ENGLAND GCSE BIOLOGY OCR GATEWAY FOUNDATION · FINAL EXAM · 50 QUESTIONS

Final Exam — 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 to let Brett know so he can fix it.

1 **In the microscopy required practical, why is iodine stain added to onion cells?**

- A to magnify the cells
- B to make the nucleus easy to see
- C to kill the onion cells
- D to keep the cells alive for longer

Understand It with Pulse | Flag a mistake

2 **Red apples are cut and left in the air. They turn brown because an enzyme in the apple reacts with oxygen. What would slow this browning down?**

- A putting them in a fridge
- B warming them up
- C leaving them in sunlight all day
- D cutting them smaller

Understand It with Pulse | Flag a mistake

3 **Hardcover books have mass. What is mass measured in?**

- A kilograms
- B newtons, the unit of force
- C joules
- D watts

Understand It with Pulse | Flag a mistake

4 **A peach tree flowers in spring. What do bees carry between flowers?**

- A leaves
- B water
- C pollen
- D seeds

Understand It with Pulse | Flag a mistake

5 **A sunflower makes glucose in its leaves. Which gas does it take in for photosynthesis?**

- A nitrogen gas from the air
- B carbon dioxide
- C hydrogen gas from the air
- D oxygen gas from the air

Understand It with Pulse | Flag a mistake

6

A forest absorbs carbon dioxide. Which process does this?

A photosynthesis

B combustion of the wood

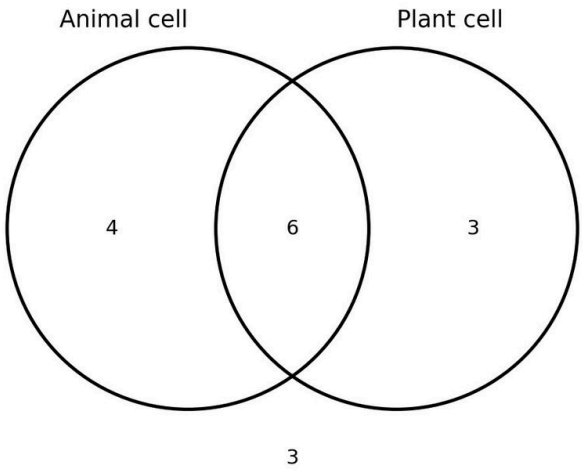
C decomposition in the soil

D respiration in the trees

Understand It with Pulse

Flag a mistake

7 **The Venn diagram shows features of animal cells and plant cells. How many features are found in both types of cell?**



A 7

B 6

C 8

D 5

Understand It with Pulse

Flag a mistake

8 **What is the pH of bile?**

A alkaline

B strongly acidic

C acidic

D neutral

Understand It with Pulse | Flag a mistake

9 **Why does a shoot bend towards light?**

A more auxin on the shaded side

B the lit side grows faster

C auxin builds up on the lit side

D the roots pull the shoot over

Understand It with Pulse | Flag a mistake

10 **Why are quadrats placed randomly?**

A to avoid counting

B to find the most organisms

C to save time

D to get a fair sample

Understand It with Pulse | Flag a mistake

11 **What is a mutation?**

A a change in the number of cells

B a change in the number of chromosomes

C a change in the DNA base order

D a change in the size of a cell

Understand It with Pulse | Flag a mistake

12 **Which disease is now prevented by the MMR vaccine?**

A tuberculosis

B malaria

C athlete's foot

D measles

Understand It with Pulse | Flag a mistake

13 **One glucose molecule releases 30 molecules of ATP in respiration. How many ATP molecules are released from 3 glucose molecules?**

A 120

B 90

C 180

D 60

Understand It with Pulse | Flag a mistake

14 **Why do guard cells close the stomata at night?**

A to let oxygen out

B to absorb more minerals

C to reduce water loss

D to stop photosynthesis

Understand It with Pulse | Flag a mistake

15 **Which plant hormone makes shoots bend towards light?**

A auxin

B gibberellin

C ethene

D insulin

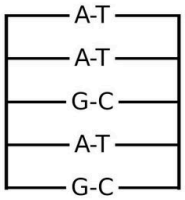
Understand It with Pulse | Flag a mistake

