



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

Course: B. Sc. Biotechnology

Subject Name: Biomolecules

Semester: I

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 the importance of water in the body.
- (b) Explain why water is a polar molecule.

Q.2.

- (a) What are the differences between hetero and homo polysaccharides?
- (b) What is the importance of polysaccharides?



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Assignment No: 2

**Due date of submission: 10.11.2016**

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Q.1

- (a) What are structural and function of polar amino acids?
- (b) Describe the four levels of protein structure.

Q.2

- (a) What are the major functions of phospholipids?
- (b) What are the major differences of Vitamins and hormones?



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Course: B. Sc. Biotechnology

Subject Name: Cell Biology

Semester: I

Sub. Code:

Assignment No: 1

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Q.1

- (a) Explain cellular evolution with suitable diagrams.
- (b) What do you understand by Biochemical Composition of cell. Explain in brief. with suitable diagrams.

Q.2

- (a) Define the ultrastructure of unit membrane with its Chemical Composition & functions.
- (b) How the photochemical energy will be converted into chemical energy. Explain in brief.



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Q.1

(a) What are trans membrane protein. Explain the transport mechanism with carrier proteins in brief. with suitable diagram.

(b) Explain the structure & functions of porin protein in brief.

Q.2 (a) What is ATP? Explain the production of ATP un cell.

(b) Explain.

(i) Auliport & Symport

(ii) Eudocytosis & exocytosis