ENGLAND GCSE BIOLOGY OCR GATEWAY HIGHER · 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 **Glass marbles are shaken in a tray. What does this model?**

- A particles disappearing completely
- B particles freezing into place
- C particles gaining energy
- D particles bonding together

Understand It with Pulse | Flag a mistake

2 **Eggs can carry Salmonella bacteria. What should you do before eating eggs?**

- A wash them in cold water
- B eat them raw
- C leave them in the sun
- D cook them thoroughly

Understand It with Pulse | Flag a mistake

3 **A thermometer measures temperature in degrees Celsius. What is the freezing point of water on this scale?**

- A 10
- B 32
- C 100
- D 0

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

5 **Horses have different coat colours. What causes the differences?**

- A different species
- B different alleles
- C different habitats
- D different diets

Understand It with Pulse | Flag a mistake

6 **A thermometer shows a child has a temperature of 39 degrees Celsius. What does a high temperature suggest?**

- A the body is too cold
- B the body is fighting an infection
- C the child is dehydrated
- D the child needs more sleep and rest tonight

Understand It with Pulse | Flag a mistake

7 **What is glucose used to make in cell walls?**

A starch

B amino acids

C cellulose

D glycogen

Understand It with Pulse | Flag a mistake

8 **What does a stent do?**

A replaces a valve

B holds an artery open

C lowers blood pressure

D removes a blood clot

Understand It with Pulse | Flag a mistake

9 **What is a risk factor for type 2 diabetes?**

A being overweight

B eating vegetables

C exercising daily

D being underweight

Understand It with Pulse | Flag a mistake

10 **A field has 1000 kg of grass. If 5 percent of the energy passes to the rabbits, how much grass biomass supports the rabbits?**

A 100 kg

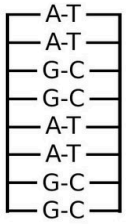
B 25 kg

C 500 kg

D 50 kg

Understand It with Pulse | Flag a mistake

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



- **A** 8
- **B** 10
- **C** 7
- **D** 9

Understand It with Pulse | Flag a mistake

12 **What does a vaccine contain?**

- **A** a dead or weakened pathogen
- **B** a live dangerous pathogen that causes disease
- **C** white blood cells
- **D** an antibiotic

Understand It with Pulse | Flag a mistake

13 **What does a plant make from glucose for energy storage in seeds?**

A lipids

B protein

C cellulose

D starch

Understand It with Pulse | Flag a mistake

14 **What do guard cells do?**

A make chlorophyll

B carry sugars down the stem

C absorb water from soil

D open and close the stomata

Understand It with Pulse | Flag a mistake

15 **What does progesterone do?**

A it triggers ovulation

B it thickens the lining before ovulation

C it maintains the uterus lining

D it stimulates eggs to mature

Understand It with Pulse | Flag a mistake

16 **What is a biotic factor?**

A a physical factor, like light

B a non-living factor, like temperature

C a chemical factor, like pH

D a living factor, like a predator

Understand It with Pulse | Flag a mistake

17 **Where did the nucleus for Dolly come from?**

A from an embryo cell

B from an adult cell

C from a sperm cell

D from an egg cell

Understand It with Pulse | Flag a mistake

18 **Which pathogen causes HIV?**

A a bacterium

B a protist

C a virus

D a fungus

Understand It with Pulse | Flag a mistake

19 **Why does oxygen diffuse from the lungs into the blood?**

A the blood pumps it in

B the lungs are warmer

C oxygen is more concentrated in the lungs

D oxygen is less concentrated in the lungs

Understand It with Pulse | Flag a mistake

20 **Why do red blood cells have no nucleus?**

A to fight infection better

B to live for longer

C to divide more quickly in the bone marrow

D to carry more haemoglobin

Understand It with Pulse | Flag a mistake

21 **Body temperature is 37 degrees Celsius. It rises by 3 degrees. What is the temperature now?**

A 42 degrees Celsius

B 39 degrees Celsius

C 40 degrees Celsius

D 41 degrees Celsius

Understand It with Pulse | Flag a mistake

22 **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 20

B 1

C 10

D 100

Understand It with Pulse | Flag a mistake

23 **Two heterozygous parents have a child. What is the probability the child is homozygous recessive?**

- A 50%
- B 25%
- C 0%
- D 75%

Understand It with Pulse | Flag a mistake

24 **Why should a course of antibiotics be finished?**

- A to save money on medicine
- B to kill all the bacteria
- C to prevent an allergic reaction
- D to stop side effects

