Annexure 2: Sample Format of the Project Proposal

- 1. Cover Page
- 2. Project Title Page: Should be brief and descriptive
- 3. Project Personnel:
 - a) Academic Supervisor: Name, Institution, Contact Details
 - b) Co-supervisor/s: Name, Institution, Contact Details
 - c) Team Members: Name, Specialized Area, Faculty, University, Index Number, E-mail, Mobile Number
- 4. Table of Contents
- 5. Introduction and Background
- 6. System Requirements
 - a) Project objectives and Scope
 - i) Clearly defined objective
 - ii) Detailed scope of the project, Including deliverables

b) Budget and cost Estimates

- i) Detailed budget breakdown
 - 1) Who are involved in the project?

(Project managers, Developers (front-end, back-end, full-stack) UX/UI designers, QA engineers/testers, Business analysts DevOps engineers, Consultants and Contractors)

- 2) **Development cost -** Software Licenses/Tools and Utilities
- 3) Infrastructure costs Hardware/Cloud service
- ii) Cost-Benefit Analysis

A cost-benefit analysis (CBA) for a software project proposal helps in evaluating the financial viability of the project by comparing the total expected costs against the total expected benefits. Here's a step-by-step guide on how to conduct a CBA.

c) Innovation and Competitiveness

7. System Design

- a) Outputs of the System Design Phase
 - i) Design Documents:
 - High level design documents (HLD) Provides an overview of the system architecture and major components.
 (System Architect Design - Define the overall architecture of the system. Choose the architectural pattern (e.g., microservices, monolithic, layered). Identify the main components and their interactions.)
 - 2) **Low-level Design documents (LLD)** Details each component, including class diagrams, sequence diagrams, database, and API specifications.
 - ii) Prototypes and Mockup (UI prototypes and wireframes)
 - UI design/UX design
 - iii) Security Plan Detailed security measures, including authentication, authorization, and encryption strategies
 - iv) Strategies for Performance Optimization and Scalability.

8. System Development

Testing and Deployment Strategies (tools and technologies)

- a) Project management Approach
 - i) Methodology (e.g. Agile, waterfall, scrum)
 - ii) Project management tools and techniques
- b) Quality Assurance
 - i) Quality control measures.
 - ii) Testing Strategies
- c) Sustainability and Maintenance
- 9. Project Milestones and Timeline