



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA
FACULTY OF SCIENCE
OCTOBER/NOVEMBER 2016 EXAMINATION

COURSE CODE: DAM363
COURSE TITLE: ECONOMIC STATISTICS
CREDIT 3
UNITS:

TIME ALLOWED: 3Hours

INSTRUCTION: Attempt any Five (5) questions

Question 1

List and discuss the methods used in the selection of samples in research
– 14 marks

Question 2

- i) Describe any four methods of data collection that you know - 8 marks
- ii) Discuss any four identified disadvantages of using secondary data - 6 marks

Question 3

- i) Enumerate the features of standard deviation - 7 marks
- ii) In descriptive statistics, mention the major reasons why arithmetic mean is considered an important measure of location? -7 marks

Question 4

- i) Briefly explain the halting problem - 7 marks
- ii) State Godel's incompleteness theorem - 7 marks

Question 5

- i) What is a Turing Machine? - 7 marks
- ii) Distinguish between deterministic and nondeterministic pushdown automata - 7 marks

Question 6

- i) What is a PDA? - 7marks
- ii) If languages L_1 and L_2 are each given in a standard representation prove that the languages (L_1 and L_2) are identical -7 marks

Question 7

- i) Develop an algorithm for the Operation of a DFA 8 marks
- ii) Write shorts notes on any 3 of the following terms 6 marks
 - a. *Transducer*
 - b. An automaton

c. Set Intersection