16 **What are decomposers?**

- **A** green plants and algae
- **B** worms and insects only
- **C** bacteria and fungi
- **D** animals that eat dead plants

Understand It with Pulse | Flag a mistake

17 **The diagram shows a short section of DNA. How many base pairs are there in total?**



- **A** 5
- **B** 7
- **C** 4
- **D** 6

Understand It with Pulse | Flag a mistake

18 **A person is exposed to a disease on day 5. The incubation period is 7 days. On which day do symptoms start?**

- A 14
- B 13
- C 11
- D 12

Understand It with Pulse | Flag a mistake

19 **What gas is released by photosynthesis?**

- A carbon dioxide
- B oxygen
- C hydrogen
- D nitrogen

Understand It with Pulse | Flag a mistake

20 **What does amylase break down?**

- A cellulose to glucose
- B proteins to amino acids
- C lipids to fatty acids and glycerol
- D starch to sugars

Understand It with Pulse | Flag a mistake

21 **Which neurone carries the impulse from the CNS to the effector?**

- A a sensory neurone
- B a receptor neurone
- C a relay neurone
- D a motor neurone

Understand It with Pulse | Flag a mistake

22 **Producers in a food chain hold 10000 kJ of energy. About 10 percent passes to the primary consumers. How much energy reaches them?**

A 10000 kJ

B 2000 kJ

C 500 kJ

D 1000 kJ

Understand It with Pulse | Flag a mistake

23 **What are the three domains of life?**

A Animals, Plants and Fungi

B Prokaryotes, Eukaryotes and Viruses

C Archaea, Bacteria and Eukaryota

D Bacteria, Viruses and Fungi

Understand It with Pulse | Flag a mistake

24 **Which pathogen causes HIV?**

A a fungus

B a protist

C a virus

D a bacterium

Understand It with Pulse | Flag a mistake

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

A plant cells divide more slowly

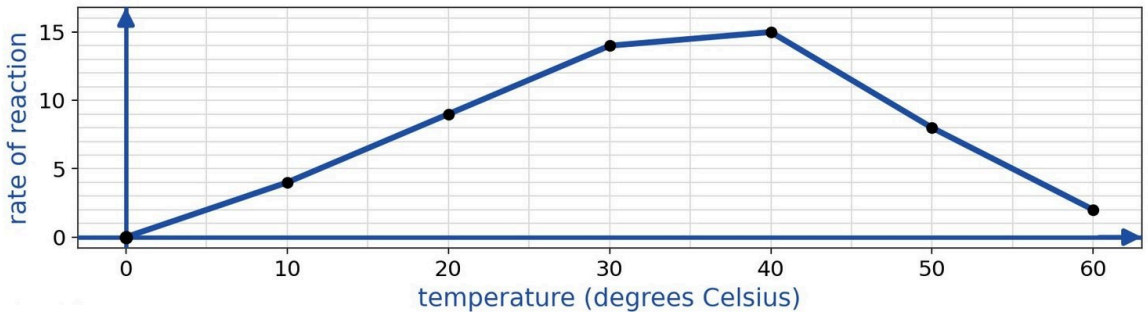
B plants have no DNA in their cells

C plants keep meristem tissue

D animal cells have no nucleus

Understand It with Pulse | Flag a mistake

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



A 20

B 30

C 40

D 60

Understand It with Pulse | Flag a mistake

27 **Blood glucose falls from 8 mmol per litre to 5 mmol per litre. What is the fall?**

A 4 mmol/L

B 5 mmol/L

C 2 mmol/L

D 3 mmol/L

Understand It with Pulse | Flag a mistake

28 **Producers in a food chain have a biomass of 1000 kg. About 10 per cent of biomass passes to each level. What is the biomass of the secondary consumers?**

A 1

B 100

C 20

D 10

Understand It with Pulse | Flag a mistake

29 **In a DNA sample, 25 percent of the bases are adenine. What percent are thymine?**

A 15%

B 75%

C 35%

D 25%

Understand It with Pulse | Flag a mistake

30 **Which is a physical defence of a plant?**

A an antimicrobial chemical

B a waxy cuticle

C antibodies in the sap

D white blood cells

Understand It with Pulse | Flag a mistake

31 **Why is the lid of a Petri dish taped on, but not sealed all the way round?**

