



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
*University Village, Nnamdi Azikiwe Expressway, Plot 91, Cadastral Zone, Jabi, Abuja*  
**Faculty of Agricultural Sciences, Dept. of Agricultural Economics and Extension,**  
*PoP Examination Questions, 2021 Academic Session*

**Course Title: Diffusion and Adoption of Innovations**

**Course Code: ARD 503**

**Credit Unit: 3 Units**

**Total Score: 70 Marks**

**Time Allowed: 3Hrs**

**INSTRUCTION: Answer 4 Questions Only**

### **QUESTION ONE**

- a. Distinguish between Knowledge Based Technology and Materials Innovation Technologies **(4 marks; 2 marks for each category)**
- b. Explain any five (5) stages in which an individual adopts an innovation **(7.5 marks; 1.5 marks for each stage).**
- c. Explain any three (3) stages of Innovation-decision process that occurs over time as modelled by Rogers. **(6 marks; 2 marks for each stage)**

### **QUESTION TWO**

- a. Discuss briefly the three (3) Communication Channels diffusing the innovation at various states in the innovation-decision process. **(7.5 marks)**
- b. Discuss the stages of putting **innovation into use** by either individual or other decision making unit and **reinforcement** based on positive outcomes from the innovation, that occur in innovation-decision process. **(6 marks)**
- c. Explain the following approaches of identifying opinion leaders; (4 mks)
  - (i) Self-Designating
  - (ii) Observation**(4marks; 2 mark for each)**

### **QUESTION THREE**

- a. With the use of certain attributes, briefly discuss the kind of training for changing behavior through unstructured group interface. **(5.5 marks)**
- b. Explain in two folds, the contributions of Everett Rogers (1995) in the transitions from collection of knowledge through communication perspectives to a more cross-disciplinary focus on innovation diffusion. (6 mks)

- c. Discuss the **Innovation Decision Process theory** and **Individual Innovativeness theory** of diffusion of innovation that describe the stages involved in technology process of potential adopters over time and the varying speeds at which innovation decision process travel through. (6 mks)  
(5 marks; 2.5 marks for each theory)

#### QUESTION FOUR

- a. Discuss any two (2) dimensions suggested by Rogers to analyze the consequences of innovation-decisions. (6 marks)
- b. Identify any four (4) ways through which the ownership of a technology and leadership in its applications move between organizations over time. (7 ½ marks)
- c. What are the conditions that lead to adoption of Green Revolution technologies in which the high-yield varieties may require complementary inputs (fertilizers and sometimes water). (4 marks)

#### QUESTION FIVE

- a. Briefly explain the key constraints for adoption of new technologies and the ways of militating against them. (7 marks)
- b. Define distance learning. (3 ½ marks)
- c. With good examples, discuss the two major objectives that are achieved through distance learning which takes advantage of currently available technologies.(3 mks)
- d. List four (4) of the reasons for the change agent in agricultural extension services (4 mks)