

CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD
General Certificate of Education Examination

0565 HUMAN BIOLOGY 1

JUNE 2020



ORDINARY LEVEL

Centre Number	
Centre Name	
Candidate Identification No.	
Candidate Name	

Mobile phones are NOT allowed in the examination room.

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 – 0565 Human Biology 1"
4. Fill in the information required in the spaces above.
5. Fill in the information required in the spaces provided on the answer sheet using your HB pencil:
Candidate Name, Exam Session, Subject Code and Candidate Identification 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. All questions carry equal marks.
7. Each question has **FOUR** suggested answers: **A, B, C** and **D**. Decide which answer is appropriate. 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]
8. 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.
9. 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.
10. Do all rough work in this booklet using the blank spaces in the question booklet.
11. **At the end of the examination, the invigilator shall collect the answer sheet first and then the question booklet. DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH IT.**

Turn Over

1. Select the right pair of statement :
- A Man has a large developed forebrain...
...This enables man to live well in the society.
 - B Man is bipedal....This enables him to have a stable movement
 - C Man has hands with opposable thumbs...This enables him to grip objects
 - D Man's head is straight...This enables him to walk uprightly

-
2. Which statement best defines a cell?
- A Basic functional unit of an organism that can exist on its own
 - B Basic unit of an organism that can exist on its own
 - C Basic structural unit of an organism that can exist on its own
 - D Basic structural and functional unit of an organism that can exist on its own

-
3. How are the simple columnar epithelial cells modified to carry out their functions in the small intestines?
- A The cells are elongated in shape
 - B The cells are column shaped and tightly fitted
 - C The free borders of the cells have microvilli
 - D The free borders of the cells have cilia

-
4. In which part of the human body does meiosis take place?
- A The gonads
 - B The bladder
 - C The sensory organ
 - D The kidney

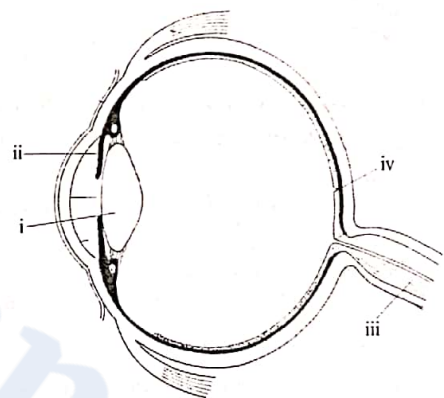
-
5. Two small pieces of bones were used to run an experiment. One was placed in dilute HCL and the other in water for same period of time, then removed. What could be the result?
- A The two bones were hard
 - B The bone in HCL was soft and flexible
 - C The bone in water was a little bit soft
 - D The bone in HCL was a bit hard

6. Study the statements and select the best answer:
- A Skeletal muscles contract and relax fairly slowly
 - B Smooth muscles contract voluntarily
 - C Cardiac muscles are myogenic
 - D Smooth muscles move bones at joints

-
7. What type of joint is located at the elbow?
- A Ball and socket joint
 - B Hinge joint
 - C Gliding joint
 - D Saddle joint

-
8. Select the characteristics of a reflex action;
- A It is involuntary and learned
 - B It is voluntary and innate
 - C It is innate and rapid
 - D It is rapid and learned

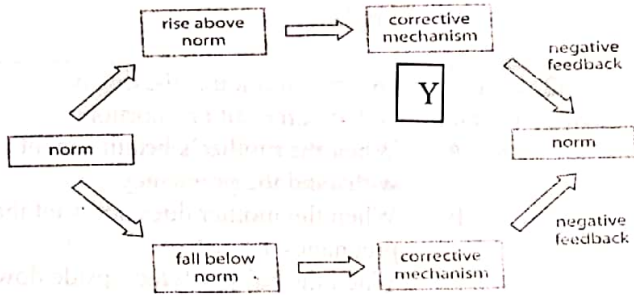
-
9. The diagram below is the vertical section through the eye;



- (Courtesy Bryon Dawson(Revised GCSE biology)
Identify the part that is concerned with colour vision
- A I
 - B II
 - C III
 - D IV

-
10. Select the correct pair of ions which play a role in the transmission of impulse along the axon:
- A Potassium and magnesium ions
 - B Sodium and calcium ions
 - C Sodium and potassium ions
 - D Magnesium and sodium ions

