



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



END-OF-FIRST-SEMESTER EXAMINATIONS. AUGUST, 2023

LEVEL 300

COURSE CODE: PBI 351

COURSE TITLE: INTEGRATED SCIENCE III FOR UPPER PRIMARY

TIME ALLOWED: 2 HRS

STUDENT'S INDEX NUMBER:

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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) Prepare a 30-minute lesson plan to teach pollination in basic four class. (15 marks)  
State clearly any three (3) major indicators.  
b) State any five (5) pedagogical strategies you can use to teach the above lesson successfully. (5 marks)
2. a) Describe how to teach reflection of light in basic six. (8 marks)  
b) Define reflection of light (2 marks)  
c) With a well labeled diagram, illustrate the refraction of light as it travels from one medium to the other (5 marks)  
d) Draw and label a complete flower (5 marks)
3. a) Explain eclipse of the moon (5 marks)  
b) Draw and label eclipse of the moon (5 marks)  
c) With illustrations, explain to a basic four pupils the three types of beam of light (10 marks)

4. a) An incident ray makes an angle of  $60^\circ$  with the normal. Use a ray diagram to illustrate clearly the angle of reflection. (7 marks)
- b) Calculate the angle between the incident ray and the reflected ray. (4marks)
- c) Explain how you would teach the following phenomena to basic five pupils;
- i. Evaporation      ii. Sublimation      iii. Melting      (9 marks)
5. a) Describe how you will teach any four (4) importance of seed and fruit dispersal in Basic five class. (8marks)
- b) Draw and label the longitudinal section of seed. (6marks)
- c) Describe how you will teach any two (2) means of seed and fruit dispersal to basic six class. (6marks)

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