



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SCHOOL OF HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR SECOND YEAR SEMESTER ONE
DEGREE IN COMMUNITY HEALTH AND DEVELOPMENT**

KISUMU

COURSE CODE: HCD 3211.

COURSE TITLE: CRITICAL THINKING AND SCIENTIFIC WRITING

EXAM VENUE:

DATE:

TIME:

Instructions:

- 1. Answer all the questions in Section A and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A

Answer all Questions in this section

1. The following statements are examples of logical fallacies in arguments, please label the name of each fallacy in the table below; [3 Marks]

A statement/ an argument	What fallacy
Moderator: What does Trump have to say about him describing grabbing women “by the pussy” and bragging about kissing them without their consent? Trump: “If you look at Bill Clinton, far worse – mine are words. His was action were worse. Bill Clinton was abusive to women. Hillary Clinton attacked those same women and attacked them viciously.”	A.
We can’t permit students to remove their ties, or before you know it they will be coming to school in whatever clothes they like or even naked	B.
‘No caring or dutiful parent would give one of their children huge rewards, and another little or nothing, for the same effort. Governments also have a duty of care for their citizens, so to permit the massive inequalities that exist in western society is indefensible.’	C.

- 2.
- a. Critical thinking is essential to effective learning and productive living. Name four characteristics of critical thinkers? [1.5 marks]
 - b. Name 2 other type of cognitive skills that applies in thinking process at the same level as critical thinking [1.5 marks]
3. The “Duck test” is a humorous term for a form of abductive reasoning and express as “If it looks like a duck, swims like a duck, and quacks like a duck, then it probably is a duck”, with examples, briefly explain the implied meaning of the duck test[3 marks]
4. Write brief notes on the **three major perspectives** of critical thinking? [3 marks]
5. Identify the major distinction between **an abstract and a manuscript** in scientific writing [3 marks]
6. Socratic Questionings are deep at the heart of Critical Thinking as a discipline, list **at least 6 kind** of these questioning [3 marks]
- 7.
- a. Giving example show the difference between **inductive reasoning and deductive reasoning**, and remember to state which one is more superior to the other clearly[2 marks]

- b. Briefly define an argument as you explain the **two parts** that an argument must have? [1 marks]
8. As a scholar, you have trained in purposeful thinking that involve figuring things out, please attempt to solve this “There are four large boxes and inside each large box, there is a medium box. Inside each medium box, there are two smaller boxes and inside each small box, there are four tiny boxes. How many boxes are there all together? Show your working [3 marks]
9. Write brief notes on **at least six universal standards** of critical thinking that makes it universally applicable as a skill [3 marks]
- 10.
- a. Briefly differentiated between **a reference** and **a bibliography** in scientific writing skills [1.5 marks]
- b. Outline **four main reasons** why referencing in scientific writing important? [1.5 marks]

SECTION B:

Long essay questions Answer 2 out 4 question(40 marks)

- 1.
- a. Define logic **exhaustively** by emphasizing why it is not an empirical science just like mathematics [3 marks]
- b. Write short notes on **the 2 major forms** of Non-deductive arguments [4 marks]
- c. When people are taken in by bad arguments, often it is because they don't recognize that the argument is fallacious, define Fallacy in logic as you formulate one fallacious argument of **your own** [3 marks]
- d. Describe **at least 6** different type of logical fallacies you know of while giving relevant example in each case [12 marks]
- 2.
- a. If Critical Thinking is so crucial in everyday world, explain the paradox of why the uncritical thinking is so common even among the most educated, exposed and influential persons. Please focus your discussion to the **five powerful barriers** to Critical Thinking [6 marks]
- b. Several scholars have been credited to have contributed to the foundation of what is known today as “Critical thinking paradigm”, briefly describe the contribution of the following two to the discipline? [4 marks]
- i. **Socrates**

ii. 18th Century Scholars as (Charles Darwin)

- c. In 1956 Benjamin Bloom et al. developed the six order of thinking process, describe the six bloom's taxonomy of thinking **from the lowest to highest order of thinking** [10 marks]
- 3.
- a. The mastery of critical thinking is similar to the mastery of many meta-skills. Briefly describe **the three** important components that are needed ? [3 marks]
- b. Giving clear examples discuss the **Three basic principles** of Creative Thinking Skills [6 marks]
- c. Demonstrate with example the **synergistic relationship** between problem solving, creativity and critical thinking [5 marks]
- d. Briefly describe **systematically all the steps** involve in creative problem solving process from initial to the final [6 marks]
- 4.
- a. Critical thinking is a meta-thinking skill which requires mastery similar to the mastery of many other cognitive skills. Describe **these three** important components in the mastery [6 marks]
- b. Everybody thinks, because it is human to think, however, critical thinkers on the other hand apply four renowned tools in the thinking process. Explain these **four tools** of critical thinking giving relevant examples of how you can apply them [6 marks]
- c. Justify the rationale of emphasizing the art of Critical thinking skills to students and the general population [8 marks]

Good luck!