



UNIVERSITY OF GHANA

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DEPARTMENT OF TEACHER EDUCATION
SCHOOL OF EDUCATION AND LEADERSHIP
COLLEGES OF EDUCATION

END OF SEMESTER ONE EXAMINATIONS FOR LEVEL 200, 2023/2024
B.ED. PROGRAMME

COURSE CODE: TEUP 207

COURSE TITLE: INTEGRATED. SCIENCE I FOR UPPER PRIMARY

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

Time: 2 hours

SECTION A

[25 MARKS]

Answer **all** questions in this section. This section has twenty-five items. Choose the correct or best responses to answer questions 1-23; and provide short answers for questions 24 and 25.

1. _____ is not a creeping plant.
 - A. Bougainvillea
 - B. English Ivy
 - C. Strawberry
 - D. Wintergreen
2. Creepers are not used to/as _____
 - A. control pest
 - B. improve air quality
 - C. provide shade
 - D. wildlife habitat

3. Which of these has adventitious roots?
- A. Bougainvillea
 - B. English Ivy
 - C. Strawberry
 - D. Wintergreen
4. Sweet peas have/are _____
- A. creepers
 - B. shrub
 - C. tendrils
 - D. trailers
5. Apart from the radicle _____ grow from any part of the plant.
- A. adventitious root system
 - B. branched root system
 - C. fibrous root system
 - D. tap root system
6. _____ is the region of the stem where leaves shoot from.
- A. Axil
 - B. Internode
 - C. Node
 - D. Plumule
7. Wasps and yellow jackets live in _____
- A. caves
 - B. hives
 - C. holes
 - D. Webs
8. _____ react with dilute acids to produce salts and hydrogen gas only.
- A. Bases
 - B. Ions
 - C. Metals
 - D. Non-metals
9. Which of these is used in water treatment and bleaching agent preparation?
- A. Chloride
 - B. chlorine
 - C. metalloid
 - D. sodium chloride
10. The reaction of air moisture on metal surfaces to produce metallic oxides is termed _____
- A. burning
 - B. corrosion

- C. oxidation
D. rusting
11. _____ is necessary in photosynthesis by green plants.
A. Carbon (IV) oxide
B. Chlorine
C. Nitrogen
D. Oxygen
12. In _____ hydrolysis is used to coat Nickel on Iron.
A. alloying
B. cathode protection
C. electroplating
D. Galvanizing
13. _____ are reserved areas for migrating birds to use as their habitats.
A. Beach
B. Home
C. National park
D. Sanctuary
14. Bryophyta is a _____.
A. herb
B. moss
C. Shrub
D. tree
15. Which of these processes is less dependent on the use of Zinc?
A. Coating iron
B. Extraction of gold
C. Making roofing sheets
D. Temperature measurement
16. The strength of metallic bonds between atoms are influenced by _____.
A. number of electrons and neutrons
B. number of neutrons in the nucleus
C. number of protons in the nucleus
D. number of valence electrons
17. _____ is less contributor to the greenhouse effect.
A. Afforestation
B. Burning of fossil fuel
C. Farming practice
D. Industrial waste

18. The physical and psychological changes that occurs when a child transitions to adulthood is _____
- A. adolescence
 - B. development
 - C. maturation
 - D. puberty
19. Adolescent intellectual development is devoid of _____
- A. intense curiosity and wide range of intellectual pursuit.
 - B. interest in interaction with peers
 - C. modelling behaviours
 - D. shifting from concrete to abstract thinking.
20. Cabbage is a _____
- A. herb
 - B. moss
 - C. Shrub
 - D. tendril
21. The main components of Bronze are _____
- A. Copper and Manganese
 - B. Copper and Nickel
 - C. Copper and Tin
 - D. Copper and Zinc
22. Which of these non-metals exist as gas at normal room temperature?
- A. Astatine
 - B. Bromine
 - C. Phosphorus
 - D. Sulphur
23. _____ is a group IV element used in the core of nuclear reactors.
- A. Lead
 - B. Germanium
 - C. Graphite
 - D. Silicon
24. What instrument is most suitable for measuring the thickness of fingernails?
25. What is the unit for measuring weight of objects?

SECTION B

(75 marks)

Answer any 3 questions from this section. All questions carry equal marks.

1.
 - a. How will you teach a primary five pupil to know the difference between adventitious and fibrous root systems? [4 marks]
 - b. Explain two (2) differences between mass and weight of a substance [4 marks]
 - c. What is the difference between steel and wrought iron? [2 marks]
 - d. Give one use each of steel and wrought iron. [2 marks]
 - d. State two physical properties of metals. [2 marks]
 - e. Differentiate between heat and temperature. [2 marks]
 - f. Use diagrams to differentiate sea and land breezes. [6 marks]
 - g. State and explain two importance of inclusive learning environments. [3 marks]

2.
 - a. How will you teach a primary six pupil to distinguish annual from biennial plants? [4 marks]
 - b. Give four benefits of plants and plant products. [4marks]
 - c. State three reasons why Aluminium is preferred for making roofing sheets to any other metal [6 marks]
 - d. Describe how heat is transferred through a metal bar. [4 marks]
 - e. i. With practical example explain differentiated instruction [3 marks]
ii. What is negative geotropism? [2 marks]
iii. Indicate the group of each of the following elements.
C, Na, P, Mg, I, Ca, S, Xe [2 marks]

3.
 - a. Distinguish between walking animals from swimming animals using two (2) features to a primary four pupil [4 marks]
 - b. Give four benefits of animals and animal products. [4 marks]
 - c. What is the difference between rusted and corroded metals. [4 marks]
 - d. Explain two effects of poorly ventilated rooms. [4 marks]
 - e. i. Explain the characteristics of adolescent students. [3 marks]
ii. Explain why most metals have high melting and boiling points. [4 marks]
 - iii. Explain why Argon exist naturally as chemically uncombined substance. [2 marks]

4.
 - a. Give two differences between herbs and shrubs. [4 marks]
 - b. State four ways of caring for pets. [4 marks]

c. Explain two ways to prevent a coal pot from rusting.

[4 marks]

d. i. Mention any five (5) learner characteristics.

[5 marks]

ii. What are the upper and lower fixed points of following scales?

i) Celsius scale. ii) Fahrenheit scale. iii) Kelvin scale

[8 marks]