**Biochemistry:**

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| Research title | Outlines |
| 1. **Diseases caused by abnormal protein structure**
 | * Definition of proteins
* General structure
* Classification
* Levels of protein structure
* Protein folding
* Effect of unfolded proteins and mutated proteins on health.
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| 1. **Defective DNA repair system and relation to cancer.**
 | * Definition of repair
* Types of repair system
* Types of DNA repair system defects
* Clinical correlation of defective repair systems
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| 1. **Recombinant DNA technology**
 | * Definition
* Biomedical importance
* Types and techniques
* Discuss basis of different methods including gene cloning, sequencing and blotting techniques and their implications in diagnosis of different diseases.
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| 1. **Inborn errors of protein metabolism**
 | * Discuss in detail different examples of inborn metabolic disorders with the reference to the enzymatic deficiency, defective metabolic pathway, clinical picture and management.
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| 1. **Vitamins and their implications on health**
 | * Vitamins Classification
* Types
* Functions
* Deficiencies
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