

# DEPARTMENT OF BIOCHEMISTRY

## 2007/2008 RAIN SEMESTER EXAMINATION

COURSE TITLE: BIOCHEMICAL PHARMACOLOGY

COURSE CODE: BCH 418

INSTRUCTION: Answer five (5) questions only

TIME ALLOWED: 2½ hours

1. Using specific examples, write short but concise notes on the following:

- i. Diseases
- ii. Drug actions
- iii. Drug names
- iv. Pharmacogenetics

2. a. What do you understand by drug resistance and discuss the factors that contribute to the spread of resistance.
- b. How can physicians tackle the problems of drug resistance?
- c. Using 5 specific examples, differentiate between mechanism of developing resistance to antibiotics under these heading: name of drug, class, mechanism of action and mechanism of resistance.
3. a. In your own view, why will a drug that is toxic to an infectious agent be of no toxicological significance to the host?
- b. Using specific examples discuss 5 factors each that can affect the
- i. Absorption
  - ii. Metabolism
- of chemotherapeutic agents.

4. a. Mrs. Oluwaji, a postgraduate student of OOU was admitted to OOUTH. Upon clinical investigation, she was diagnosed of "ricketsae chalmidine". Describe the mechanism of the drug that will be suitable for the treatment of the disease under the following heading:
- i. Antimicrobial activities
  - ii. Chemistry
  - iii. Pharmacokinetics
  - iv. Clinical uses.
- b. What is a broad spectrum antibiotic? Give 5 examples.

*Structure of drug based on broad of a drug*

5. a. Write concise notes on the adverse reactions of chloramphenicol.
- b. Describe the mechanism of "N-Acetyl L-P-aminophenol" under the following:
- i. Pharmacokinetics
  - ii. Indications
  - iii. Adverse effect
  - iv. Dosage.

6. a. What are the advantages and disadvantages of medicinal plant in comparison with synthetic drug?
- b. Discuss the use of a named herb in the treatment of an ailment with particular emphasis on
- i. Pathogenesis of the disease.
  - ii. Mode of preparation of the herb
  - iii. Phytochemical constituents
  - iv. Mechanisms of action