

**Assignment III**  
**UNIT-III**  
**PART-A**

1. What is pipelining?
2. Define Pipeline speedup.
3. What are the major characteristics of a pipeline?
4. What is data path?
5. What is a hazard?
6. Why is branch prediction algorithm needed? Differentiate between the static and dynamic techniques.
7. What do you mean by delayed branching?
8. What is precise exception?

**PART-B**

1. What is data hazard? Explain the ways and means of handling it.
2. What is instruction hazards? Explain in detail how to handle the instruction hazards in pipelining with relevant examples .
3. Explain the dynamic branch prediction technique.
4. Write note on exception handling