- **A** to let the bacteria escape when they grow
- **B** to keep the dish warm
- **C** to let oxygen in and keep microbes out
- **D** to stop the agar from drying out completely

Understand It with Pulse | Flag a mistake

32 **Which component of blood helps blood to clot?**

- **A** plasma
- **B** white blood cells
- **C** platelets
- **D** red blood cells

Understand It with Pulse | Flag a mistake

33 **Eggs are produced by hens. What is the female reproductive cell called?**

A an egg cell

B a zygote

C a sperm cell

D an embryo

Understand It with Pulse | Flag a mistake

34 **What do decomposers return to the soil?**

A nutrients

B carbon dioxide

C oxygen

D water

Understand It with Pulse | Flag a mistake

35 **What is a gene bank?**

A a hospital for genetic disorders

B a store of seeds or genes

C a laboratory for cloning

D a bank that stores money

Understand It with Pulse | Flag a mistake

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

A it becomes zero

B it becomes negative

C it increases

D it stays the same

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

38 **A heart beats 60 times per minute and pumps 70 mL per beat. What is the cardiac output in mL per minute?**

- A 4200 mL/min
- B 3700 mL/min
- C 8400 mL/min
- D 4700 mL/min

Understand It with Pulse | Flag a mistake

39 **How does the body lose heat when it is too hot?**

A by shivering

B by vasoconstriction

C by growing hair

D by sweating

Understand It with Pulse | Flag a mistake

40 **What is biogas?**

A oxygen released by plants

B nitrogen from the air

C carbon dioxide from burning

D methane made without oxygen

Understand It with Pulse | Flag a mistake

41 **What is the order of the Linnaean groups, largest first?**

A a list of all living things

B kingdom to species in order

C species to kingdom in order

D genus to family in order

Understand It with Pulse | Flag a mistake

42 **What is herd immunity?**

A everyone in the population catches the disease at once

B animals protect humans

C most people are immune so disease cannot spread

D vaccines work on animals

Understand It with Pulse | Flag a mistake

43 **Where does aerobic respiration happen?**

A in the chloroplasts

B in the mitochondria

C in the vacuole

D in the nucleus

Understand It with Pulse | Flag a mistake

44 **Red apples provide energy. Which nutrient in apples provides most energy?**

A fat, for insulation

B protein, for growth

C fibre, for digestion

D carbohydrates

Understand It with Pulse | Flag a mistake

45 **In a reflex, where does the impulse go after the receptor?**

A to a relay neurone

B straight to the effector

C to a hormone

D to the brain first

Understand It with Pulse | Flag a mistake

46 **A forest provides a habitat. What does habitat mean?**

A when an organism sleeps

B where an organism lives

C what an organism eats

D how an organism breeds

Understand It with Pulse | Flag a mistake

47 **Which animal was the first cloned from an adult cell?**

A a farm cow

B Dolly the sheep

C a laboratory mouse

D a pet dog

Understand It with Pulse | Flag a mistake

48 **A vaccine is given to 19 out of every 20 people in a school of 400 pupils. How many pupils receive the vaccine?**

A 380

B 399

C 20

D 38

Understand It with Pulse | Flag a mistake

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

A 4

B 2

C 1

D 3

Understand It with Pulse | Flag a mistake

50 **A heart beats 60 times per minute and pumps 80 mL per beat. What is the cardiac output in mL per minute?**

A 5300 mL/min

B 4300 mL/min

C 9600 mL/min

D 4800 mL/min

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. B
2. A
3. A
4. C
5. B
6. A
7. B
8. A
9. A
10. D
11. C
12. D
13. B
14. C
15. A
16. C
17. A
18. D
19. B
20. D
21. D
22. D
23. C
24. C
25. C
26. C
27. D
28. D
29. D
30. B
31. C
32. C
33. A
34. A
35. B
36. A
37. C
38. A
39. D
40. D
41. B
42. C
43. B
44. D
45. A
46. B
47. B
48. A
49. B
50. D

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