

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

## SCHOOL OF HEALTH SCIENCES

#### UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

#### COMMUNITY HEALTH AND DEVELOPMENT

4<sup>TH</sup> YEAR 1<sup>ST</sup> SEMESTER 2019/2020 ACADEMIC YEAR

COURSE CODE: HPB 3412 COURSE TITLE: INTRODUCTION TO PHARMACOLOGY. EXAM VENUE: STREAM: BSc Community Health and Development DATE: EXAM SESSION:

TIME: 2.00 HOURS

### **Instructions:**

- 1. Answer all the questions in Section A and 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. (30MARKS)

**1**. Define the following terminologies as used in pharmacology. (5marks)

- a) Pharmacokinetics
- b) Pharmacodynamics
- c) Drug
- d) Adverse drug reaction
- e) Therapeutics.

2. Outline FIVE sources of drugs used in the prevention, treatment and diagnosis of various diseases in health facilities. (5marks)

3. Drugs may be administered by various routes. The choice of the routes depend on the types of the drug and the patient's requirement. Outline the advantages of using enteral rout in the administration of drugs. (5marks)

4. Outline FIVE way that drugs at times tend change the physiological system of living organism (5marks)

5. Citing one example of penicillins.explain the mechanism of its action. (5marks).

6. Albendazole is a congener of mebendazole with action and mechanism of action similar to mebendazole but it has several advantages over it.State FIVE advantages over mebendazole. (5marks).

#### SECTION B. (40MARKS)

7. a. Discuss on the various factors that may possibly modify the effects of the drugs, (15marks)

b. state the possibly ways that a drug interaction may result and the approach a public health officer can take in order to Evert possible outcome of threat to the patient under medication. (5marks)

8. Discuss the role a public health officer and other health professionals can play in ensuring public health safety and benefit to good health in regard to various drugs available in both private and public health entities in Kenya. (20marks)

9. a. Alcohol dependence is a common social evil which is difficult to treat. Several drugs are tried in chronic alcoholism. State and explain the outcome of the possible drugs so far have been used. (12 marks).

b. State and briefly explain FOUR factors that may influence the successful chemotherapy of an infection. (8marks)