Annexure I (For Project Proposal for BEE)

1. Project Statement:

The increasing demand for efficient and accessible employment opportunities has highlighted the need for a reliable job portal that ensures a seamless hiring experience for both job seekers and recruiters. Traditional job search methods often face challenges such as lack of transparency, delayed responses, and limited accessibility. A user-friendly job portal can provide a flexible, real-time, and secure environment for job searching and hiring, offering features such as automated job recommendations, real-time application tracking and employer-job seeker feedback mechanisms.

2. Approximate duration (in hours) to complete the project:

100+ HOURS

3. Proposed Project In charge:

Mr. Rahul

4. Team Members along with roll no's:

a. Lovish Bhateja(2210991857)
b. Kashish Gupta (2210991768)
c. Khushi(2210991963)
d. Madhav Garg(2210991863)
e. Kavita Trivedi(2210991774)

5. Check Points:

a. Does the project statement result in a product? If yes, what type of product?

Yes, the project results in a web-based and mobile-compatible job portal.
The platform facilitates job searching and hiring by connecting job seekers with employers, managing job postings, processing applications, enabling secure payments for premium job listings, and providing real-time notifications and feedback mechanisms.

b. **Does the project statement use multiple concepts to achieve the outcome? (yes/no)**

Yes, a working prototype of the job portal can be created. The prototype would include essential features such as secure user authentication, job posting and application management, real-time notifications, and an administrative dashboard**.** This simplified working model allows evaluation of the project's feasibility, design, and implementation.

c. **Does it have enough for our team members to do sufficient amount of work? (yes / no)**

Yes, the project statement uses multiple concepts to achieve the outcome. These include full-stack web development (MERN stack), user authentication, and responsive frontend design.

6. **Technical Nodes (add more rows in the table below, if required)**

Subject / Area / Topic	**Technical Nodes**
Frontend	React.js , Redux, CSS
Backend	Node.js, Express.js
Database Management	MongoDB, Mongoose
Authentication & Security	JWT, bcrypt.js, OAuth
API Development	RESTful APIs, CRUD Operations
Deployment	MongoDB Atlas
Version Control	Git, GitHub

7. Prerequisites (in terms of knowledge, concepts and material) for doing the Project:

1. Knowledge:

- MERN stack (MongoDB, Express.js, React, Node.js)
- User authentication with JWT o RESTful API development
- Frontend development with React, Tailwind CSS, and Bootstrap
- Backend languages such as JavaScript or Java

2. Concepts:

- Database management with MongoDB
- Web security best practices
- UI/UX design principles
- User authentication

3. Material:

- Development tools (e.g., VS Code, Git)
- Testing tools (Jest, Mocha)

8. Material that may be required to make the project and where it might be available

Material Required for the Project:

1. **Development Tools:**
   - **Text Editor/IDE**: Visual Studio Code (VS Code) - Available for free download from the official VS Code website.
   - **Version Control:** Git - Available for free at Git's official website.
   - **Node.js & npm:** Required for backend development - Available at Node.js official website.

2. **Libraries & Frameworks:**
   - **MERN Stack Components:** MongoDB, Express.js, React, Node.js – Official documentation and packages available via npm.
   - **Redux & Bootstrap:** For frontend styling - Available via npm or through their respective websites (Redux , Bootstrap).

3. **Testing Tools:**
    - **Jest:** For React testing - Available via npm.
    - **Mocha:** For Node.js testing - Available via npm.

4. **Documentation & Learning Resources:**
    - **Official Documentation:** For all tools and libraries, available on their respective websites.
    - **Tutorials & Guides:** Available on platforms like MDN Web Docs, FreeCodeCamp, and YouTube

9. What could the total cost of the project?

The total cost of developing the project can be estimated based on the required resources. Here's a breakdown:

1. **Development Tools:**
    - **Visual Studio Code (VS Code):** Free.
    - **Git:** Free.
    - **Node.js & npm:** Free.

2. **Libraries & Frameworks:**
    - **MERN Stack Components (MongoDB, Express.js, React, Node.js):** Free
    - **Redux & Bootstrap:** Free

3. **Testing Tools:**
    - **Jest & Mocha:** Free.

4. **Miscellaneous Costs:**
    - **Domain Name (optional):** $10-15/year (from providers like Namecheap or GoDaddy).
    - **Hosting (optional beyond free tiers):** $5-10/month (if additional services are needed beyond free tiers).

5. **Estimated Total Cost:**
    - **Basic Version (using free tools and services):** $0
    - **With Optional Costs (domain name + paid hosting):** $60-150/year The project can be completed with minimal cost if you use free resources and services, but adding a custom domain or more advanced hosting could increase the cost.

10. **Resources available to us:**
    a. https://www.mongodb.com/resources/languages/mern-stack-tutorial
    b. https://legacy.reactjs.org/docs/getting-started.html
    c. https://www.geeksforgeeks.org/redux-css/