

OLABISI ONABANJO UNIVERSITY
DEPARTMENT OF BIOCHEMISTRY

2012/2013 RAIN SEMESTER EXAMINATION

COURSE CODE: BCH 302

TIME ALLOWED: 2 HOURS

COURSE TITLE: ENZYMOLOGY

DATE: MONDAY, 30TH MAY, 2014

SECTION A

INSTRUCTION: Answer question 1 and one (1) other question from this section

1. (a) Derive the Michaelis-Menten equation. ✓
(b) Derive Lineweaver-Burk equation from Michaelis-Menten equation.
(c) Explain how to determine the K_M and V_{max} of an Enzyme? ✓
2. (a) Give Five (5) functions of Enzymes. ✓
(b) Write short notes on two (2) factors that affect enzyme activity. ✓
3. (a) Explain how you will isolate an enzyme from an animal tissue.
(b) List the criteria for enzyme purity.

SECTION B

INSTRUCTION: Answer any two (2) questions from this section

4. (a) Explain the mechanisms of enzyme binding.
(b) Why is the Induced-fit model preferable to the Lock and Key model?
5. (a) In a tabular form, List the six (6) classes of enzymes and give one (1) example per class. ✓
(b) Write a short note on the mechanisms of enzyme catalysis. ✓
6. (a) Differentiate between competitive and non-competitive inhibition. ✓
(b) Define (i) Active and (ii) Regulatory sites of an Enzyme.
(c) Name at least three (3) Instruments for measuring enzyme activities? ✓

Spectrophotometer
Fluorometer

Twenty — 314
Wednesday — 316

