



(Department of Agriculture)

Programme : M.Sc. Agriculture (Genetics & Plant Breeding IInd Sem)

Course Name : Biotechnology for crop improvement

Course code : MSAGGPB-121

Assignment No : 1

Due date of submission: 12 .03.2019

Instruction

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Programme and Enrolment No. clearly at the top of the page.

Q.1: (a) Define biotechnology. Write the scope of biotechnology in plant breeding.

(b) What do you know about tissue culture? Explain somatic hybridization.

Q.2:-

(a) Define technique of DNA isolation. Explain technique of RFLP and RAPD.

(b) Explain qualitative and quantitative traits in crop plants..

Department of Agriculture

Programme: M.Sc. Agriculture (Genetics & Plant Breeding IInd Sem)

Course Name : Cell Biology and Molecular Genetics

Course code: MSAGGPB-122

Assignment No: 1

Due date of submission: 12 .03 .2019

Instruction

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Programme and Enrolment No. clearly at the top of the page.

Q.1:-

- (a) Write differences between eukaryotic and prokaryotic cells with suitable diagram.
- (b) Define bioenergetics. Explain function of mitochondria and chloroplast with clean diagram

Q.2:-

- (a) Describe interphase nucleus structure and chemical structure.
- (b) Define cell biology. Write history of cell biology.

Department of Agriculture

Programme: M.Sc. Agriculture (Genetics & Plant Breeding IInd Sem)

Course Name: Mutagenesis and Mutation Breeding

Course code: MSAGGPB-123

Assignment No: 1

Due date of submission: 12 .03 .2019

Instruction

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Programme and Enrolment No. clearly at the top of the page.

Q.1:-

- (a) Define mutation. Write history of mutation breeding in crops.
- (b) Describe mutagenic agents.

Q.2:-

- (a) Describe effect of mutation on DNA. Explain factors influencing mutation.
- (b) Describe physical and chemical mutagens.

Department of Agriculture

Programme: M.Sc. Agriculture (Genetics & Plant Breeding IInd Sem)

Course Name: Principles of Quantitative Genetics

Course code: MSAGGPB-124

Assignment No: 1

Due date of submission: 12 .03 .2019

Instruction

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Programme and Enrolment No. clearly at the top of the page.

Q.1:-

- (a) What is variance? Explain additive, dominance, epistatic and linkage effects.
- (b) Describe ANOVA.

Q.2:-

- (a) Define genetic diversity. Explain cluster and D^2 analysis.
- (b) Explain multiple factor hypotheses.