St.JOSEPH'S COLLEGE OF ENGINEERING, CHENNAI-119
St.JOSEPH'S INSTITUTE OF TECHNOLOGY, CHENNAI-119
DEPARTMENT OF INFORMATION TECHNOLOGY
IT 6602 SOFTWARE ARCHITECTURES
Assignment –IV
Part - A

1.   **List out the common architectural styles?**
2.   **Define REPOSITORIES: [data cantered architecture]**
3.   **What do you mean by "PIPES AND FILTERS"?**
4.   **Define Event-Based Implicit Invocation**
5.   **Define Amdahl's Law & Layered System**
6.   **What are the three major parts of blackboard?**
7.   **What are the Three Vignettes In Mixed Style?**
8.   **What are the Heterogeneous Architectures and four components of interpreter?**

Part - B

1.   **Explain the architecture styles**
   i)Data abstraction and object-oriented organization
   ii)Event-based, implicit invocation

2.a)Consider the case study of building a software controlled mobile robot. Describe its challenging problems and design considerations with four requirements. Finally give the solution by layered architecture for all the four requirements.
b) Discuss the invariants, advantages and disadvantages of pipes and filters architectural style

3.State the problem of KWIC. Propose implicit invocation and pipes and filters style to implement a solution for the same

4.a) Explain the process control paradigm with various process control definitions
   b)Expalin the following with an example:
        i. Controlled variable
       ii. Set point
      iii. Open loop system
      iv. Feedback control system
       v. Feed forward control system