

Answer all questions in this section

Each question is followed by four options lettered A to D. Find out the correct option for each question and shade in pencil on your answer sheet the answer space which bears the same letter as the option you have chosen. Give only one answer to each question. An example is given below

Which of these is out of place?

- A. Kidney
- B. Ureter
- C. Bladder
- D. Liver

The correct answer is **Bladder** which is lettered C and therefore answer C space would be shaded

A B C D E

Think carefully before you shade the answer spaces. Erase completely any answers you wish to change.

Now answer the following questions.

1. The structure that links the mouth with the stomach is the.....
 - A. oesophagus
 - B. duodenum
 - C. ileum
 - D. trachea
2. Liquids suitable for use in thermometer must not
 - A. wet glass
 - B. have low boiling point
 - C. have low melting point
 - D. have a high density
3. Which of the following effects is not a result of illegal connection of electricity? It can
 - A. lead to fire outbreak
 - B. lead to frequent power cut -off
 - C. increase the flow of current
 - D. cause damage to electrical appliance
4. Which of the following metals is used for making roofing sheet?
 - A. Tin
 - B. Aluminum
 - C. Mercury
 - D. Silver
5. The S.I unit for power is
 - A. J
 - B. IN
 - C. N
 - D. K
6. Which of the following substances can be used as an electrical insulator?
 - A. Copper
 - B. Graphite
 - C. Plastic
 - D. Zinc
7. The chief source of energy in the world today is.....
 - A. coal
 - B. natural gas
 - C. crude oil
 - D. water
8. The insect that transmits the plasmodium parasite is called.....
 - A. housefly
 - B. tsetsefly
 - C. dragon fly
 - D. mosquitoes

9. The planet earth is located in a galaxy known as.....
- meteorites
 - super nova
 - satellite
 - milky way
10. Which of the following metals is an alloy?
- Aluminum
 - Zinc
 - Bronze
 - Iron
11. The male sex cells in the flower are found in the
- filament
 - ovary
 - yam
 - plantain
12. The basic units of matter is the
- atom
 - ion
 - molecules
 - electron
13. The property of metal that makes it possible for it be drawn into a wire is called.....
- malleability
 - ductility
 - resistivity
 - conductivity.
14. The by -products of respiration are.....
- carbon dioxide and heat.
 - carbon dioxide and water
 - oxygen and heat
 - oxygen and water
15. Which of the following is likely to happen when the relative humidity is high?
- It is likely to rain
 - It is likely to be sunny
 - It is likely to be dry
 - The day will be hot.
16. Which of the following statement about bush fires is/are True?
- They cause air pollution
 - They deplete vegetation cover
 - they contribute to global warming
- I only
 - II only
 - II and III only
 - I, II and III .
17. An example of a leafy vegetable crop is.....
- cucumber
 - lettuce
 - okro
 - onion
18. Which of the following sources of energy is non - renewable?
- Sun
 - Waves
 - Wind
 - Wood
19. The family system which involves the growing of one type of crop on the same piece of land very season is known as.....
- mixed cropping
 - mixed farming
 - mono cropping
 - mono culture.
20. The process of fertilization that takes place when the sperm and the egg of humans fuse together is referred to as.....
- fertilization
 - menstruation
 - ovualtion
 - reproduction
21. The type of liquid suitable to construct a thermometer to read temperatures of about 150°C is
- alcohol
 - mercury
 - turpentine
 - water

22. Which of the following farm animals is/ are housed in a hatch?
I. Goats
II. Pigs
III. Rabbits
A. I only
B. III only
C. I and II only
D. II and III.
23. Amino acids are the end - products of the digestion of
A. carbohydrates
B. oils
C. fats
D. protein
24. Useful materials in food that provide energy growth and repair of body tissues are called.....
A. carbohydrates
B. protein
C. mineral salts
D. nutrients
25. Fresh fruits contains a lot of
A. vitamin
B. fat
C. proteins
D. starch
26. When oil and water are shaken together they form a mixture called.....
A. a solution
B. an emulsion
C. a solute
D. an alloy
27. The main product of photosynthesis is.....
A. oxygen
B. carbon dioxide
C. glucose
D. water
28. The primary source of energy in an ecosystem is
A. water
B. oxygen
C. sun
D. carbon dioxide
29. In which habitat are you likely to find an antelope?
A. Pond
B. Marine
C. Fresh water
D. Savannah
30. Mixture of engine water oil and water could be separated by.....
A. filtration
B. decantation
C. chromatography
D. evaporation .
31. When salt is part into water it....
A. melts
B. evaporates
C. sublimes
D. dissolves
32. An atom of an elements Y has 11 protons and 12 neutrons. What is the number of electrons in it?
A. Potassium
B. Mercury
C. Sodium
D. Gold
33. A drawing of magnetic lines of force provides information on the
A. source of the field
B. strength of the field
C. strength of the field
D. type of magnet
34. The process by which carbon atoms are removed from the atmosphere is
A. combustion
B. respiration
C. decay
D. photosynthesis
35. When human male and female sex cells come together and are fused a new structure is called.....
A. embryo
B. placenta
C. zygote
D. baby

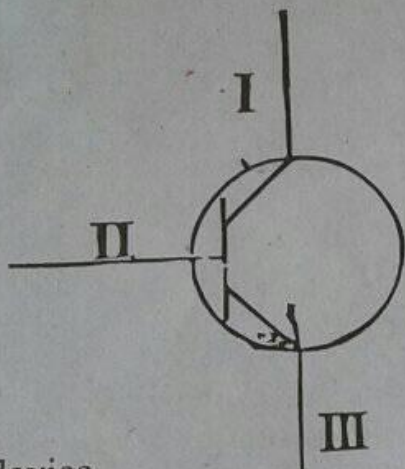
SECOND MOCK EXAMINATION
INTEGRATED SCIENCE 2

This paper is in two parts I and II. Answer all questions in part I and any other four questions in part II. Answer the questions in your answer book. Credit will be given for clarity of expression and orderly presentation of material.

