



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012
SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF
EDUCATION (EARLY CHILDHOOD EDUCATION)

ECE 505: COMPUTER APPLICATIONS

DATE: Tuesday, 27th March, 2012

TIME: 2.00 p.m. – 5.00 p.m.

INSTRUCTIONS: Answer question **ONE** and any other **TWO** questions.

QUESTION 1

- a) Distinguish the following terminologies used in computing:
i. Hardware and Software
ii. Data and Information
iii. System Software and Application Software
[6 Marks]
- b) List three different types of Application Software and give typical examples of each. Describe the major features of each Application Software.
[9 Marks]
- c) The following list indicates the number of minutes needed to install a sample of 10 doors:
28, 32, 24, 46, 44, 40, 54, 38, 32, 42
Explain briefly how to use SPSS software to compute the following measures of central tendency and dispersion.
- i. Mean, Median and Mode
ii. Minimum and Maximum
iii. Sample Variance and Standard Deviation
iv. Kurtosis and Skewness
- [3 Marks]**
[4 Marks]
[4 Marks]
[4 Marks]

QUESTION 2

- a) Explain briefly the seven major stages in Data Analysis process.
[7 Marks]
- a) Describe five major tasks performed using SPSS Toolbar
[5 Marks]
- a) State and explain four criteria used to define a subgroup in Select Cases
[8 Marks]

QUESTION 3

- a) Define the term Electronic Spreadsheet [2 Marks]
- b) Explain briefly four features provided by Spreadsheet Application programs [8 Marks]
- c) List and explain briefly five types of data files handled by SPSS program [10 Marks]

QUESTION 4

- a) State the role of the following variable definition information provided by SPSS variable view window
 - i. Name
 - ii. Type
 - iii. Width
 - iv. Decimal
 - v. Label
- b) Explain briefly five types of variables used in SPSS software [5 Marks]
- c) Describe how to use Spreadsheet Applications to determine the percent of change in the number of new passenger cars imported into Kenya from 1993 to 1994. [5 Marks]

<u>Country</u>	<u>1993</u>	<u>1994</u>
Japan	1216023	1867794
West Germany	164683	245286
Italy	10843	11045
United Kingdom	17548	27271
Sweden	18562	93084
France	1532	1976
Canada	900201	1220221

[10 Marks]

QUESTION 5

- a) State three benefits of using database management systems (DBMS) in an organization [3 Marks]
- b) Explain briefly the following SQL sub-languages used in database management systems. Illustrate each sub-language using typical examples.
 - i. Data Definition Language
 - ii. Data Manipulation Language
 - iii. Data Query Language
 - iv. Data Control Language

[8 Marks]

- c) The net sales of Klassy Fashions for the years 1989 – 1998, in thousands of dollars, are:

Year	Net Sales ('000)
1989	123.4
1990	144.1
1991	201.9
1992	232.4
1993	311.2
1994	410.8
1995	466.9
1996	512.7
1997	552.8
1998	557.6

Describe the procedures of representing the data in form of line chart using MS-Excel or Open Office Calc program.

[9 Marks]