



UNIVERSITY OF GHANA

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DEPARTMENT OF TEACHER EDUCATION

SCHOOL OF EDUCATION AND LEADERSHIP

COLLEGES OF EDUCATION

END OF YEAR TWO SEMESTER TWO EXAMINATIONS, 2022/2023

B.ED. PROGRAMME

COURSE CODE: TEEG 214

COURSE TITLE: INTRODUCTION TO EARLY GRADE SCIENCE

**Instruction:** Answer all questions in Section A and any three in Section B.

Time: 2 hours

**SECTION A**

[25 Marks]

Answer all the questions in this section.

1. Chlorophyll \_\_\_\_\_ photosynthesis.

- A. absorbs sunlight and converts it into chemical energy for
- B. helps plants retain water in
- C. provides structural support to plant cells in
- D. transports nutrients within the plant.

2. Exposure of plants to sunlight results in \_\_\_\_\_

- A. cellular respiration
- B. germination
- C. photosynthesis
- D. transpiration

3. Photosynthesis occurs in plants mainly to \_\_\_\_\_

- A. break down organic matter

- B. generate heat energy  
**C. produce Glucose and Oxygen**  
D. release Carbon Dioxide
4. What is the primary function of food in the human body?  
A. aid social interaction  
**B. supply essential nutrients and energy**  
C. support cognitive development  
D. provide shelter and protection
5. Which of the following repairs tissues and build muscles?  
A. Carbohydrates  
B. Fats  
**C. Proteins**  
D. Vitamins
6. All the following are sources of carbohydrates EXCEPT \_\_\_\_\_  
**A. Peas**  
B. Potatoes  
C. Rice  
D. Spaghetti
7. \_\_\_\_\_ control the flow of electric current through electronic circuits  
A. Ammeters  
B. Diodes  
C. Resistors  
**D. Transistors**
8. \_\_\_\_\_ store and release electric charges in electronic circuits.  
**A. Capacitors**  
B. Diodes  
C. Inductors  
D. Transistors
9. The energy transformation in light-emitting diodes (LEDs) is \_\_\_\_\_  
**A. electrical to light**  
B. electrical to mechanical  
C. electrical to sound  
D. electrical to thermal
10. The importance of proper hand-washing is to \_\_\_\_\_  
A. keep the skin moisturized  
B. make the hands cleaner

- C. prevent bad breath  
D. prevent the spread of germs and diseases
11. Human teeth are cleaned regularly to \_\_\_\_\_  
A. change their colour  
B. make them shine  
C. prevent cavities and gum diseases  
D. remove taste buds
12. What is the ideal frequency of brushing the teeth to maintain good oral hygiene?  
A. In the morning and at night  
B. Once a month  
C. Once a week  
D. Whenever you feel like it
13. The main purpose of taking regular bath or shower is to \_\_\_\_\_  
A. cool down the body  
B. exercise the body  
C. make the body shine  
D. remove dirt, sweat, and bacteria
14. What is the importance of keeping fingernails short and clean?  
A. To avoid breaking them  
B. To be fashionable  
C. To make them look clean  
D. To prevent accumulation of dirt and germs
15. What is the significance of washing and brushing the hair regularly?  
A. To change colour of the hair  
B. To increase hair growth  
C. To maintain clean and healthy hair and scalp  
D. To prevent hair from falling out
16. \_\_\_\_\_ is the tool commonly used for removing caps  
A. Bottle opener  
B. Crowbar  
C. Pincers  
D. Scissors
17. \_\_\_\_\_ is used for cutting fabrics.

A. Hammer

B. Pliers

C. Screwdrivers

D. Shears

18. Crowbar is used to \_\_\_\_\_

A. Bend metals

B. cut wires

C. pry open objects

D. tighten screws

19. A wheelbarrow is commonly used for \_\_\_\_\_

A. cutting wood

B. measuring distances

C. opening bottles

D. transporting materials

20. Pliers are often used for \_\_\_\_\_

A. cutting wires and cables

B. driving nails into wood

C. lifting heavy objects

D. measuring temperature

21. An essential skill for using hammer is \_\_\_\_\_

A. measuring lengths

B. opening bottles

C. striking objects accurately

D. tightening bolts

22. What precautionary measures should be observed in using scissors?

A. cutting materials quickly

B. keeping fingers away from the blades

C. using measuring angles

D. using them as screwdrivers

23. Which skill is important to use when tightening or loosening nuts and bolts with spanners?

A. apply the appropriate turning force

B. keep the tool cool

C. measure distances

D. use it as hammer

24. All these are sources of fat EXCEPT \_\_\_\_\_

- A. Corn
- B. Soya
- C. Sunflower
- D. Yoghurt

25. All these are necessary for test of starch in leaf EXCEPT \_\_\_\_\_

- A. Alcohol
- B. Dropper
- C. Fehling's solution
- D. Iodine

## SECTION B

[75 Marks]

Answer any three questions from this section.

1. (a) a) State two health benefits and two effects of sunlight to humans. [9 Marks]  
b) Explain the term photosynthesis [8 Marks]  
(c) How will distinguish visible light from infrared radiation? [8 Marks]

2. (a) Distinguish between food substances and food nutrients. [7 Marks]  
(b) Write short notes on:  
i. body building foods [9 Marks]  
ii. energy giving foods [9 Marks]

3. (a) Explain to Basic four child the four (4) reasons why we eat [15 marks]  
(b) Distinguish between grains and nuts with an example three each. [10 marks]

4. (a) Briefly explain personal hygiene to a basic three child. [5 marks]  
(b) State the aim of personal hygiene. [5 marks]  
(c) Explain to a colleague the economic determinants such as cost, income, availability affect the choice of your food. [6 marks]  
(d) List three electronic components and state their functions. [9 marks]

5. (a) Draw a simple electronic circuit containing diode, resistor, capacitor, LED, wires, and battery [15 Marks]  
(b) Briefly explain forward bias and reverse bias in electronic circuit.