

45. What is the name given to the pathway taken by an impulse in a reflex action?
- Neurons
 - Reflex
 - Reflex arc
 - Synapse
-
46. Choose the correct dental formula of an adult human being.
- $\frac{I_2 C_2 P_3 M_2}{I_2 C_2 P_3 M_2}$
 - $\frac{I_2 C_1 P_2 M_1}{I_2 C_1 P_2 M_3}$
 - $\frac{I_3 C_2 P_3 M_2}{I_3 C_2 P_3 M_2}$
 - $\frac{I_3 C_1 P_4 M_2}{I_3 C_1 P_4 M_2}$
-
47. Green/red colour blindness is sex-linked. A normal man marries a completely colour-blind woman. They have eight children, four boys and four girls. How many of them are colour blind?
- 2
 - 6
 - 4
 - 8
-
48. The most abundant component of blood in terms of its volume is:
- Blood cells
 - Blood proteins
 - Dissolved food substances
 - water
-
49. Besides acting as an excretory organ, the kidney also functions in osmoregulation by regulating:
- The blood sugar level
 - Blood water/salt level
 - Blood temperature
 - Blood salt content
-
50. Identify the most simple hygienic practice below that can greatly contribute in lowering the incidence of water and food borne diseases in the community:
- Boil drinking water thoroughly
 - Eat from clean plates
 - Chlorination of drinking water
 - Wash hands with clean water before meals and after using toilet.

STOP

NOW GO BACK AND CHECK YOUR WORK

CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate of Education Examination

565 HUMAN BIOLOGY 1

JUNE 2014

ORDINARY LEVEL

Centre No. & Name	1395 S.G.B.H.S KRIBI
Candidate No.	5033
Candidate Name	ABAGE NHDENYUWI

565 HUMAN BIOLOGY 1: MULTIPLE CHOICE QUESTION PAPER

One and a half hours.

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION.
2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins:

3. Check that this question booklet is headed "Ordinary Level – 565 Human Biology 1"
4. Insert the information required in the spaces above.
5. Insert the information required in the spaces provided on the answer sheet using your HB pencil:
Candidate Name, Exam Session, Subject Code, Center Number and Candidate Number. Take care that you do not crease or fold the answer sheet or make any marks on it other than those asked for in these instructions.

How to answer the questions in this examination

6. Answer ALL the 50 questions in this Examination.
7. Calculators are allowed.
8. Each question has FOUR suggested answers: A, B, C and D. Decide on which answer is correct. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen.
For example, if C is your correct answer, mark C as shown below:

[A] [B] ☒ [C] [D]

9. Mark only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.
10. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to that question later.
11. Do all rough work in this booklet, using, where necessary, the blank spaces in the question booklet.
12. Mobile phones are NOT allowed in the examination room.
13. You must not take this booklet out of the examination room. All question booklets and answer sheets will be collected at the end of the examination.

Turn Over

1. Diffusion is the movement of molecules from a region of higher concentration to a region of lower concentration. Which statement is true?
 - A. It is a selective process.
 - B. Living membranes are essential.
 - C. Movement of substances is along the concentration gradient.
 - D. Respiration provides energy for the process.

2. The endometrium of the uterus is made up of
 - A. Striated muscle.
 - B. Squamous epithelium.
 - C. Smooth muscle.
 - D. Connective tissue.

3. The axial skeleton is made up of:
 - A. Limb girdle and limbs.
 - B. The skull, limbs and ribs.
 - C. Limbs, girdle and ribs.
 - D. Ribs, vertebrae and skull.

Questions 4-6 are based on the following directions for each of the questions; one or more of the responses are correct. Decide which of the responses is (are) correct and choose.

- A. if 1, 2 and 3 are correct
 - B. if 1 and 2 only are correct
 - C. if 2 and 3 only are correct
 - D. if 1 only is correct
4. The common monomer(s) of maltose, sucrose and lactose is:
 1. Glucose
 2. Fructose.
 3. Galactose.

 5. The reagent used for testing glucose and maltose in a sample is?
 1. Benedict's solution
 2. Fehling's solution
 3. Iodine solution

 6. The products of oxidation of organic substances in the mitochondrion are:-
 1. $C_2H_5OH + CO_2 + \text{Energy}$
 2. $CO_2 + H_2O$
 3. A.T.P

Question 7 - 9 are concerned with the following terms:-

- A. Erythrocytes
- B. Thrombocytes
- C. Macrophages
- D. Lymphocytes

Relate each of the statements below with one of the terms above.

7. Which cell type will increase in number when bacteria are found in blood.

8. Select the blood cell whose mutation results in a hereditary disease.

9. Which cell type is attacked by H.I.V?

10. Which of the following processes will decrease the amount of carbon dioxide in the atmosphere:
- Respiration
 - Putrefaction.
 - Photosynthesis
 - Combustion.

