



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SEPTEMBER/OCTOBER 2015 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: BIO 316

COURSE TITLE: INTRODUCTION TO BIOINFORMATICS

TIME ALLOWED: 2 Hours

INSTRUCTION: Answer 4 questions

1. a) Define a database.
b) What do you understand by Database collaboration
c) Differentiate between a primary and a secondary database
d) List out the types of databases based on nature of primary
2. Describe the characteristics of file formats of the primary databases
3. Define or give meaning to the following bioinformatics terms: -
 - i) Accession Number
 - ii) BLAST
 - iii) BLOSUM
 - iv) CLUSTALW.
4. What is NCBI? Describe the major features of NCBI
5. List the BLAST flavours and describe their outputs
6. a) What is sequence alignment?
b) list the types of methods of a nucleotide alignments
c) attempt to align these sets of sequences
 - i) ATTGCC, AATTCGCC
 - ii) MLTKF, MMMKFFT