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Following Paper ID and Roll No. to be filled in your Answer Book.

PAPER ID : 44005 Roll No.

B. Tech. Examination, 2024-25

(Even Semester)

DEPLOYMENT OF CLOUD

Time : Three Hours] *[Maximum Marks : 60*

Note :– Attempt all questions.

SECTION – A

1. Attempt all parts of the following : 8×1=8

   (a) Define cloud computing.

   (b) Write any two cloud service providers.

   (c) What do you understand by FaaS?

   (d) How does version control help in DevOps?

   (e) What is toolchain in IBM cloud?

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(f) What is the function of a load balancer?

(g) List IBM Watson services available on IBM cloud.

(h) What ist he role of the hypervisor?

SECTION – B

2. Attempt any two parts of the following : 2×6=12

(a) Describe different cloud deployment models with examples.

(b) Discuss any five DevOps practices/features in detail.

(c) What are the advantages of using the JSON data format in web services?

(d) Explain the role of virtualization in cloud computing infrastructure.

SECTION – C

Note :– Attempt all questions. Attempt any two parts from each questions. 8×5=40

3. (a) Compare IaaS, PaaS and SaaS with suitable examples.

(b) Discuss the benefits and challenges of using cloud computing.

(c) Briefly explain the cloud impact in banking and education.

4. (a) Explain the DevOps lifecycle with a diagram.

(b) Describe the various IBM Watson services available on IBM cloud.

(c) Discuss the benefits and challenges of implementing CI/CD.

5. (a) Explain the archtiecture of Representational State Transfer (REST).

(b) Describe cloud resource provisioning and monitoring.

(c) Discuss the features and benefits of IBM cloudant. Explain how REST APIs can be used to interact with the cloudant database.

6. (a) What are containers? Discuss how IBM cloud container registry is used for managing container images.

(b) Explain the role of docker in containerization and describe the use of docker hub in modern application deployment.

(c) What is Kubernetes? Explain the key capabilities of kubernetes in the context of cloud-native application orchestration.

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