

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**FACULTY OF AGRICULTURAL SCIENCES**

**SECOND SEMESTER EXAMINATION**

**JANUARY/FEBRUARY, 2018**

**Programme: Agricultural Extension and Management**

**Course Code: AEM 772**

**Course Title: Research Methods and Statistics**

**Credit Unit: 2**

**Total Score: 70 Marks**

**Time Allowed: 3 Hours**

**Instruction: Answer question one (1) and any other three (3) Questions**

1. Explain the following:

a. Positively skewed distribution **(8marks)**

b. Negatively skewed distribution **(6marks)**

c. Normal distribution **(11marks)**

2a. i. Explain the terms secondary and primary data **(5marks)**

 ii List the sources of secondary data **(2.5marks)**

b. Explain the reasons for using sample **(2.5marks)**

3i. Define hypothesis and list the functions of hypothesis **(6marks)**

ii. Briefly discuss the different types of hypothesis **(4marks)**.

4. Explain in full what a questionnaire is and outline the guidelines on questionnaire design **(10marks)**

5. Briefly explain the relationship between Qualitative Research and Quantitative Research **(10marks)**

6a. Outline the variables to consider in in selecting a research problem **(5marks)**.

b. Identify the characteristics of a research problem **(5marks)**.