

Grade1 PUBLISHERS
FEBRUARY, 2020
INTEGRATED SCIENCE
2 & 1
ESSAY & OBJECTIVES

NAME:

INDEX NUMBER:.....

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Grade1 PUBLISHERS

Ghana's Leading Educational Consult & Publishers

BASIC EDUCATION CERTIFICATE EXAMINATION MOCK

INTEGRATED SCIENCE 2

Do not open this booklet until you are told to do so. While you are waiting, carefully read and observe the following instructions. Write your name and index number in the ink in the spaces provided above.

This booklet consists of two papers. Answer paper 2 which comes first in your answer booklet and paper 1 on your objective test answer sheet. Paper 2 will last 1 hour 15minutes after which the answer booklet will be collected. Do not start paper 1 until you are told to do so. Paper 1 will last 45 minutes.

FOR EXAMINER'S USE ONLY	
QUESTION NUMBER	MARK
TOTAL	

Essay 1 hour 15 mins

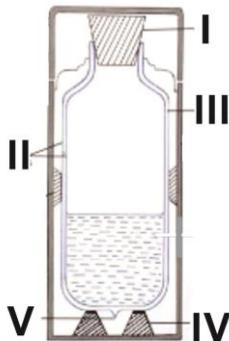
This paper consists of two sections: Part I and II
Answer all questions in Part I and four questions from Part II.

PART I

40 MARKS

Answer *all* questions in this part

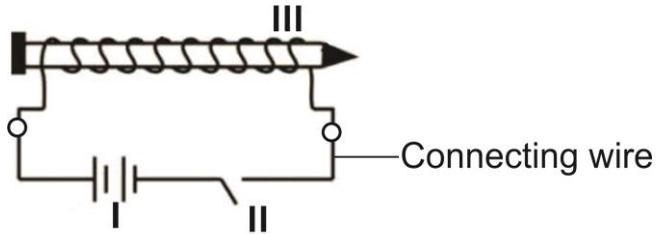
1. a. Study the diagram carefully and answer the questions that follow:



- Identify the figure above
- Name the parts labelled I, II, III, IV and V
- How does the device minimize heat loss or gain through
 α Conduction β Convection \yen Radiation
- Give one use of the device 10 marks

b. The diagram below shows the electrical method of magnetizing a nail. Study the diagram and use it to answer the questions that follow.

i. Give the names of the parts of the circuit labelled I, II and III

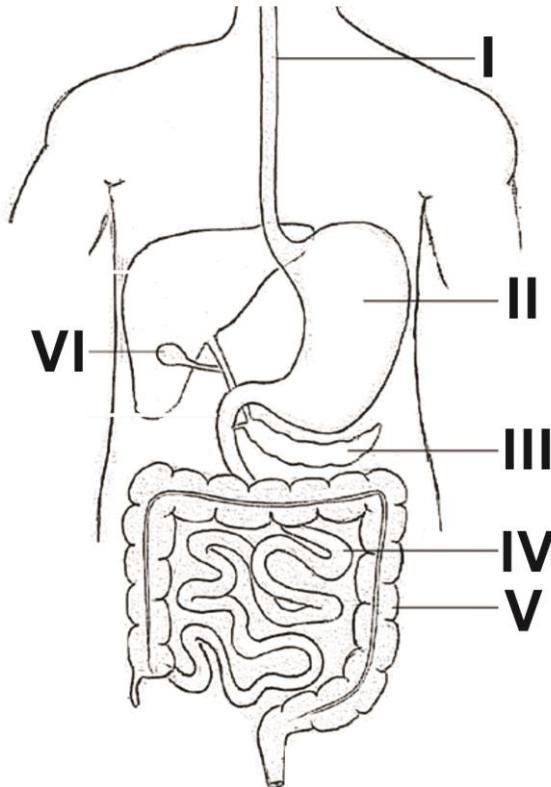


ii. List two substances that can be made into a magnet

iii. State three methods of making magnets

iv. State the law of magnetism 10 marks

c. The figure below is an illustration of a part of the human body. Study the figure carefully and answer the questions that follow



