BCADSCAD Second Sessional Tests 2024-25

Second Semester

BCADSN12101: Cloud Application Development

Time: 3 Hours Max. Marks: 60

(Section A)

Q1. Attempt All Questions (1*8)

a) Describe the evolution of IBM Cloud?
b) Define DevOps and its main objective?
c) Explain the role of source code management in DevOps?
d) How is issue tracking used in DevOps practices?
e) What are the advantages of using JSON data format?
f) List at least three IBM Watson services available on IBM Cloud?
g) What are the benefits of using IBM Cloudant?
h) How can you access Cloudant databases and documents on IBM Cloud?

Section B

Q2. Attempt any Two. (6*2)

a) Illustrate the key principles of DevOps and how they are implemented within the IBM Cloud.
b) Discuss the architecture of Representational State Transfer (REST) and its principles.
c) Explain how RESTful APIs facilitate communication between client and server applications.
d) Evaluate the advantages and limitations of using JSON as a data format in RESTful APIs.

Q3 Attempt Any Two. (5*2)

a) Illustrate the concept of "Software as a Service" (SaaS) and how it fits into the cloud service models.
b) Describe the steps involved in building and deploying applications using DevOps tools on IBM Cloud.
c) Define Continuous Delivery and explain its importance in the context of DevOps.
d) Explain the basic architecture of Docker. Include in your answer the roles of the Docker Engine, containers, images, and Dockerfile.