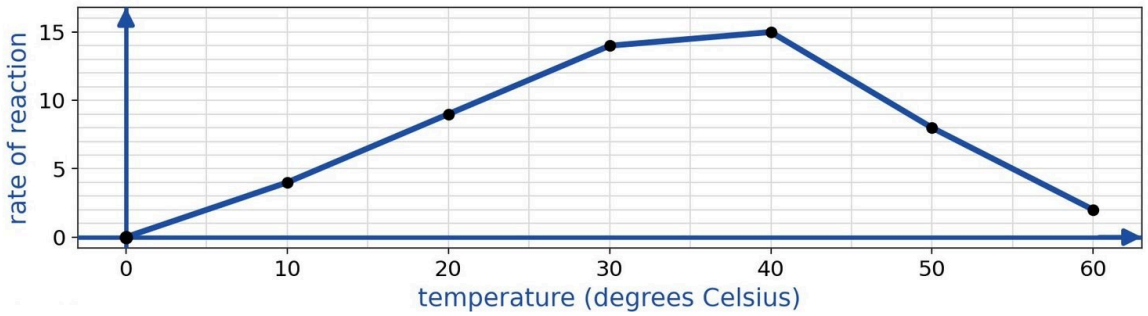
B fatty acids

C glycerol

D amino acids

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22 **The graph shows the rate of an enzyme reaction at different temperatures. At which temperature is the rate highest?**



A 60

B 40

C 30

D 20

Understand It with Pulse | Flag a mistake

23 **One glucose molecule releases 30 molecules of ATP in respiration. How many ATP molecules are released from 5 glucose molecules?**

- A 150
- B 120
- C 300
- D 180

Understand It with Pulse | Flag a mistake

24 **What happens to heart rate during exercise?**

- A it increases
- B it stops
- C it stays the same
- D it decreases

Understand It with Pulse | Flag a mistake

25

Two antibiotic discs give zones of inhibition of 8 mm and 14 mm. Which antibiotic is more effective?

A the 8 mm one

B neither, zones do not show this

C they are equally effective

D the 14 mm one

Understand It with Pulse

Flag a mistake

ANSWER KEY

1.	D	**10.**	C	**19.**	C
2.	A	**11.**	D	**20.**	C
3.	C	**12.**	D	**21.**	A
4.	C	**13.**	A	**22.**	B
5.	B	**14.**	C	**23.**	A
6.	C	**15.**	B	**24.**	A
7.	D	**16.**	A	**25.**	D
8.	A	**17.**	D		
9.	A	**18.**	D		

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