NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
SECOND SEMESTER EXAMINATION
JANUARY/FEBRUARY, 2018

Programme: Agricultural Extension and Management
Course Title: STATISTICS AND RESEARCH METHODS IN EXTENSION
Course Code: AEM 501
Credit Unit: 3
Total Score: 70 Marks
Time Allowed: 2½Hours

INSTRUCTION:
Answer Compulsory question 1 (30 marks) and any 4 questions (10 marks each).

1. (a) What is a research?   **3 marks**
    (b)   Explain the three (3) classifications of research.   **6 marks**
    (c) In what ways do exploratory, descriptive and causal research designs differ?
                                                                                    6 marks
    (d) Briefly comment on simple random sampling and systematic sampling methods
         with examples.   **5 marks**
    (e) Explain Ex-post-facto-research with a clear example.   **5 marks**
    (f) Differentiate between Case and Ethnographic studies.   **5 marks**

2. (a) Identify five (5) characteristics of research problems.   **5 marks**
    (b)   Define hypothesis and list its types.   **5 marks**

3. (a) What are intervening variables?   **4 marks**
    (b)   Differentiate between continuous and discrete variables.   **6 marks**

4. (a) What are the characteristics of inadequate response in questionnaire administration?
                                                                                    5 marks
    (b) Define the followings:
       i. Sample
      ii. Statistic
     iii. Sample frame
      iv. Sampling error
       v. Probability   **5 marks**

5. (a) i. What is a pie chart?   **2 mark**
          ii. What are the steps in drawing a pie chart?   **2 marks**
    (b) If there are 85 students in a faculty, 20 students in Agric. Extension Department, 10
students in Agronomy, 35 students in Agric. Economics, 15 students in Animal Science
and 5 students in Agric. Biology. Present this information on a bar chart.   **6 marks**

6. (a) What is a report writing?   **2 marks**
    (b)   Write short notes on the followings:

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- Forward
- Introduction
- Methodology
- Discussion and interpretation **8 marks**

7. (a) Write five (5) tips for constructing a bar. **5 marks**
   (b) Write short notes on quartiles and mean deviation. **5 marks**