

09084540

OLABISI ONABANJO UNIVERSITY
FACULTY OF BASIC MEDICAL SCIENCES
DEPARTMENT OF BIOCHEMISTRY
REMO CAMPUS, IKENNE

2012/2013 HARMATTAN SEMESTER EXAMINATIONS

BCH 405: METABOLIC REGULATIONS (2 UNITS)

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS. TIME ALLOWED: TWO HOURS.

1. Explain in detail, the basic concept of integrated metabolism.
2. Write comprehensive notes on the following (i) Lactose operon
(ii) Arabinose operon.
3. Explain the following (i) Feedback regulation
(ii) Allosteric regulation.
4. With the aid of useful and relevant illustrations, explain why it is important for a metabolic pathway to be regulated.
5. Catabolite repression is one of the ways that enables *E.coli* to utilize glucose, explain.
6. The activation of glycogen phosphorylase from the *b* form to *a* form involves presence of hormone. These effects are reversible when hormone disappears. Suggest reactions by which such reversibility is achieved.

Dr O.A. AKINR
O.A. Akint
24/12/13