

**SPECIFY TYPE OF
EXAMINATION**

FIRST ATTEMPT
FIRST RESIT
SECOND RESIT
RE-TAKE



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
AGRICULTURAL EXTENSION AND EDUCATION
3RD YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR
SIAYA CAMPUS**

COURSE CODE: EPB 9301

COURSE TITLE: SPECIAL METHODS OF TEACHING BIOLOGY

DATE:

STREAM: BSC (AGED& EXT.)

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and B and ANY other TWO questions in Section C**
- 2. Tick the most correct alternative in Section A**
- 3. Answers to Questions in Section B and C must be written in the spaces provided on the question paper.**
- 4. Candidates must ensure they submit their work by clicking “finish and submit attempt” button at the end.**

SECTION A: 30 Marks (Each question carries 1 mark)

Answer ALL questions from this section.

1. Which one the following was not an objective of Nuffield Biology Syllabus of 1969.
 - A. Teach biology in such a way that students make use of their Biological knowledge rather than memorizing
 - B. Approach biology teaching in an investigative manner.
 - C. Teach biology through chalk and talk and practical be used for Verification.
 - D. Make biology teaching stimulating through observation and basing Classwork on students' experiences and interests.
2. Identify from the statements below the non-merit of class experiments in Biology teaching
 - A. Suitable when handling equipment with high risks
 - B. Leads to proper retention of learnt material.
 - C. Ensure maximum student activity
 - D. Allows for practice of science process and skills
3. ---- is a succinct statement of each major technical terms to serve as revision material for students in a Biology text book
 - A. Index
 - B. Glossary
 - C. Illustrations
 - D. Cross-referencing
4. Which of the following below activities is not carried out in the preparation room of a Biology lab?
 - A. Setting up the experiment
 - B. Preparation of the chart
 - C. Store chemical
 - D. Giving first aid to minor injuries in the lab
5. ---- are the established ways of working that are acceptable by all scientists all over the world?
 - A. Skills
 - B. Processes
 - C. Values
 - D. Beliefs

6. Below are factors to consider when lesson planning except?
 - A. Schemes of work
 - B. Content

- C. Safety precautions for practical
 - D. Number of students in class
7. ---- is the body of skills or techniques which a biology teacher involves students in during the process of presenting the content of the lesson
 - A. Teaching method
 - B. Teaching approach
 - C. Scientific approach
 - D. Discovery method
 8. When is a group discussion as a method of teaching not necessary
 - A. When the teacher wants to reach a very large audience
 - B. When classifying meaning of concept
 - C. When revising for examination
 - D. When summarizing results of an experiment.
 9. Pascal Leone propounded the three steps of problem solving approach in Biology teaching except?
 - A. Figurative
 - B. Devising a plan
 - C. Executing
 - D. Operative
 10. Who was the mentor of the project method of teaching biology?
 - A. John Dewey
 - B. SP. Tunik
 - C. Oraifo polypa
 - D. Dorner
 11. Which one of the following is not a characteristic of Expository teaching approach?
 - A. Predominance of teacher talk
 - B. Teaching is by giving facts
 - C. Teacher's role is to offer guidance
 - D. Students participation in learning is inform of listening and asking questions
 12. Lesson conclusion can take one of the following methods except?
 - A. Asking questions
 - B. Asking learners to perform skills
 - C. Emphasizing the main messages
 - D. Presenting a problem of biological nature
 13. Which of the statement is not a component of an instructional objective?
 - A. Performance component
 - B. Utility component
 - C. Conditional component
 - D. Criterion component
 14. Which one of the following does not characterize a poorly planned lesson?
 - A. Teacher visualize the activity to take place

- B. Presentation of wrong facts
 - C. Running short of facts
 - D. Poor coverage of lesson time
15. Below are three major entries in a scheme of work except?
- A. Time
 - B. Lesson development
 - C. Content
 - D. Objectives
16. An abstraction used to clarify words, ideas, objects, feelings which have common characteristics is called?
- A. Fact
 - B. Theory
 - C. Concept
 - D. Law
17. A document that prescribes what is to be taught in a particular subject of the curriculum is called?
- A. Syllabus
 - B. Curriculum
 - C. Schemes of work
 - D. Lesson plan
18. The three goals of teaching biology involve the three components of teaching science except?
- A. Content
 - B. Processes
 - C. Utility
 - D. Attitude
19. Below are instruments used to obtain information on the aspects judged on evaluation except?
- A. Questionnaires
 - B. Interview schedule
 - C. Transactions
 - D. Classroom observation schedule
20. The role of a working model is to;
- A. Reveal internal structures
 - B. Show the function of a particular part
 - C. Study external features
 - D. Show scaled presentation
21. Identify the non- teaching resource in teaching Biology.
- A. Text books
 - B. Charts
 - C. Green houses
 - D. Apparatus

22. Which of these factors do not affect reliability of a tests?
- A. The instrument taker
 - B. Administrator factor
 - C. Heterogeneity of the items
 - D. School environment
23. Which one of the following is not one of the types of marking schemes used in Biology assessment?
- A. Impressionistic marking scheme
 - B. Analytical marking scheme
 - C. Ideal marking scheme
 - D. Shorthand marking scheme
24. Which one of the below statements best describes formative Evaluation?
- A. Takes place before instruction to determine the starting point of an instructional programme
 - B. Assessment that takes place at the end of the course
 - C. Are the techniques of formal and informal nature that one uses during instruction.
 - D. None of the above
25. “The respiratory structure in an insect is called a ---“. This type of an objective test item is called?
- A. Multiple -choice item
 - B. Short- answer item
 - C. Matching item
 - D. True-false item
26. The extent to which a test adequately covers the syllabus to be tested is referred to as.
- A. Face validity
 - B. Prediction validity
 - C. Criterion validity
 - D. Content validity
27. The sequence of the first **four** categories in Bloom’s taxonomy is:
- A. Knowledge, comprehension, application, analysis
 - B. Analysis, comprehension, application, knowledge
 - C. Application, knowledge, comprehension, analysis
 - D. Comprehension, application, knowledge, analysis
28. In multiple choice questions, the incorrect answer is called?
- A. Key
 - B. Destructor
 - C. Negative
 - D. Options
29. An example of antecedents in evaluation is?
- A. Curriculum objectives
 - B. Actual classroom teaching
 - C. Methods of assessment
 - D. Academic achievement

30. Which of the following statements best define Evaluation?
- A. Process of determining whether there has been a change in student’s behavior
 - B. Measuring numerals to objects or events according to stated roles
 - C. Assessment of terminal or criterion behavior
 - D. Process of getting, assembling and interpreting evidence which helps us make valid judgments

SECTION B: 20 Marks

Answer ALL questions from this section.

31. Explain **TWO** positive contributions of Biology to mankind. (2 marks)

.....

.....

.....

.....

32. (i) Define the term “biohazard”. (2 marks)

.....

.....

.....

- (ii) Giving an example in each case, classify any **TWO** bio hazard found in Biology Lab. (2 marks)

.....

.....

.....

.....

33. Field Trip is one of the teaching methods used in biology teaching. State **THREE** advantages of field trip method. (3 marks)

