**ADEKUNLE AJASIN UNIVERSITY, AKUNGBA-AKOKO**

**FACULTY OF SCIENCE**

**DEPARTMENT OF COMPUTER SCIENCE**

**2ND SEMESTER EXAMINATION – 2013/2014 SESSION**

**Course Title:** Application Package (using MySQL and MS-ACCESS) **Course Code:**  CSC 424

**Course Unit:** 3 **Course Status:** Elective **Time:** 2½ hours

**Instruction:** Answer **Question 1** and **any other two (2) questions**

1a. i. In the past days of computing, dbase seems popular. However in the modern days computing, MySQL seems to have taken over. Discuss how this robust database software merged and its strengths/facilities that make it preferable over many other database packages. (6mks)

ii. Compare and contrast MySQL and MS-Access as examples of DBMS (4mks)

iii. Every language has a way of defining its variable; MySQL is not an exception. Discuss at full length. (6mks)

iv. With light coding illustration, differentiate between the following index types:

\* Primary Key and Unique Key \* Ordinary Index and Full-Text Index (4mks)

b. i. With appropriate coding illustrations, discuss the principal components of MySQL. (6mks)

c. In MS-Access, the followings are some of the available data types:

\* Hyperlink \* Look up Wizard \* AutoNumber \* OLE Object. Define and describe their use by designing a singular table that consists of these four. (4mks)

2a. Discuss data types in MS-ACCESS. (7mks)

b. Explain the components of MS-ACCESS. (4mks)

c. Discuss the processes(steps) involved in securing your MS-ACCESS database. (3mks)

d. Demonstrate by coding, how you would connect any of your MS-ACCESS tables/files to any visual, web or scripting language. (6mks)

3a. Discuss MySQL Engines. (6mks)

b. Programmatically differentiate between DDL and DML. (4mks)

c. Illustrate the concept of privileges in MySQL. (2mks)

d. In a typical departmental setting, you have level coordinators, exam officer, data entry clerks, SIWES coordinator, and seminar/project coordinator. Assume yourself as an HOD, code to assign and de-assign responsibilities/roles to the afore-mentioned personnel. (8mks)

4a. The likes of Dangote, Otedola etc are regarded as Nigerian Business GURUs. As a demonstration of what you have learnt in one of the practical sessions of this course, create a MySQL database for storing the profiles of all NIGERIAN BUSINESS GURUs that have made names for themselves. From your table(s)/file(s), fire the under-listed ***queries***:

1. All Business Gurus in Nigeria
2. All Business Gurus from North
3. All Business Gurus from under the age of ‘40’
4. All ‘living’ Business Gurus in Nigeria
5. All ‘dead’ Business Gurus in Nigeria
6. All Business Gurus that are world-ranked (known outside Nigeria)
7. All Local Business Gurus (known/ranked only within Nigeria) (10mks)

b. It is no doubt that, we have many Importers and Exporters in Nigeria, known and unknown, genuine and dubious. Using MySQL, design an IMPOR-EXPOR App which provides a platform for all Nigerians, homes and abroad to have knowledge and access to all Nigerian Accredited Importers and Exporters (and avoid been duped). From your table(s), fire the under-listed ***queries***:

1. All Importers/Exporters in Nigeria
2. All Importers/Exporters from a specified State
3. Importers/Exporters and their Contacts (e.g. phones and emails, address etc)
4. Importers and Exporters based on their nature of goods/products (e.g. All Rice Importers)
5. Importers/Exporters and their Websites
6. Importers/Exporters and their Contact Persons/Contact Agents
7. Importers/Exporters and their Registration Particulars
8. Importers/Exporters and their Subsidiaries (10mks)