PART I (40 marks)

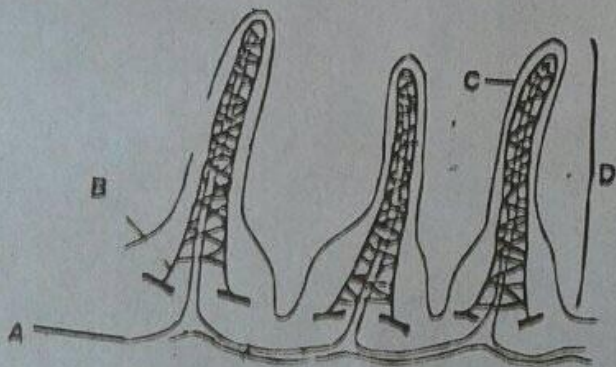
Answer all questions in this part.

1.a. The diagram below is an illustration of an electronic device. Study the diagram and answer the questions that follows



- Identify the device
- Name each of the parts labelled I, II and III.
- What term is used to describe the device if the part labelled I is connected to the negative terminal and the part labelled II is connected to the positive terminal of a cell.
- State three uses of the device.

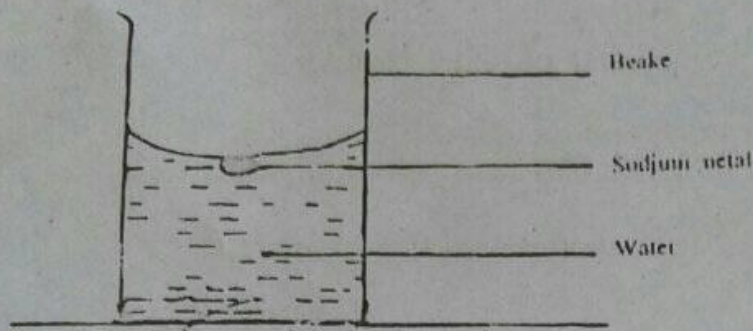
b. The illustration below represents a microscopic diagram of a mammalian ileum. Study the illustration and answer the questions that follow. 10marks



- Name the structure A, B, C and D.
- Suggest three ways in which structure D is suited for the absorption of the products of digestion.
- Name the process by which the food is absorbed by D.
- List **three** types of digested food molecules absorbed by B.

11marks

- c. In an experiment to investigate the reactivity of sodium a piece of sodium metal was dropped in a beaker containing water. The experiment set-up is as illustrated below. Study the set-up carefully and answer the questions that follow.



- State what would happen if a glowing splint was held at the mouth of the beaker.
 - Name the gas evolved.
 - Write a balanced equation for the reaction that occurred.
 - Name *two* other metals that can react in a similar way as the sodium.
- d. Study carefully the crops illustrated below and answer the questions that follows.



- Identify each of the crops labeled A, B, C and D.
- What group of crops does C belong?
- If crop rotation programme is to be drawn-up why should C be included?
- Give *three* advantages the farmer is likely to gain by adopting the crop rotation programme.

PART II

Answer four questions only from this part

- Name *four* devices whose operations depend on changes in pressure.
- Define malnutrition.
 - Give *two* effects of malnutrition in humans.
- State the group of mixture each of the following substances can be put into.
 - Blood
 - Air
 - Smoke
 - Crude oil
- Give:
 - two* examples of infectious diseases.
 - one* example of non-infectious disease.

3. a. Briefly explain each of the following types of diseases.

- i. Airborne diseases
 - ii. Food and water borne disease.
- b. i. What is an electrical circuit?
ii. State **one** difference between open and closed circuits.
- c. i. What is technology?
ii. State **two** uses of technology in communication.
- d. Mention **four** cultural practice in vegetable crop production.

4 marks

3 marks

4 marks

4. a. State **one** function of each of the following components of a typical cell:

- i. nucleus
- ii. chloroplast
- iii. mitochondria 3mks

b. i. What is soft water?
ii. Give **two** examples of soft water.

c. i. What is transistor?
ii. Give **two** uses of transistor.

d. State **two** ways in which each of the following factors causes depletion of soil resources

- i. Burning
- ii. Leaching

5. a. List **three** process that can change matter from one state to another.

3 marks

b. i. Define 'efficiency as used in the study of machine.

ii. In a machine, 200J of energy was lost as heat. If the energy input is 600J, what is the efficiency of the machine.

4marks

c. Write the systematic name of each of the following chemical compound.

- i. Fe_2S_3
- ii. SO_2
- iii. CO_2
- iv. N_2O

4marks

d. State the functions of the following parts of the digestive system.

- i. Duodenum
- ii. Colon
- iii. Ileum
- iv. Rectum

4 marks

6. a. State the end product of digestion of carbohydrates.

- i. Carbohydrate
- ii. Protein
- iii. Fats and oil.

3 marks

b. i. What is biotechnology?

ii. List the products that are obtain from biotechnology.

c. i. What is vector of a diseases?

ii. Name **two** vectors of diseases.

d. A piece of stone is dropped from a height on the ground. State the energies possessed by the stone.

i. Just before it was released from the maximum point;

ii. midway between the fall;

iii. just before it hits the ground.

4 mark