1. **Project Introduction**

Write down the introduction of your project.

2. **Project Objectives**

Write down the specific objectives of your project in bullet points.

3. **Project Analysis**

3.1. Strategic Assessment

Write description here to check whether your project aligns with organizational goals or not. In addition, also add if how market demands on your project.

3.2. Technical Assessment

*Write description for **Frontend, backend, database, machine learning and deployment** in context of your project. In Addition, write some technical challenges (If available).*

3.3. Economic Analysis

3.3.1 Present Worth, Future Worth and Annual Worth

Write some sample data for your project and calculate Present Worth, Future Worth and Annual Worth and present it in Tabular format along with brief description.

3.3.2 Internal Rate of Return (IRR)

Calculate IRR using formula. Write Calculations and Conclusions along with brief description.

3.3.3 Benefit-Cost Ratio (BCR) Analysis

Calculate BCR using formula. Write Calculations and Conclusions along with brief description.

4. **Activity Planning and Scheduling**

4.1. Work Breakdown Structure

Create a Work breakdown structure of your project.

4.2. Bar Chart

Create a Gantt chart of your project here.

4.3. Network planning model

Write short description of Network planning model.

4.4. Critical path method (CPM)

Give each activities a Activity number as per your WBS and calculate the critical path of your project.

4.5. Program evaluation and review technique (PERT)

For PERT, give random three estimated time of Pert and calculate the expected time using formula.

4.6. Precedence Diagramming Method (PDM)

Write description about precedence diagramming method here.

4.7. Shortening Project Duration

Write description for what have you done for shortening project duration in your project along with brief of Shortening Project Duration.

4.8. Identifying Critical Activities

Explain what have you identified in CPM analysis for your project with brief description.

5. Risk Management

5.1. Nature and Identification of Risk

Write description for what sort of risk you identify in your project?

5.2. Risk Analysis & Evaluation of risk to the schedule using Z-values

Give the sample data for Activity and z-values and interpret the result of z-value accordingly.

6. Resource Allocation

6.1. Identifying resource requirements

List and briefly explain human, technical and financial resources requirement for your project.

6.2. Resource allocation

List and briefly explain human resource allocation, software and tools allocations and financial resource allocation for your project.

6.3. Resource smoothing and resource balancing

List and explain how can you perform resource smoothing and balancing for your project.

7. Monitoring and Control

Briefly explain with perspective of your project.

7.1. Collecting Data

How the data collection takes place with respect to your project. Explain here.

7.2. Visualizing Progress

For Visualizing progress, you need to make Gantt chart and slip chart for your project and explain briefly.

7.3. Cost (Expenditure) Monitoring

Provide some sample data and make a graph showcasing Estimated budget vs. Actual cost for your project with brief explanation.

7.4. Earned Value Analysis

For earned value analysis, as we did numerical on class, give sample data for your project and calculate the metrics and interpret the result as well.

8. Testing

8.1. Test Plan

Here briefly describe the test scope, test strategies and test deliverables for your project.

8.2 Types and level of testing

Lastly, here you need to explain the unit testing, integration testing, system testing and acceptance testing for your project.

9. Conclusion

Write the summary of your findings, lesson learned and recommendations for future project.