BRITISH COLUMBIA ANATOMY AND PHYSIOLOGY 12 (MATPH12) · 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 an animal cell, most of the DNA is stored in the**

- A mitochondrion
- B ribosome
- C Golgi body
- D nucleus

Understand It with Pulse | Flag a mistake

2 **The enzyme in saliva that begins starch digestion is**

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

Understand It with Pulse | Flag a mistake

3 **The chamber that receives oxygen poor blood from the body is the**

- A left ventricle
- B right atrium
- C left atrium
- D right ventricle

Understand It with Pulse | Flag a mistake

4 **The part of a neuron that carries an impulse away from the cell body is the**

- A dendrite
- B axon
- C cell body
- D receptor

Understand It with Pulse | Flag a mistake

5 **The organelle that packages proteins for transport out of a cell is the**

A Golgi body

B lysosome

C nucleus

D vacuole

Understand It with Pulse | Flag a mistake

6 **Most chemical digestion and nutrient absorption take place in the**

A small intestine

B stomach

C large intestine

D oesophagus

Understand It with Pulse | Flag a mistake

7 **The blood component that carries oxygen is the**

A platelet

B red blood cell

C white blood cell

D plasma protein

Understand It with Pulse | Flag a mistake

8 **The central nervous system is made up of the**

A nerves only

B brain and spinal cord

C sense organs

D autonomic nerves

Understand It with Pulse | Flag a mistake

9 **The shape of a DNA molecule is best described as a**

A Single strand

B Triple helix

C Flat sheet

D Double helix

Understand It with Pulse | Flag a mistake

10 **Bile is produced in the**

A pancreas

B liver

C gallbladder

D small intestine

Understand It with Pulse | Flag a mistake

11 **In a typical adult blood pressure reading, the higher number is the**

- A systolic pressure
- B diastolic pressure
- C pulse pressure
- D venous pressure

Understand It with Pulse | Flag a mistake

12 **The brainstem controls basic life functions such as**

- A breathing and heart rate
- B reasoning
- C memory of facts
- D voluntary movement

Understand It with Pulse | Flag a mistake

13 **The process in which a DNA sequence is copied into messenger RNA is called**

A Translation

B Replication

C Mutation

D Transcription

Understand It with Pulse | Flag a mistake

14 **The flap that keeps food out of the windpipe during swallowing is the**

A epiglottis

B diaphragm

C alveolus

D bronchus

Understand It with Pulse | Flag a mistake

15 **The pulmonary circuit carries blood between the heart and the**

A body tissues

B kidneys

C lungs

D liver

Understand It with Pulse | Flag a mistake

16 **A motor neuron carries impulses**

A from receptors to the brain

B inside sense organs

C from the central nervous system to muscles

D from muscle to muscle

Understand It with Pulse | Flag a mistake

17 **The organelle that releases most of the usable energy in an animal cell is the**

A mitochondrion

B nucleus

C ribosome

D vacuole

Understand It with Pulse | Flag a mistake

18 **During inhalation, the diaphragm**

A relaxes and moves up

B stops moving

C pushes air out

D contracts and moves down

Understand It with Pulse | Flag a mistake

19 **Useful substances filtered out of blood are returned to blood by**

- A secretion
- B filtration
- C reabsorption
- D excretion

Understand It with Pulse | Flag a mistake

20 **The hormone that lowers blood glucose by helping cells take it up is**

- A insulin
- B glucagon
- C adrenaline
- D thyroxine

Understand It with Pulse | Flag a mistake

21 **The monomer that makes up a protein is an**

A Amino acid

B Fatty acid

C Nucleotide

D Glucose unit

Understand It with Pulse | Flag a mistake

22 **The graph shows breathing rate before, during and after exercise. Breathing rate is highest**

A at rest

B after recovery

C before exercise

D during exercise

Understand It with Pulse | Flag a mistake

23 **The hormone that increases water reabsorption in the kidney is**

A insulin

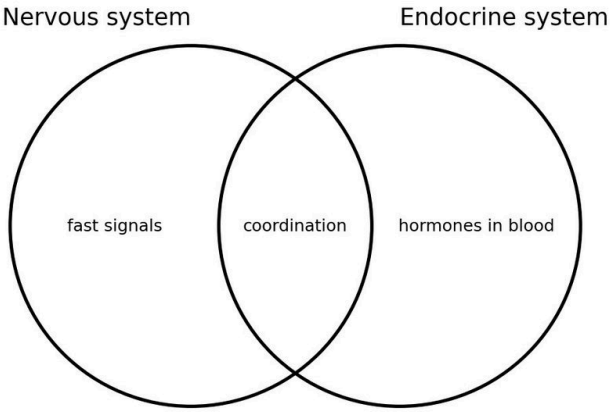
B adrenaline

C thyroxine

D ADH

Understand It with Pulse | Flag a mistake

24 **The diagram compares the nervous system and the endocrine system. The role shared by both systems is that they**



A send electrical impulses only

B release hormones into blood

C control muscles directly

D coordinate body responses

Understand It with Pulse | Flag a mistake

25 **The phase of mitosis in which sister chromatids are pulled apart is**

- A Prophase
- B Anaphase
- C Telophase
- D Interphase

Understand It with Pulse | Flag a mistake

26 **The graph shows oxygen use during rest and exercise. Oxygen use during exercise compared with rest is**

- A lower
- B the same
- C higher
- D zero

Understand It with Pulse | Flag a mistake

27 **The graph shows urine output as ADH level rises. As ADH rises, urine output**

A increases

B stays the same

C drops to zero at once

D decreases

Understand It with Pulse | Flag a mistake

28 **During exercise, the nervous, respiratory and circulatory systems together**

