



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 breadth
- 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 accumulatio 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.