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

- A 4400 mL/min
- B 9800 mL/min
- C 4900 mL/min
- D 5400 mL/min

Understand It with Pulse | Flag a mistake

27 **What is vasodilation?**

A blood vessels near the skin narrow

B sweat glands close

C the heart beats faster

D blood vessels near the skin widen

Understand It with Pulse | Flag a mistake

28 **Producers in a food chain hold 100000 kJ of energy. About 10 percent passes to the primary consumers. How much energy reaches them?**

A 20000 kJ

B 100000 kJ

C 10000 kJ

D 5000 kJ

Understand It with Pulse | Flag a mistake

29 **What causes polydactyly?**

A an extra chromosome

B a recessive allele

C a missing chromosome

D a dominant allele

Understand It with Pulse | Flag a mistake

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

A an antimicrobial chemical

B antibodies in the sap

C a waxy cuticle

D white blood cells

Understand It with Pulse | Flag a mistake

31 **In osmosis, water moves from where to where?**

A hot to cold water

B cell to soil

C concentrated to dilute solution

D dilute to concentrated solution

Understand It with Pulse | Flag a mistake

32 **What is cancer?**

A uncontrolled cell division

B a lack of white blood cells

C a blocked blood vessel

D a virus infecting the body

Understand It with Pulse | Flag a mistake

33 **A thermometer shows a patient's temperature is 39 degrees Celsius. Is this above or below normal body temperature?**

- A exactly normal
- B above normal
- C below normal
- D impossible to tell

Understand It with Pulse | Flag a mistake

34 **What makes a good compost heap?**

- A cold, dry and sealed
- B dry, warm and sealed
- C wet, cold and airless
- D warm, moist and airy

Understand It with Pulse | Flag a mistake

35 **Which bases pair together in DNA?**

A A pairs with A, T pairs with T

B A pairs with G, C pairs with T

C A pairs with T, C pairs with G

D A pairs with C, T pairs with G

Understand It with Pulse | Flag a mistake

36 **Why is a hybridoma useful?**

A it makes many different antibodies

B it makes identical antibodies

C it stops tumours growing

D it kills cancer cells directly

Understand It with Pulse | Flag a mistake

37 **Which part of a plant cell contains cell sap?**

A the vacuole

B the nucleus

C the mitochondria

D the cytoplasm

Understand It with Pulse | Flag a mistake

38 **What is a benign tumour?**

A a tumour that stays in one place

B a tumour that spreads around the body

C a tumour that cannot be treated

D a tumour caused by a virus

Understand It with Pulse | Flag a mistake

39 **How does sweating cool the body?**

A sweat evaporates from the skin

B sweat carries heat into the blood

C sweat blocks the pores

D sweat warms the skin surface

Understand It with Pulse | Flag a mistake

40 **Seabirds are affected by plastic pollution. How does plastic harm them?**

A they eat it by mistake

B it helps them fly

C it makes them stronger and healthier

D it keeps them warm

Understand It with Pulse | Flag a mistake

41 **A honeybee moves pollen between flowers. What is this an example of?**

- A germination
- B pollination
- C fertilisation
- D photosynthesis

Understand It with Pulse | Flag a mistake

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

- A an embryo
- B a sperm cell
- C an egg cell
- D a zygote

Understand It with Pulse | Flag a mistake

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

A 64

B 66

C 32

D 128

Understand It with Pulse | Flag a mistake

44 **A sandwich contains bread and cheese. Where does digestion begin?**

A in the small intestine

B in the mouth

C in the large intestine

D in the stomach

Understand It with Pulse | Flag a mistake

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

A it becomes negative

B it becomes zero

C it stays the same

D it increases

Understand It with Pulse | Flag a mistake

46 **A quadrat of area 20 square metres contains on average 5 daisies. Estimate the number of daisies in a field of 200 square metres.**

A 25

B 100

C 50

D 500

Understand It with Pulse | Flag a mistake

47 **Which disorder is caused by a dominant allele?**

A cystic fibrosis

B sickle cell anaemia

C haemophilia

D polydactyly

Understand It with Pulse | Flag a mistake

48 **What do antibiotics kill?**

A fungi

B bacteria

C viruses

D protists

Understand It with Pulse | Flag a mistake

49 **Why does breathing rate increase during exercise?**

- A to take in more carbon dioxide
- B to cool the blood
- C to slow the heart
- D to take in more oxygen

Understand It with Pulse | Flag a mistake

50 **What does amylase break down?**

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

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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