

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF AGRICULTURAL AND FOOD SCIENCES UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION 3rd YEAR, 2nd SEMESTER 2021/2022 ACADEMIC YEAR

SIAYA CAMPUS

COURSE CODE: AEB: 3302/3321. STREAM: BSc. AGED

COURSE TITLE: Agricultural Extension and Technology Transfer

DATE: SESSION:

TIME: 2HOURS

Instructions:

1. Answer ALL questions in Section A and ANY other TWO questions in Section B.

- 2. Candidates are advised not to write anything in this question paper.
- 3. Answers to Questions must be written in the Answer Booklets
- 4. Candidates must hand in their answer booklets to the invigilator while in the examination room.

SECTION A: [20 MARKS] [Each question carries one mark]

NB: These are multiple choice questions with four choices A, B, C and D [Tick the correct answer]

- 1. Insufficient knowledge about an innovation and inability to predict its consequences generally leads to
 - A. Over-adoption
 - B. Dis-adoption
 - C. Low adoption
 - D. Non-adoption
- 2. Innovativeness can be defined as:
 - A. The degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a social system.
 - B. The number of individuals who adopt a new idea in a specified period
 - C. Adoption of all innovations
 - D. Non-adoption of technologies
- 3. The rate of adoption is generally measured as
 - A. The number of individuals who adopt a new idea in a specified period.
 - B. The number of technologies adopted in a specified period
 - C. New innovations introduced in a system in a specified period
 - D. All the above
- 4. Agricultural extension is a
 - A. Formal education process
 - B. Non-formal education process
 - C. Both formal and non-formal education process
 - D. None of the above
- 5. It is not enough for an Extension Agent to have technical knowledge he must also know how to communicate this knowledge to farmers. Select which is not Agent/sender related barrier
 - A. Interpersonal sensitivity
 - B. Lack of responsive feedback
 - C. Sender credibility
 - D. Communication objectives
- 6. The elements of diffusion include the following except
 - A. Innovation
 - B. Adoption
 - C. Social system
 - D. Communication channel
- 7. The following comprise participatory extension methods except:
 - A. Participatory video
 - B. Farmer Field School
 - C. Innovation Platform
 - D. Home visits
- 8. Experiential theory of learning is *mostly* applicable in
 - A. Farmer Field School FFS
 - B. Innovation Platform -IP
 - C. Participatory Video PV,
 - D. All of the above

- 9. Rate of adoption refers to
 - A. The relative speed with which an innovation is adopted by members of a social system,
 - B. Time taken to adopt an innovation,
 - C. The number of people who adopt an innovation in a given time.
 - D. All of the above
- 10. The variables that determine the rate of adoption of innovation are:
 - A. Nature of the social system,
 - B. Type of innovation-decision,
 - C. Channels of communication,
 - D. All of the above
- 11. Audio-visual tools can be categorized as mass methods of communicating agricultural extension messages.
 - A. True,
 - B. False,
 - C. Not aware
- 12. A farm publication with usually a single printed sheet of paper of small size containing preliminary information relating to a topic is called
 - A. Leaflet,
 - B. Folder,
 - C. Bulletin
 - D. Newsletter
- 13. Competencies needed by the Extension Agent may include
 - A. Technical competency
 - B. Communication competency
 - C. Economic competency
 - D. All the above
- 14. The main advantages expected from the decentralization of agricultural extension services include:
 - A. Service closer to the people
 - B. Improved accountability,
 - C. Both A and B,
 - D. None of the above.
- 15. The following are principles used in extension education except
 - A. Need and interest
 - B. Whole family principle
 - C. Pedagogical principle
 - D. Cultural change
- 16. The complexity of a technology is important in
 - A. Adoption process
 - B. Diffusion process
 - C. Both A and B
 - D. None of the above
- 17. Assumptions of TOT model of extension include the following except
 - A. The technology will fix it all.
 - B. Researchers know best

- C. There is only one source of knowledge
- D. There are multiple sources of knowledge
- 18. Everett Rogers advanced the
 - A. Theory of change
 - B. Theory of diffusion
 - C. Experiential theory of learning
 - D. Theory of adoption
- 19. The Early Adopters comprise what percentage of the adoption curve
 - A. 2.5 %
 - B. 16 %
 - C. 34 %
 - D. 13.5 %
- 20. The adoption of agricultural technology practices usually requires "new forms of interaction, organization and agreement between multiple actors". Specify the approach that would be most suited for this.
 - A. Exchange tours
 - B. Farmer Field School
 - C. Demonstration
 - D. Innovation platform

SECTION B: [20 MARKS]

Answer All questions in this section

- 21. Give reasons why an Agricultural Extension Agent is encouraged to use more than one extension method or approach in disseminating information to his/her clientele. [4 Marks]
- 22. Briefly discuss the elements of diffusion giving relevant examples. [6 Marks]
- 23. Outline and discuss any four socio-economic roles of Agricultural extension in Kenya.

 [10 Marks]

SECTION C: [30 MARKS]

Answer any TWO questions in this section

- 24. Discuss the importance of principle of participation in the extension work. [15 Marks]
- 25. As an Extension Agent in charge of Siaya Central Ward, you have been tasked with initiating a Dairy farmer field school (FFS). Identify key features of an FFS. [15 Marks]
- 26. An Innovation is an idea, practice or object perceived as new by an individual or another unit of adoption. Discuss with relevant and specific examples of innovation/technology attributes that may facilitate or impede its adoption. [15 Marks]