

OLABISI ONABANJO UNIVERSITY
DEPARTMENT OF BIOCHEMISTRY
2012/2013 RAIN SEMESTER EXAMINATION

COURSE TITLE: XENOBIOTICS

COURSE CODE: BCH 318

INSTRUCTION: Answer any 4 questions.

TIME ALLOWED: 2 hours

1. Using specific examples and relevant biochemical pathway (where necessary) justify the following statements:

- i. Biotransformation of xenobiotics terminates the half life of the agent.
- ii. Extensive first pass effect may lead to decrease efficacy of orally administered drug.
- iii. Phase II reaction of drug metabolism may not necessarily be preceded by phase I.
- iv. It is not at all time that the final product of xenobiotic biotransformation is more polar than the parent compound.
- v. Biotransformation of xenobiotics may lead to bioactivation

2. a.

- i. What are drug conjugants?
- ii. List (only) the different types of xenobiotic conjugants.
- iii. Describe five (5) different routes by which xenobiotics conjugants can be excreted and state the significance of each of the route.

b.

- i. What do you understand by enterohepatic circulation?
- ii. Explain its significance in drug response.

3. A nurse was given a drug and instructed to either administer it enterally or parenterally, discuss this instruction under the following headings:

- i. Classification of the mode of administration
- ii. The significance of each mode of administration
- iii. Advantages of each mode of administration
- iv. Disadvantages of each mode of administration