January, 2015



Post Graduate Diploma in Agricultural Extension Management (PGDAEM)

2nd Semester 2013-14 Term End Examinations & Supplementary Examinations of 2007-08 to 2012-13

AEM : 205 A - Sustainable Agricultural Development (3 Credits)

Max. Marks-70

Duration - 2 ¹/₂ hrs.

ANSWER ANY 5 QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS

- 1) Discuss the elements of sustainable agriculture and their importance. How do you promote sustainable agriculture in your service area ?
- 2) What is Precision farming? How does it differ from conventional farming? Explain the ways and means of adopting precision farming technology.
- 3) What is your understanding on the need of Integrated Nutrient Management (INM) for sustaining increased crop productivity? Discuss the various sources available for nutrient supply in INM for sustainable agriculture.
- 4) Explain the importance of Natural Resource Management in sustainable agriculture? Discuss your experiences in promotion of Natural Resource Management with suitable examples.
- 5) Define organic farming. Describe the various crop management practices in organic farming for sustaining soil and crop productivity.
- 6) What are bio-control agents? Differentiate between Predators and Parasites. Why do we have to promote biological control?
- 7) What is Indigenous Technical Knowledge (ITK)? Mention the ITKs known to you and promoted for sustainable agriculture? What is the extension strategy adopted for popularizing ITKs?.
- 8) Write short notes on **any four** of the following.
 - a. Crop Rotation
 - b. Merits and Demerits of Organic Farming
 - c. Quality of Irrigation Water
 - d. Integrated Farming System (IFS)
 - e. Use of Pheromone traps for monitoring the insect pests.
 - f. Trap cropping



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ANSWER ANY 5 QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS

- 1) Write the basic principles to be followed in selecting the alternate land use system and describe the different alternate land use systems developed to suit location specific needs.
- 2) Discuss the various approaches with examples for mitigating the pest outbreak under habitat diversification. Based your practical knowledge on pest incidence in arable crops suggest the future strategies for promoting Integrated Pest Management (IPM) for sustainable pest management.
- 3) What is your understanding on the need of Integrated Nutrient Management (INM) for sustaining increased crop productivity? Discuss the various sources available for nutrient supply in INM for sustainable agriculture.
- 4) Write the process of determining the irrigation schedule to the crops based on critical stages of crop growth and plant characteristics. What is the basis for assessing the quality of irrigation water ?
- 5) Define organic farming. Describe the various crop management practices in organic farming for sustaining soil and crop productivity.
- 6) Write the adverse effects of the following weather abnormalities and also the possible management strategies for safeguarding the standing crops.

i) Excess rainfall ii) Scanty Rainfall iii) Untimely Rainfall iv) Wind

- 7) What is the concept of Indigenous Technical Knowledge (ITK)? Write the relevance of ITK in development, research and extension in the field of agriculture.
- 8) Narrate the major components of technology used for Precision Farming management practices and write about the constraints in adopting Precision Farming in Indian farming situation .



Post Graduate Diploma in Agricultural Extension Management (PGDAEM) EXAMINATION – July, 2014

AEM 205 A: SUSTAINABLE AGRICULTURAL DEVELOPMENT (3 credits)

MAX MARKS-70

DURATION- 2 ¹/₂ hrs.

Answer any five of the following questions. All questions carry equal marks

- 1. List out the basic principles of sustainable agriculture? Discuss the major elements of sustainable agriculture?
- 2. Explain the various strategies for management of **soil** and **water** natural resources?
- 3. Write short notes on any **Four**of the following.
 - a. Causes of water logging and its harmful effects
 - b. Mechanical methods of pest control
 - c. Low External Input Sustainable Agriculture (LEISA)
 - d. Beneficial and harmful effects of wind
 - e. Merits and demerits of organic farming
 - f. Integrated Farming System
- 4. Write short notes on any **two** of the following..
 - a. Alternate land use systems
 - b. precision farming technologies
 - c. organic pest management
- 5. Discuss the various **plant** and **soil** criteria for scheduling irrigation to crops?
- 6. List out the effects of climate change? Discuss in detail the **rainfall** disaster management practices?
- 7. Write in brief on any **Four**of the following.
 - a. New generation insecticides
 - b. Methods of organic manure or waste recycling
 - c. Soil-water relations
 - d. Cropping systems
 - e. Bio-fertilizers and their benefits
 - f. Green House effect
- 8. Justify the importance of indigenous technical knowledge (ITK) in agriculture? Discuss how to integrate ITK into agricultural research and agricultural extension?



Post Graduate Diploma in Agricultural Extension Management (PGDAEM) SUPPLEMENTARY EXAMINATION (2011-12 BATCH) – JANUARY 2014

Course 205A: SUSTAINABLE AGRICULTURAL DEVELOPMENT (3 credits)

Maximum Marks: 70

Duration: 2 1/2 hrs

Answer any **FIVE** of the following questions. All questions carry equal marks.

- 1. What do you mean by " climate change"? Mention various types of weather disasters. Describe the effects of climate change in Agriculture.
- 2. What is precision farming ? How it is different from conventional farming? Explain the ways and means of adopting precision farming technology.
- 3. Write short notes on any **three** of the following.
 - a. Crop Rotation
 - b. Quality of Irrigation Water
 - c. Integrated Farming System (IFS)
 - d. Use of Pheromone traps for monitoring the insect pests.
 - e. Water Harvesting
- 4. Write short notes on any **two** of the following.
 - a. Organic Farming
 - b. Indigenous Technical Knowledge (ITK)
 - c. Integrated Nutrient Management
- 5. Explain the procedure involved in producing vermi-compost. Write the importance of vermi-compost in sustainable Agriculture
- 6. Explain the major components of Integrated pest management .Give an example taking a crop how IPM is implemented in your area for pest management?
- 7. Write in brief on any **three** of the following
 - A. Mulching in AgricultureB. Bio-Fertilizers and their use in Agriculture with examplesC. Trap cropping in AgricultureD. Green House effectE. Biological control
- 8. What do you understand by "sustainable Agriculture" and explain the important factors that influence sustainable Agriculture with examples?



