



**SDJ** INTERNATIONAL  
COLLEGE

## **M.Sc. (CA) SEMESTER – 1**

### **Subject – Web Development Operations (104)**

#### **Assignment: 1**

- Q-1) Provide an overview of the purpose of DevOps and its architecture.  
Q-2) What are the main differences between Agile and DevOps, and how do they complement each other?

#### **Assignment: 2**

- Q-1) Explain the roles of automation tools such as Maven, Jira, Splunk, and Ansible in the DevOps process, highlighting their purposes?  
Q-2) Describe the installation process of Ansible and the key concepts of YAML in Ansible.

#### **Assignment: 3**

- Q-1) Provide an overview of Ansible Playbooks. What are the key components of a Playbook, and how can you create one?  
Q-2) Discuss control structures in Ansible, including blocks, loops, and conditionals.

#### **Assignment: 4**

- Q-1) Explain the fundamentals of Jenkins, its architecture, applications, and features, as well as the advantages of using Jenkins in the DevOps pipeline.  
Q-2) Provide a high-level overview of how to build a CI/CD pipeline with Jenkins.

#### **Note:**

- **Assignment I & II must be written in one assignment and III & IV must be in another assignment book.**
- **Submission Date will be declared later on.**