11. The flow diagram below is that of the control of blood sugar level. Study it and answer the question that follows:



(Courtesy Givens and Reiss Human biology and health studies)

Which activity is taking place at the corrective mechanism Y

- A Liver converts glycogen to glucose
 B Liver converts glycogen to maltose
 C Insulin converts glucose to glycogen
 D Insulin accelerates conversion of glucose to glycogen
12. The hormone whose release into blood causes an increase in heart beat is;
 A Glucagon
 B Insulin
 C Adrenaline
 D Aldosterone
13. Select the vitamin that prevents night blindness:
 A Vitamin B
 B Vitamin D
 C Vitamin A
 D Vitamin C
14. Which of the following activities will be affected if the bile duct is blocked?
 A Protein digestion
 B Fat digestion
 C Secretion of pancreatic juice
 D Secretion of secretin
15. Benedict's reagent is used to test for:
 A Starch
 B Reducing sugar
 C Proteins
 D Lipids
16. Select the mineral whose deficiency in the diet will result to goitre:
 A Calcium
 B Magnesium
 C Iodine
 D Iron
17. Identify the component of the gastric juice that is bactericidal:
 A Mucus
 B Pepsin
 C Rennin
 D Hydrochloric acid
18. The maximum volume of air forced out after the deepest inspiration is called...
 A Vital capacity
 B Expiratory reserve volume
 C Inspiratory reserve volume
 D Residual volume
19. What activity brings about the expansion of the thorax during inspiration?
 A Relaxation of the diaphragm
 B Relaxation of the intercostal muscles
 C Contraction of the diaphragm
 D Movement of ribs upwards and inwards
20. Study this table and select a difference between arteries and veins:
- | | Arteries | Veins |
|---|---------------------|----------------------|
| A | Has valves | No valves |
| B | Large lumen | Small lumen |
| C | Thin elastic fibres | Thick elastic fibres |
| D | Thick muscular wall | Thin muscular wall |
21. Why is high blood pressure the main factor that causes heart attack?
 A It increases the risk of fatty deposits in the arteries
 B It causes less force to be exerted on the cardiac muscles
 C It causes the heart to work beyond normal
 D It increases the risk of high blood sugar level
22. What will be the response of the skin during a vigorous activity?
 A Arterioles beneath the epidermis constrict
 B Rate of sweating reduces
 C Much heat loss by radiation
 D Sweat pores are closed
23. Identify the part of the nephron where there is the highest reabsorption of salts:
 A Glomerulus
 B Distal convolute tubule
 C Loop of Henle
 D Proximal convoluted tubule

24. Laboratory analysis revealed the presence of glucose in the urine of an individual. What could be the disease he is suffering from?
- A High blood pressure
 - B Diabetes
 - C Hepatitis
 - D Cirrhosis

25. What type of immunity is acquired after exposure to a particular pathogen?
- A Natural passive immunity
 - B Natural active immunity
 - C Artificial active immunity
 - D Artificial passive immunity

26. In the blood clotting mechanism fibrinogen changes to fibrin in the presence of:
- A Prothrombin and calcium ions
 - B Thrombin and calcium ions
 - C Thrombokinase and potassium ions
 - D Thrombin and potassium ions

27. Identify the correct site and corresponding function of mucous membrane:
- A In the gut....Secretes mucus that coats food and prevents friction
 - B In the vagina...Secretes mucus that prevents friction
 - C In the nostrils...Secretes mucus that waft away dust and pathogens
 - D In the mouth...Secretes mucus that traps pathogens

28. Why are vaccines made of killed or attenuated pathogens
- A To prevent virulence of the pathogen
 - B To prevent patients contracting the disease
 - C To prevent allergic reactions from patients
 - D To prevent resistance from patient

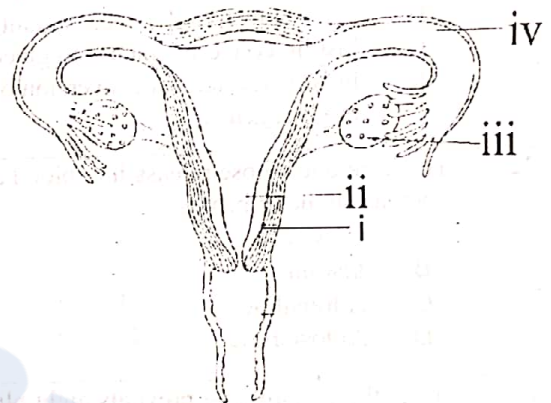
29. Which part of the female reproductive system produces oestrogen?
- A clitoris
 - B Oviduct
 - C Ovary
 - D Uterus