Use tables I and II below to answer questions 11-13. Match the biological terms in table I with the descriptions in table II

	Table I		Table II
11.	Cell	A.	The genetic constitution of an organism
12.	Tissue	B.	The basic unit of an organism
13.	Genotype	C.	A group of cells performing the same functions
		D.	A unit of inheritance

14. A diet deficient in vegetable fibre may cause
- Diarrhoea
 - Vomiting
 - Constipation
 - Appendicitis
15. Under normal conditions urine does not contain glucose because:-
- Blood reaching the kidney contains glucose.
 - The kidney tubules convert glucose to urea.
 - All of the glucose filtered in the kidney tubule is selectively reabsorbed.
 - Blood does not carry glucose to the kidney.
16. What are the light sensitive cells of the eye?
- Rods and cones
 - Neurones
 - Nerves
 - Photosensitive cells
17. What is the fluid that prevents friction at joints?
- Mucus
 - Synovial fluid
 - Lymph
 - Tissue fluid.
18. The body does not store excess amino acids. Any excess amino acids in the body is broken down in the liver in a process called
- Detoxification
 - Deamination
 - Digestion
 - Hydrolysis
19. What is the pigment responsible for hair and skin colour?
- Melanin
 - Biliverdin
 - Haemoglobin
 - Bilirubin

20. A human diploid cell contains 46 chromosomes. How many chromosomes would be found in 10 muscle cells and 10 sperm cells put together?
 A 480
 B 1250
 C 920
 D 690
-
21. The biceps muscle is:
 A A cardiac muscle
 B A smooth muscle
 C A striated muscle
 D An involuntary muscle
-
22. The part of the nerve cell which transmits impulses towards a cell body is known as?
 A An axon
 B A myelin sheath
 C A dendrite
 D A dendron
-
23. The ions that are found outside a neurone at resting potential are?
 A Potassium ions
 B Sodium ions
 C Chloride ions
 D Magnesium ions
-
24. A hormone concerned with digestion is:
 A Secretin
 B Calcitonin
 C Aldosterone
 D Glucagon
-
25. Which of the following clothing materials is the best conductor of heat?
 A Cotton
 B Wool
 C Linen
 D nylon
-
26. How is man structurally different from other mammals?
 A Man is emotional.
 B Man has a very large forebrain
 C Man is able to take care of his young after birth
 D Man is able to cook his food.
-
27. Play grounds in an urban area such as Limbe City may
 (i) promote team spirit; (ii) promote good health
 (iii) provide revenue for the council (iv) lead to social unrest
- Select the correct statements above and choose the most appropriate options that follow:
- A (i) and (ii) only
 B (ii) and (iv) only
 C (i), (ii) and (iii) only
 D (i), (ii), (iii) and (iv)
-

28. The processes by which ova and sperm cells are produced in the gonads are:
 A Ovulation and ejaculation
 B Oogenesis and spermatogenesis
 C Ovulation and spermatogenesis
 D Oogenesis and ejaculation
-
29. When is fertilization most likely to occur in a 28 day menstrual cycle?
 A Between day 27 and 28
 B Between day 1 and 2
 C Between day 6 and 7
 D Between day 14 and 15
-
30. An individual may gain antibodies from a natural source e.g a foetus from the mother through the placenta. What type of immunity is described above?
 A Natural passive immunity
 B Natural active immunity
 C Artificial passive immunity
 D Artificial active immunity
-
31. When food is frozen it does not decay because the bacteria in it are:
 A All killed
 B Alive and growing
 C Alive but not growing
 D Alive and reproducing.
-
32. A specially trained person who takes x-rays in the hospital is called:
 A Radiologist
 B Cardiologist
 C Psychiatrist
 D Neurologist.

The following directions concern questions 33-35:

Directions: Each question consists of a statement in the left column followed by a second statement in the right column. Choose:

- A. if both statements are true and the second statement is a correct explanation of the first.
 B. if both statements are true and the second statement is NOT a correct explanation of the first.
 C. if the first statement is true but the second is false.
 D. if the first statement is false but the second is true.

Statement One	Statement two
33 Sex linkage describes the situation where genes for certain characters, e.g haemophilia, are located on the sex chromosome.	Sex linkage results in the allele being transmitted along with the sex chromosome.
34 ABO blood group is determined by a gene which has three different alleles, all of which may occupy the same locus.	The knowledge of ABO blood group system is useful in blood transfusion.
35 The female hormones, oestrogen and progesterone, are produced in the ovaries.	The male sex hormone; testosterone is produced in the testes.

36. Which two birth control methods prevent sperm cells from entering the vagina during sexual intercourse?
 A Condom and coitus interruptus
 B Condom and intra-uterine device
 C Tubal ligation and condom
 D Tubal ligation and coitus interruptus.

37. A condition that arises when the body is unable to lose excess heat is:
- Heat cramp
 - Heat exhaustion
 - Heat stroke
 - Heat spot
-
38. Why are the respiratory systems of heavy smokers less able to prevent bacteria and viruses that float in air from entering the lungs?
- Smokers do not brush their mouth properly after smoking
 - Smokers inhale the smoke containing bacteria and viruses
 - Nicotine weakens the epiglottis that protects the wind pipe.
 - Cigarette smoke destroys cilia that protect the lungs.
-
39. If a predator is removed from an ecosystem, the prey species will
- Increase in number
 - Decrease in number
 - Remain unchanged
 - Fluctuate occasionally
-
40. The fluid found in the cochlea of the ear is:
- Endolymph
 - Plasma
 - Lymph
 - Tissue fluid
-
41. Two excretory organs responsible for the elimination of urea and salts are:
- Kidneys and skin
 - Kidneys and pancreas
 - Kidneys and lungs
 - Kidneys and liver
-
42. Which of the following is a disorder of the circulatory system?
- Liver cirrhosis
 - Atherosclerosis
 - Emphysema
 - Bronchitis
-
43. Which organism in the food chain below is a secondary consumer?
- Green plants → Grasshopper → Lizard → snake
- snake
 - Lizard
 - Grasshopper
 - Green plants
-
44. Which of the following are the correct functions of a blood clot?
- Prevent blood loss from a wound
 - Reduces risk of pathogen entering body through the wound
 - Provides a framework for the repair of damaged tissues.
 - Prevents entry of air into blood vessel
- Select the statements which are correct and choose:
- (i), (iii) and (iv)
 - (i), (ii), (iii)
 - (ii), (iii) and (iv)
 - (i) and (ii)