A slow breathing and heart rate

B stop sweating

C reduce blood flow to muscles

D increase oxygen delivery to muscles

Understand It with Pulse | Flag a mistake

29 **A change in a DNA sequence that can be passed to offspring must occur in a**

A skin cell

B muscle cell

C nerve cell

D gamete cell

Understand It with Pulse | Flag a mistake

30 **In the lungs, the wall of an alveolus is thin so that**

A air can be stored

B gases diffuse quickly

C blood flows slowly

D mucus is made

Understand It with Pulse | Flag a mistake

31 **The pacemaker of the heart that sets the rhythm of beating is the**

- A SA node
- B AV node
- C aorta
- D vena cava

Understand It with Pulse | Flag a mistake

32 **A resting neuron has a charge difference across its membrane called the**

- A resting potential
- B action potential
- C threshold
- D synapse

Understand It with Pulse | Flag a mistake

33 **A cell membrane is made mainly of a double layer of**

A proteins

B phospholipids

C glucose

D cellulose

Understand It with Pulse | Flag a mistake

34 **The tube that carries food from the mouth to the stomach is the**

A trachea

B oesophagus

C ureter

D bronchus

Understand It with Pulse | Flag a mistake

35

Capillary walls are only one cell thick so that

A pressure stays high

B blood flows fast

C exchange happens quickly

D valves can close

Understand It with Pulse | Flag a mistake

36

The parasympathetic nervous system mainly promotes

A fight or flight

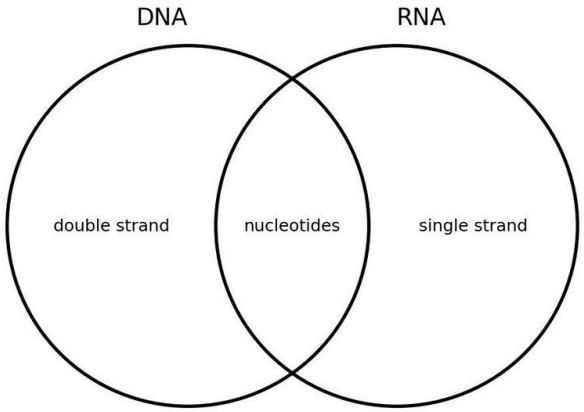
B stress hormones

C muscle growth

D rest and digestion

Understand It with Pulse | Flag a mistake

37 **The diagram compares DNA and RNA. The feature shared by both molecules is that they**



A are double stranded

B contain thymine

C are made of nucleotides

D stay in the nucleus

Understand It with Pulse | Flag a mistake

38 **After absorption, most nutrients from the small intestine travel first to the**

A lungs

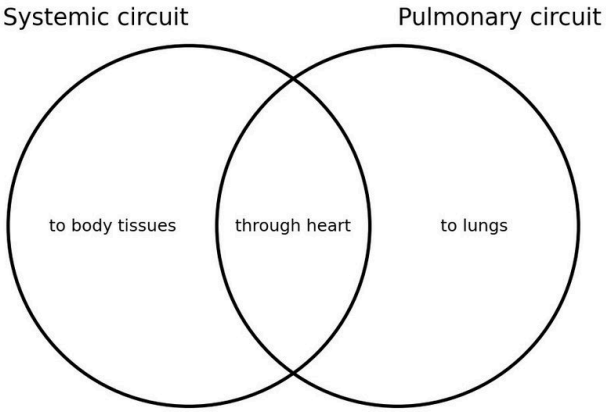
B liver

C kidneys

D heart

Understand It with Pulse | Flag a mistake

39 **The diagram compares systemic circulation and pulmonary circulation. The feature shared by both circuits is that they**



A move blood through the heart

B supply the kidneys only

C carry oxygen rich blood only

D bypass the heart

Understand It with Pulse | Flag a mistake

40 **Sperm are produced and then mature and are stored mainly in the**

A testes

B epididymis

C urethra

D prostate

Understand It with Pulse | Flag a mistake

41 **A mutation that replaces one base with another is called a**

A deletion

B insertion

C substitution

D duplication

Understand It with Pulse | Flag a mistake

42 **During exhalation, the volume of the chest cavity**

A increases

B stays the same

C decreases

D doubles

Understand It with Pulse | Flag a mistake

43 **The loop of Henle helps the kidney to**

A concentrate urine

B filter blood first

C pump blood to the lungs

D make red cells

Understand It with Pulse | Flag a mistake

44 **The graph shows blood glucose after eating. After the peak, blood glucose**

A keeps rising

B falls back toward normal

C drops to zero

D stays at peak

Understand It with Pulse | Flag a mistake

45 **Cell differentiation is the process by which cells**

A lose all their genes

B stop using energy

C merge into one cell

D become specialized for particular jobs

Understand It with Pulse | Flag a mistake

46 **Most carbon dioxide in blood is carried as**

A free gas

B haemoglobin

C hydrogen carbonate ions

D plasma protein

Understand It with Pulse | Flag a mistake

47 **High blood pressure over a long time increases risk of**

A anaemia

B asthma

C stroke

D diabetes

Understand It with Pulse | Flag a mistake

48 **The nervous and endocrine systems both help the body respond to a threat by**

A slowing all body systems

B stopping digestion permanently

C mobilizing energy and raising alertness

D lowering blood pressure to zero

Understand It with Pulse | Flag a mistake

49 **Uncontrolled cell division that forms a mass of abnormal cells is a feature of**

A mitosis

B meiosis

C cancer

D differentiation

Understand It with Pulse | Flag a mistake

50 **The digestive system helps homeostasis by keeping a steady supply of**

A oxygen

B carbon dioxide

C nutrients in blood

D red cells

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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