**Benha University, Faculty of Agriculture Time: 2 hours**

**Agricultural Biotechnology Program 60 marks**

**Agronomy 3 (Crop Production)**

**Code: AG 0103**

Model Answer

**First semester 2015-2016**

**Answer the following questions:**

**Q1:** **Chose only two:**

Division of field crops, depending on the economic importance?

1. Cereal or grain crops
2. Legumes for seed
3. Forage crops
4. Fiber crops
5. Sugar crops
6. Oil crops

What is the Basic Practices of field crop Production?

1) Preparation of soil

2) Sowing

3) Adding Manure and Fertilisers

4) Irrigation

5) Protecting from weeds

6) Harvesting

7) Storage

How can you produce high and improved yield of maize?

1. Variety: its one of the most important factor to choose the suitable variety.
2. Care in using fertilizers: nitrogen fertilizer must be applied at the rate and at time and by the means that contribute to high yield with good qualities.
3. Care in operation practices and using machines in this aspects. Using mechanical power results in high and improved yield.
4. Insects and weed control chemically.

**Q2:** **Chose only two:**

1. Write notes about, fertilizers of wheat?

Egyptian soils are known to be poor in available nitrogen due to their low content of organic matter and the small amounts of organic manures added to them annually. Therefore, applying the optimum N level and suitable N carrier are most important means for raising the yield of most crops. Many researchers have found that nitrogen application is an important input for wheat production**. Salwau (1994**) showed that soil application of nitrogen level up to 75 kg N/fed increased significantly plant height, number of spikes/m2, spike characters, grain yield/fed and protein content in wheat grain. The soil application of 30 , 45 , 60 and 75 kg N/fed increased grain yield by 77.76 % , 106.22 %, 132.22 % and 122.78 %, respectively over the control in combined analysis

1. What is the advantage of transplanting method in rice crop?

* Less seeding rate
* Better weed control
* Suitable density
* High yield

1. What is a legume? List four crop plants that are members of the legume family?

* The legumes are all members of a single plant family, the Fabaceae.
* Beans, peas, lentils, soybeans, peanuts, alfalfa, clover, and more.

they are important: nitrogen fixation.

* + Bacteria in root nodules convert nitrogen gas into usable forms.
  + This makes legumes the most important source of protein in the plant world.
* Also makes them good natural fertilizer

**Q3:**

1. Write notes about, clover varieties?

There are 4 chief varieties of Egyptian clover grown in Egypt.

* Miscawi: It is the most important and wide spread variety. It makes a vigorous rapid growth, plants produce many basal branches, and yields much amounts of green food.
* Khadrawi: it is not largely spread. It is give one cutting more than Miscawi
* Fahl: it is rarely used in the Delta, but it is often sown before cotton or Sugar cane in Upper Egypt.Is grown mostly in the basin lands and gives only one cutting.
* Saidi: it produces two cuttings

GOOD LUCK