- i. Identify the part of the human body illustrated
- ii. Name the parts labelled I, II, III, IV, V and VI
- iii. List two enzymes secreted by the part labelled II
- iv. Name one function of the part labelled I

d. i. Study the reaction of liquid “A” with the named substances in the table and complete the inference column

Experiment	Observation	Inference
i. Liquid A +red litmus Liquid A + blue litmus	Litmus remained red Litmus turned red	Liquid is
ii. Liquid A + Sodium trioxocarbonate (IV)	Effervescence of colourless gas. Gas turned lime water milky	The gas is

iii. Name a compound which react in a similar way as in liquid A

iv. Name two uses of liquid A.

PART II

60 MARKS

Answer only **four** questions from this part

2. a. Give four difference between heat and temperature 4 marks

b. i. Give three qualities of a good and reliable thermometric liquid

ii. Define heat energy 4 marks

c. i. Give three differences between planets and stars

ii. Name two types of satellites 4 marks

d. i. Name the four types of teeth in humans

ii. What is periodontal disease? 3 marks

3. a. i. Define digestion

ii. Give four causes of indigestion 4 marks

b. i. Distinguish between magnetic material and non magnetic material

ii. Give two properties of magnets 3 marks

c. Outline the science principles on which the following industries are based. i. salt making ii. Blacksmithing iii. Gari processing

iv. Kenkey processing v. soap making 5 marks

d. Name two causes of diseases 2 marks

4. a. Give four reasons why water is not used as a thermometric substance 4 marks

b. i. Mention three ways by which soil moisture can be lost

ii. Name the two types of soil nutrients 4 marks

c. i. List two causes of tooth decay

ii. What is indigestion? 3 marks

d. i. List two uses of mixtures

ii. Name two types of mixtures

5. a. i. List three examples of inorganic fertilizers

ii. What is inorganic fertilizer? 4 marks

b. A bag of cement is pulled along a smooth horizontal floor with a horizontal force of 1000N. If the work done is 100,000J, Calculate the distance through which the bag is pulled 5 marks

c. i. Name four examples of first class levers

ii. Give two reasons why efficiency of a machine is less than 100%

- d. Give two importance of water to the human body
- 6. a. i. Mention four ways of caring for machines
- ii. Define machine 3marks
- b. i. Define a magnetic field
- ii. List three properties of magnetic field lines
- c.i. Mention four types of soil erosion
- ii. Give two effects of soil erosion
- d. i. Give three effects of teenage pregnancy
- ii. Define ovulation

END OF ESSAY

**DO NOT TURN OVER THIS PAGE UNTIL YOU ARE
TOLD TO DO SO.**

**YOU WILL BE PENALIZED SEVERELY IF YOU ARE
FOUND LOOKING AT THE NEXT PAGE BEFORE
YOU ARE TOLD TO DO SO.**

Integrated Science 1

Objective Test

45 minutes

1. The parasite that is found on dogs is
A. tick B. plasmodium C. guinea worm D. capsids
2. The end product of protein digestion is
A. glucose B. maltose C. poly-peptide D. amino acid
3. All the following are herbivore **except**
A. sheep B. dog C. goat D. rabbit
4. The brain and the spinal cord are part of the
A. digestive system B. circulatory system C. respiratory system
D. nervous system
5. All the following promote primary health care except.
A. keeping the environment clean B. effective disposal of sewage
C. personal hygiene D. bleaching of skin
6. The shape of a child's nose may resemble that of the mother due to..
A. heredity B. similarity C. reflection D. familiarity
7. Which of the following is a liquid?
A. iron B. mercury C. brass D. aluminum
8. The portion of air which is used in burning is
A. nitrogen B. vapour C. oxygen D. carbon dioxide

