



CRAWFORD UNIVERSITY

Faith City, Igbesa, Ogun State.

2015/2016 HARMATTAN SEMESTER EXAMINATIONS

COLLEGE: NATURAL AND APPLIED SCIENCES

PROGRAMME: MICROBIOLOGY

COURSE CODE AND TITLE: MCB 305 – MICROBIAL GENETICS

UNIT: 3

TIMES: 2 HOURS 30MINS

INSTRUCTION: ANSWER ANY FOUR QUESTIONS

1 (a). With very clear drawing, explain in details the complementary structures of the DNA nucleotides as GC and AT

(b). List and draw the structures of purines and pyrimidine bases

2. Write a comprehensive description of the biology of pyramids

3(a). Transcribe and translate the following genetic code from DNA to RNA to protein/ amino acid

TACAAAGATGACCCCTTTTCCATCATT

(b). Explain what you understand by degenerate codon.

4. (a). What is mutation? Explain the difference between induced and spontaneous mutation

(b). Describe various possibility that could occur in a point mutation

5. Write short notes on the following

a. Transformation b. Direct selection of a mutation c. Mutagensd. Lysogenic bacteria

CRAWFORD UNIVERSITY
LIBRARY