



UNIVERSITY OF GHANA

(All rights reserved)

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]