Post Graduate Diploma in Agricultural Extension Management (PGDAEM) SPECIAL SUPPLEMENTARY EXAMINATION – DECEMBER 2013

Course 205A: Sustainable Agricultural Extension Development (3 credits)

- Maximum Marks: 70 Duration: 2 1/2 hrs Answer any **FIVE** of the following questions. All questions carry equal marks.
- 4. List out alternate land use systems? Give an account of basic principles to be followed in selecting land use systems?
- 5. Discuss briefly the various components of organic pest management?
- 6. Write short notes on any **three** of the following.
 - a. Crop Rotation
 - b. Quality of Irrigation Water
 - c. Integrated Farming System (IFS)
 - d. Merits and Demerits of Organic Farming
 - e. Water Harvesting
- 4. Write short notes on any **two** of the following.
 - a. Sustainable Agriculture
 - b. Indigenous Technical Knowledge (ITK)
 - c. Precision Farming
- 5. What is INM? Critically justify the need for integrated nutrient management (INM)?
- 6. Discuss the various criteria for scheduling irrigation to crops?
- 7. Write in brief the possible management strategies for adverse weather conditions?
- 8. Give a detail account of on-farm and off-farm sources of organic manures?



Post Graduate Diploma in Agricultural Extension Management (PGDAEM) Final Examination (February 2010)

Course 205 A: Sustainable Agricultural Development (3 Credits)

Maximum Marks: 70

Duration: 2 ¹/₂ hrs

Answer any five questions. All questions carry equal marks

- 1. Soil health status is deteriorating gradually. Suggest ways and means of sustaining the soil health through Integrated Nutrient Management (INM) practices with your own experiences.
- 2. What do you understand by climate change? List out various types of weather disasters. Discuss the effects of climate change in agriculture.
- 3. What is Integrated Pest Management (IPM)? How IPM practices would help in promotion of sustainable agriculture. Explain with examples.
- 4. Explain the importance of Natural Resource Management in sustainable agriculture? Discuss your experiences in promotion of Natural Resource Management with suitable examples.
- 5. What do you understand by *Sustainable Agriculture?* Explain the important factors influencing the sustainable agriculture with suitable examples.
- 6. What do you understand by Organic Farming? Describe the importance of Organic Farming in Agriculture.
- 7. What is Indigenous Technical Knowledge (ITK)? Mention the ITKs known to you and promoted for sustainable agriculture? What is the extension strategy adopted for popularizing ITKs?
- 8. Write short notes on any three of the following
 - a. Biological pest control
 - b. Trap cropping
 - c. Use of Pheromone traps
 - d. Green House Effect
 - e. Watershed



Post Graduate Diploma in Agricultural Extension Management (PGDAEM) Final Examination, First Semester 2008-09 (August 2009)

Course 205 A: Sustainable Agricultural Development (3 Credits)

Maximum Marks: 70

Duration: 2 ¹/₂ hrs

Answer any five of the following questions. All questions carry equal marks.

- 1. Explain the procedure involved in producing vermi-compost. Highlight the importance of vermi-compost in the context of sustainability.
- 2. What is Indigenous Technical Knowledge (ITK)? Mention the ITKs relevance for Sustainable Agriculture. Discuss the extension strategy for popularizing ITKs?
- 3. What is Precision Farming? How is it different from Conventional Farming? Explain various steps for effective implementation of Precision Farming.
- 4. What do you understand by Organic Farming? Describe the importance of Organic Farming in Agriculture.
- 5. Write short notes on any three of the following
 - a. Biological pest control
 - b. Trap cropping
 - c. Use of Pheromone traps
 - d. Green House Effect
 - e. Water Shed
- 6. What do you understand by Climate Change? List out various types of weather disasters. Discuss the effects of Climate Change in agriculture.
- 7. Explain the concept of Integrated Pest Management (IPM). Discuss the role of IPM practices in promotion of Sustainable Agriculture with examples.
- 8. What do you understand by *Sustainable Agriculture?* Explain the important factors influencing the sustainable agriculture with suitable examples.



Post Graduate Diploma in Agricultural Extension Management (PGDAEM) Final Examination (August 2010)

AEM-205 A: Sustainable Agricultural Development (3 Credits)

Maximum Marks: 70

Duration: 2 1/2 hrs

Answer any five questions. All questions carry equal marks

- 1. Discuss the elements of Sustainable Agriculture and their importance. How do you promote Sustainable Agriculture in your service area?
- 2. What is Integrated Nutrient Management (INM)? Discuss with an example.
- 3. What are Bio-control Agents? Differentiate between Predators and Parasites. Why we have to promote Biological control?
- 4. Write short notes on multiple cropping system and intercropping system.
- 5. What is Integrated Pest Management (IPM)? Discuss with an example.
- Water is a critical input in sustainable agriculture Suggest measures for judiclous use of water in agriculture.
- 7. How to promote organic farming? Discuss.
- 8. What is Precision Farming? How to promote Precision Farming among farmers. Explain.


