



**UNIVERSITY OF EDUCATION, WINNEBA
INSTITUTE FOR TEACHER EDUCATION AND
CONTINUING PROFESSIONAL DEVELOPMENT
(ITECPD)**



**END-OF-FIRST-SEMESTER EXAMINATIONS. AUGUST, 2023
LEVEL 300**

COURSE CODE: EGS 357

COURSE TITLE: INTRODUCTION TO EARLY GRADE SCIENCE III

TIME ALLOWED: 2 HRS

STUDENT'S INDEX NUMBER:

VISIT: WWW.COLEMANPUBLICATION.COM FOR MORE

GENERAL INSTRUCTIONS:

- This paper is made up of ONE SECTION.
- The Section is made up of five essay type questions.
- Answer any THREE questions in your answer booklet.
- Each question carries equal marks. You are expected to start each question on a new page.
- You are expected to hand over your answer booklet to the invigilator before you leave the examination hall.

Instruction: Answer any three (3) questions in the answer booklet provided.

1. a) Explain the concept "Plant habitat" to a Basic 3 learner. **4 marks**
 b) The table below describes the physical properties of the three main soil types.

Copy and complete the table.

Soil type	Particle size	Air spaces	Drainage ability	Water holding capacity
Clayey soil				
Sandy soil				
Loamy soil				

6 marks

- c) Explain briefly how you will assist Basic 3 learners to determine the volume of an irregular object. **10 marks**

2. a) Distinguish between the following:
 i) Epigeal and hypogeal germination of seeds **4 marks**

- ii) Pollination and fertilization in plants. **4 marks**
 b) How will you demonstrate in the laboratory that water is pure? **7 marks**

c) Complete the table below

Part of the body	Function of the part
	Sense of hearing
	Sense of sight
	Sense of smell
	Sense of taste
	For grasping

5 marks

- 3a) Consider the following two scenarios: There was a fire outbreak in the headmaster's offices as well as the basic 3 class room. The doors and the windows of the headmaster's office were all closed whilst those of the basic three classroom were opened. Which of the two rooms will have the fire burning the more and why? **4 marks**

- b) Group the following organisms under the headings in the table below and state the reasons for your classification.

Cow, cat, deer, sparrow, crocodile, dolphin, rabbits, wolf, dog, mouse.

Herbivores	Carnivores	Omnivores

10 marks

- c) Define the following specialized structures that are used for plant propagation and give an example each.

- i. Corm. - *Crinum*
 ii. Bulb. - *Onion*
 iii. Rhizome. - *Shallot*

6 marks

4. a). Explain briefly how soil could affect seed germination. **4 marks**
 b). Copy and complete the following

Quantity	SI units	Measuring instrument
Temperature		
Mass		
Volume		
Time		

4 marks

- c) Using clayey, loamy and sandy soils, describe briefly how you will demonstrate water retention in soils to basic 3 learners. **12 marks**

5a) A basic 3 learner comes to you with a sachet of water labelled 350 ml and asked what the 350 stands for.

- i) What will be your response to the learner?
- ii) How will you practically convince the learner that the value indicated is correct?

6 marks

b) Give four (4) reasons why the early grade teacher should be conversant with diversity among the learners in his or her class.

8 marks

(c) Describe three (3) ways by which water can be purified.

6 marks

VISIT: WWW.COLEMANPUBLICATION.COM FOR MORE