



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, 2020/2021  
B.ED. PROGRAMME

COURSE CODE: TEEG 214

COURSE TITLE: INTEGRATED SCIENCE II FOR EARLY GRADE

**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. Electronic components that rely on a source of energy and usually can inject power into a circuit is said to be?
  - A. active
  - B. active-passive
  - C. electromechanics
  - D. passive
  
2. The electronic component which cannot introduce net energy into the circuit is said to be?
  - A. active
  - B. active-passive
  - C. electromechanics
  - D. passive
  
3. The electronic component which carries out electrical operations by using moving parts or by using electrical connections is called .....?
  - A. Active
  - B. active-passive
  - C. electromechanics
  - D. passive

4. The tiny semiconductor made from Silicon as a result of much more temperature-tolerant and lower cost of manufacturing is .....  
A. capacitor  
B. collector  
C. resistor  
D. transistor
  
5. The fundamental components of power transmission system is called.....?  
A. capacitor  
B. resistor  
C. transformer  
D. transistor
  
6. The passive two-terminal electrical component that can store energy in an electric field electrostatically is the.....  
A. capacitor  
B. resistor  
C. transformer  
D. transistor
  
7. A passive two-terminal electrical device that inhibits the flow of current is called.....?  
A. capacitor  
B. diode  
C. resistor  
D. transformer
  
8. A two-terminal device that allows electric current to flow in only one direction is called.....?  
A. capacitor  
B. diode  
C. resistor  
D. transformer
  
9. The following are electronic components EXCEPT?  
A. capacitor  
B. cell  
C. resistor  
D. transistor
  
10. The act of keeping all parts of the external body clean and healthy is known as -----  
A. dental hygiene  
B. personal hygiene  
C. physical hygiene  
D. mental hygiene

11. Baths, steam showers and other bathing methods results in the following except?
  - A. ease muscle aches and pains.
  - B. decrease blood flow
  - C. reduce swelling
  - D. improve immune function
12. The following factors have negative impact on hygiene except?
  - A. access to clean water
  - B. poverty
  - C. lack of access to clean water
  - D. severe depression.
13. Which of the following learner characteristics are likely to influence the effectiveness of teaching aids and evaluation systems to ensure positive results?
  - A. Learner's family background, age and habitation.
  - B. Learner's parentage, socio-economic background and performance in learning of the concerned subject.
  - C. Learner's stage of development, social background and personal interests.
  - D. Learner's maturity level, academic performance level and motivational dispositions.
14. The pigment that traps solar energy used to make plant food is the chloroplast.
  - A. False
  - B. True
15. The phenomenon in which plants manufacture their food is called nutrition.
  - A. False
  - B. True
16. Energy from the sun is transferred from plants to animals a feeding relationship.
  - A. False
  - B. True
17. Vitamin D is synthesized when the skin is exposed to sunlight.
  - A. False
  - B. True
18. Keeping finger nails short can help reduce the risk of spreading infections.
  - A. False
  - B. True
19. A good dental hygiene routine can help promote, gum disease, cavities and bad breath.
  - A. False
  - B. True

20. Cleaning the body washes away dead skin cells and dirt and helps to incubate pathogen.  
A. False  
B. True
21. The portion of the electromagnetic radiation given off by the Sun, in particular infrared, visible and ultraviolet light is called .....  
A. sunlight  
B. starlight  
C. Sunlight  
D. Sunlighth
22. The combination of bright light and radiant heat results in .....  
A. sunshine  
B. sunlight  
C. starlight  
D. moonlight
23. The exposure of human body to the sun is associated with the following except?  
A. melatonin synthesis  
B. lowers stress reactivity  
C. maintenance of normal circadian rhythms  
D. increase risk of seasonal affective disorder
24. Long-term sunlight exposure is known to be associated with the following except?  
A. eye diseases such as cataracts  
B. muscular generation  
C. skin aging  
D. skin cancer
25. The most important use of sunlight is to.....  
A. dry our clothes  
B. help us to see clearly  
C. make things warm  
D. produce heat

**SECTION B**

**Answer any three questions from this section. (75 marks)**

1. a. State TWO uses of sunlight to humans. (4 marks)  
b. Describe how photosynthesis occurs. (6 marks)  
c. Explain the (3) usefulness of photosynthesis to humans. (9 marks)  
d. State two (2) health benefits and two (2) hazards that result from exposing your body to sunlight. (6 marks)
- 2a. Regular hand washing is one of the best ways to avoid spreading communicable diseases.  
b. List five (5) ideal situations that require hand washing. (5 marks)  
c. Enumerate five (5) steps to be followed to ensure effective hand washing. (5 marks)  
d. State and explain five (5) advice you would give to your class as tips for a healthy living. (15 marks)
3. a) Distinguish between food substances and food nutrients. (6 marks)  
b) Write short notes on the following:
  - i. body building foods
  - ii. energy giving foods
  - iii. protective foods(15 marks)  
c. State four (4) importance of food. (4 marks)
4. Write short notes on the following:
  - i. capacitor
  - ii. transformer
  - iii. resistor
  - iv. transistor
  - v. diode(25 marks)
- 5 a. Explain the following terms:
  - i. Inclusive teaching
  - ii. Modelling(8 marks)  
b. State four (4) measures you would use to ensure inclusive classroom learning. (12 marks)  
c. State two (2) criteria you would use to select instructional material for early grade science lesson. (5 marks)