

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2020/2021**

**THIRD YEAR SECOND SEMESTER SUPPLEMENTARY/SPECIAL EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN NUTRACEUTICAL SCIENCE**

**PHA 2204: CLINICAL PHARMACOLOGY**

**DATE: MARCH 2021 TIME: 2 HOURS**

INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

**QUESTION ONE: 30 MARKS**

a. Give two concepts of drug lead. (2 marks)

b. Define the following:-

 i. Bipole – bipole bonding. (1 mark)

 ii. Apical isomers. (1 mark)

 iii Lipophilic. (1 mark)

 iv. Medicinal chemistry. (1 mark)

c. Differentiate

 i. Pharmadodgnimic **???** and claemothecapeutic **???** (2 mark)

 ii. Antiacid and acid blockers. (2 marks)

d. What is the importance of the following terms:-

 i. Indications. (2 marks)

 ii. Off label. (2 marks)

 iii. Contcuindicalism. (2 marks)

e. Give four classes of ????failure disease. (4 marks)

f. Give four mechanism of drug action. (4 marks)

g. Give three main action of NSAIDs. (3 marks)

h. Give two sources of drug. (2 marks)

**QUESTION TWO: 20 MARKS**

Discuss Antineoplastic treatment.

**QUESTION THREE: 20 MARKS**

Discuss respiratory system treatment.

**QUESTION FOUR: 20 MARKS**

By giving four examples in each case discuss vitamins and mineral functions in the body.