

**AGRICULTURAL AND FOOD ENGINEERING DEPARTMENT
INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR**

Final Examination (Autumn Semester-2011)

Course: M. Tech (ASM) Subject Number and Name: AG60061 & Crop Production Systems

No of Students: 18 Date: 21.11.2011 (Monday) Time: 2-00 to 5-00 PM Venue: R₁

Section-“B”

Please use separate Answer script for this section

A) Write short notes on any FOUR of the followings: ... 2.5X4=10

1. Symbiotic nitrogen fixation in a leguminous field crop
2. Dapog Method of seedling raising
3. Ratoon management in *Saccharum officinarum*
4. Quality parameters of *Gossypium* sp.
5. Good storage practices of *Arachis hypogaea* seeds
6. Climatic requirement of *Oryza sativa*

B) Answer any FIVE from the followings: ... 1X5=5

1. How will you compare performance of two varieties of *Arachis hypogaea*? **OR** what is WCE and why the same is considered important for crop production?
2. Mention two major fungal diseases of *Glycine max* with hints on control measures **OR** explain why the crop remained neglected for a long time?
3. Describe the mechanism of damage by girdle beetle **OR** describe a Bio-pesticide
4. Mention two harmful effects of Ethrel
5. Mention critical growth stages of *Arachis hypogaea*
6. What is the latest technology for reducing incidence of insect pests and diseases in *S. officinarum*?