30. What is the hormone that induces labour in a pregnant mother
- A prolactin
 - B Oxytocin
 - C Oestrogen
 - D Progesterone

31. Which of these birth control methods will prevent implantation
- A Intra-uterine device
 - B Contraceptive pills
 - C Tubal ligation
 - D Implants

32. During which condition is the doctor authorized to carry out an abortion
- A When the mother's health cannot withstand the pregnancy
 - B When the mother does not want the pregnancy
 - C When the baby is lying upside down in the uterus
 - D When the mother does not have enough financial means

33. Study the diagram of the female reproductive system below :



(Courtesy D G Mackeans Introduction to human and social biology)

Identify the part where the egg develops during an ectopic pregnancy

- A i
- B ii
- C iii
- D iv

34. Identify the part of the male reproductive system that produces the sperm cells:
- A Sperm duct
 - B Epididymis
 - C Seminiferous tubule
 - D Vas deferens

35. Choose the term that is applicable to the inheritance of the A B O blood groups:
- A Dominance
 - B Incomplete dominance
 - C Codominance
 - D Partial dominance
-
36. The gene for albinism is recessive to the gene for skin colour. What are the possible genotypes of children born to a couple who are both heterozygous for the condition?
- A AA Aa, aa
 - B AA, Aa, Aa
 - C AA, AA, Aa
 - D AA, aa, aa
-
37. Why is it rare to see characters of mutated genes in the society?
- A Because most mutant genes are recessive
 - B Because mutant genes are masked in the population
 - C Because mutation is a common occurrence
 - D Because mutation may result to new resistant species
-
38. Why is the leaf dipped in alcohol to test for the presence of starch?
- A To kill the enzymes present
 - B To destroy any pathogen present
 - C To remove the chlorophyll
 - D To soften the leaf
-
39. What percentage of energy is transferred from one level to the next level in a food chain?
- A 5%
 - B 10%
 - C 12%
 - D 15%
-
40. What is the best first aid treatment you would give to an individual with minor burns?
- A Pour abundant salt on affected area
 - B Flood affected area with cold water
 - C Cover affected area with clean cloth
 - D Call for the ambulance immediately
-
41. How would you prevent the walls of the house from being overheated by direct sun rays?
- A Air vents in the ceiling
 - B Ventilation bricks in the walls
 - C Extended eaves round the house
 - D Roof gutters round the house
-
42. What is the advantage of the biological filter method over the activated sludge method in the treatment of sewage?
- A It is faster
 - B It is less tedious
 - C It produces more useful products
 - D It is cheaper
-
43. By what process does water vapour from the atmosphere become cloud
- A Condensation
 - B Evaporation
 - C Precipitation
 - D Guttation
-
44. The water pollutant that causes algal bloom is:
- A Raw sewage
 - B Sulphur dioxide
 - C Acid rain
 - D Radioactive contaminants
-
45. One way to take care of the ear is by:
- A Using clean cotton buds to remove wax from the ear
 - B Staying away from high sounds
 - C Take adequate rest
 - D Wash ears regularly to keep it clean
-
46. To which health unit would you take an individual who has just been involved in a car accident
- A Emergency unit
 - B Surgical unit
 - C Out-patient unit
 - D In-patient unit
-
47. What is the biological significance of storing food in a cold place?
- A To prevent germination
 - B To prevent vermins
 - C To prevent growth of microbes
 - D To prevent loss of taste
-
48. Select a role of a public health inspector:
- A Punishes vendors with dirty business premises
 - B Ensures that construction meets hygiene standards
 - C Destroys houses that are haphazardly constructed
 - D Educate vet doctors on meat inspection
-

49. The process of converting nitrate to nitrogen gas found in the atmosphere.
- A Anitrogen fixation
 - B Beutrophication
 - C Ammonification
 - D Denitrification

50. Select the disease that can be spread through exchange of towels.
- A AIDS
 - B Ringworm
 - C Dysentery
 - D Cholera

STOP

GO BACK AND CHECK YOUR WORK

