|  |
| --- |
| **P.V.P Siddhartha Institute of Technology** |
| **Department of Computer Science and Engineering** |
| **Course: B.Tech** | **Year: II** | **Semester: I** | **Objective: I** | **A.Y:2024-25** |
| **Subject Code:23CS3301** | **Subject Name: Advanced Data Structures and Algorithm Analysis** | **Regulation:PVP23** |
| **Duration:20 minutes** | **Maximum Marks:10 Marks** | **Date:19/09/24** | **Session: F.N** |
| **Answer all the Questions. Each Question carries 2 Marks**  **5×2M=10M** |
|  |
| **Q.No** |  | **Marks** | **CO** | **Level** |
| **1.** | **Find** time complexity of the following pseudo code:Algorithm( Sum(a,n){ S:=0.0; For i:=1 to n do S := s+ a[i]; Return s:} | **2** | **CO1** | **L2** |
| **2.** | Write any two differences between AVL trees and B – Trees | **2** | **CO1** | **L2** |
| **3.** | Summarize any four application areas of priority queues. | **2** | **CO1** | **L2** |
| **4.** | Illustrate any two graph representation techniques with example. | **2** | **CO1** | **L2** |
| **5.** | What property ensures the balanced nature of an AVL tree? | **2** | **CO1** | **L2** |