

**MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS**

**2016/2017 ACADEMIC YEAR**

**THIRD YEAR FIRST SEMESTER**

**SCHOOL OF EDUCATION**

**BACHELOR OF EDUCATION**

**COURSE CODE : CIM 321:**

**COURSE TITLE: SPECIAL METHODS IN BIOLOGY**

**DATE: 25TH JANUARY, 2017 TIME: 11.00AM-1:00PM**

**INSTRUCTIONS TO CANDIDATES**

* Question ONE is compulsory
* Answer any other TWO questions

**QUESTION ONE (Compulsory)**

1. Giving five specific examples, explain how the dynamic view of scientific knowledge has influenced teaching of Biology in Kenya’s Secondary schools. **(10 Marks)**
2. With relevant five examples discuss biology as an integrating subject.

(**10 Marks)**

1. Using relevant examples explain briefly five benefits associated with instructional planning in biology. **(10 Marks)**

**QUESTION TWO**

1. Identify five biological principles and with relevant examples explain how students can study and appreciate the principles. (**10 Marks)**
2. Giving specific examples, explain five areas where biological knowledge has been abused. **(10 Marks)**

**QUESTION THREE**

1. A Biology teacher wanted the students to investigate whether wind intensity increases rate of transpiration. Formulate a relevant hypotheses for this experiment and identify four variables that student will need to control so as to obtain accurate result. **(10 Marks)**
2. Design an experiment to test the hypothesis in (a) above. **(10 Marks)**

**QUESTION FOUR**

1. A biology teacher planned to carry out a practical on food test in a form one class. With relevant examples explain five measures to be taken by the teacher to ensure the practical session achieves the intended learning outcomes. **(10 Marks)**
2. A biology teacher on teaching practice was advised to use constructivist approach in conducting a biology lesson. Explain five roles the teacher would play during such a lesson. **(10 Marks)**

**QUESTION FIVE**

1. A biology teacher on teaching practice planned to teach the topic “Blood Vessels” using concept mapping. Explain five guidelines that the teacher needed to give to the students so as to construct suitable concept maps.

**(10 Marks)**

1. Draw a sample concept map that the teacher expected the students to construct in (a) above. **(10 Marks)**

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