



**MONAD UNIVERSITY HAPUR (UP)  
(SCHOOL OF AGRICULTURE & APPLIED SCIENCES)  
DEPARTMENT OF BIOTECHNOLOGY**

Course: M.Sc. Biotechnology

Subject Name: Genetic Engineering

Semester: III

Sub. Code:

Assignment No: 1

**Due date of submission: 10.11.2016**

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 the function of DNA ligase?
- (b) What are different types of restriction endonuclease enzymes?

Q.2.

- (a) What are method clone of m13 vectors?
- (b) Explain the different types of expression vectors?



Course: M. Sc. Biotechnology

Subject Name: Environmental Engg.

Semester: III

Sub. Code:

Assignment No: 1

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Q.1

- (a) Describe solid wastes in aspect of environment.
- (b) Explain various techniques for control of air pollution.

Q.2.

- (a) Characterize the effluent in brief.
- (b) Define factor responsible for water responsible.



**MONAD UNIVERSITY HAPUR (UP) (SCHOOL OF AGRICULTURE &  
APPLIED SCIENCES) DEPARTMENT OF BIOTECHNOLOGY**

Course: M. Sc. Biotechnology

Subject Name: Microbial Biotech

Semester: III

Sub. Code: Assignment

No: 1

**Due date of submission: 10.11.2016**

Instruction

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Q.1

- (a) Explain microbial growth kinetics with suitable curve.
- (b) Explain various factors affecting the growth of microbes.

Q.2.

- (a) Write an essay on proteins as enzymes.
- (b) Explain the role of pH & temperature on enzyme mobilization.



**MONAD UNIVERSITY HAPUR (UP) (SCHOOL OF AGRICULTURE &  
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Course: M. Sc. Biotechnology

Subject Name: Plant & Animal Biotech

Semester: III

Sub. Code: Assignment

No: 1

**Due date of submission: 10.11.2016**

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) Explain suspension culture with its chemical & physical status.
- (b) Define the composition of nutrients & other supplements for a good media.

Q.2.

- (a) What do you mean understand by cell mobilization & cell immobilization? Explain the cell immobilization in brief.
- (b) Write an essay on primary & secondary metabolites.