9. A torchlight derives its energy from
- A. dry cell B. petrol C. gas oil D. kerosene
10. The largest organ and most distributed tissue is
- A. kidney B. eye C. skin D. ovaries
11. When the north poles of two magnets are brought together
- A. they attract each other B. they repel each other
- C. they lose their magnetism D. their north poles become south poles
12. When water is put into a refrigerator, at which temperature will it turn to ice?
- A. 0°C B. 1°C C. 10°C D. 100°C
13. Sweating is a means of
- A. controlling the amount of blood in the body
- A. keeping the body temperature normal
- C. preventing disease germs from entering the body
- D. removing excess sugar from the body
14. An atom with five protons is expected to have
- A. 5 nuclei B. 5 neutrons C. 5 shells D. 5 electrons
15. When a red litmus paper is put in water, it
- A. remains red B. dissolves C. becomes colourless D. becomes blue
16. Ricket is a disease of the
- A. bones B. eyes C. heart D. kidney

17. The study of weather deals with all the following except

- A. temperature B. rainfall C. evaporation D. respiration

18. Which of the following substances is made up of atoms of the same kind.

- A. carbon dioxide B. hydrochloric acid C. iron D. water

19. Which of the following cannot be magnetized?

- A. a plastic cup B. a razor blade C. a nail D. a door hinge

20. The switch in an electric circuit is used to

- A. prevent an unstable flow of current B. increase the supply of current
C. start and stop the flow of current

D. prevent too high a flow of current

21. Machines are generally used for

- A. sewing clothes B. building roads C. protecting health

D. doing work more easily

22. A husbandly practice which involves the removal of unwanted plant part is known as

- A. mulching B. pruning C. thinning D. picking out

23. The physical arrangement of soil particles into aggregates is termed... A. soil porosity B. soil profile C. soil texture

D. soil structure

24. An example of inorganic fertilizer is
- A. ammonium nitrate B. cow dug C. farmyard manure D. poultry droppings
25. The complete movement of a planet round the sun is termed
- A. revolution B. rotation C. gravitation D. resolution
26. Which of the following is neutral to litmus paper?
- A. HCl B. H₂O C. H₂SO₄ D. NaOH
27. What do human beings obtain from food to enable them work ?
- A. blood B. vitamins C. proteins D. energy
28. What sickness are you likely to be suffering from when you have blood in your urine?
- A. bilharzia B. cholera C. syphilis D. typhoid
29. The lion is a typical example of
- A. a pet B. a carnivore C. an omnivore D. a herbivore
30. The workdone when a weight of 40N is lifted up vertically through a distance of 10m is A. 400J B. 50J C. 30J D. 4J
31. Which of the following is not a communicable disease?
- A. small pox B. chicken pox C. pneumonia D. tuberculosis
32. Soil fertility can be conserved by all the following methods except?
- A. mulching B. afforestation C. green manuring D. deforestation

33. During the dry season, most trees shed their leaves to
- A. protect the tree B. avoid being pulled down by strong winds
C. conserve water and nutrients D. discourage animals from eating leaves
34. There are thick forest in some part of the world because the climate there is A. warm and dry B. cool and dry C. hot and dry D. cool and wet
35. Which of the following is used to measure the potential difference across a resistor in an electrical circuit?
- A. voltmeter B. a meter bridge C. galvanometer D. ammeter
36. The linear sequence of living things feeding and being fed on is called..... A. linear feeding B. food chain C. photosynthesis
D. nutrition
37. Which of the following living things hide during the sunny days in order to conserve water in its body?
- A. rat B. lizard C. bat D. toad
38. Which of the following bodies is a satellite of the earth?
- A. mars B. sun C. moon D. mercury
39. Which of the following fruits is adapted for dispersal by air ?
- A. hairy fruits B. succulent fruits C. brightly coloured fruits D. sticky fruits
40. Endoparasites in farm animals can be controlled by
- A. drenching B. dipping C. dusting D. spraying

END OF OBJECTIVE TEST