BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)

B. Tech. Sem - V COMPUTER SCIENCE & BUSINESS SYSTEM : WINTER : 2023

SUBJECT : CLOUD, MICRO SERVICES & APPLICATION

Day : Thursday | Time : 02:30 PM-05:30 PM

Date : 14-12-2023 | **W-24173-2023** | Max. Marks : 60

N.B.

1) All questions are **COMPULSORY**.
2) Figures to the **RIGHT** indicate **FULL** marks.
3) Assume suitable data **WHEREVER** necessary.
4) Draw neat labeled diagrams **WHEREVER** necessary.

Q.1 Describe the key components of a typical cloud services and deployment model. Provide example for each component and elaborate on their functions in the cloud ecosystem. **(10)**

OR

Explore the emerging trends and futures prospects of cloud computing. How might technologies like edge computing and quantum computing impact the cloud landscape in coming years. **(10)**

Q.2 Provide in depth overview of z scalar cloud security. How does z scalar's cloud security platform work and What are its key features and benefits. **(10)**

OR

Explain concept of multi-cloud and hybrid cloud architectures. What are the advantages and challenges of using multiple cloud providers or combining on premises infrastructures with the cloud? **(10)**

Q.3 Describe Azure app service and its role in cloud application development discuss the key features and use cases of Azure App services and explain how it simplifies the deployment and scaling of web and module applications. **(10)**

OR

Discuss Real world use cases of organizations that have successfully adopted a multi cloud strategy utilizing azure, GCP and AWS for different purposes. Analyze the benefits and challenges of such a multi cloud approach. **(10)**

Q.4 Provide insights into the evolving cloud native landscape. Discuss emerging technologies and trends in the field of cloud native development. **(10)**

OR

Explain spring cloud and its role in building cloud native applications. Discuss the various components and capabilities affected by spring cloud for building distributed system and microservices. **(10)**

Q.5 Explain key stages in the API life cycle, from design and developments to testing and deployment. **(10)**

OR

Provide Comprehensive overview of tools and services that are commonly used in cloud native dev OPS. such as helm, Prometheus and grafana. **(10)**

Q.6 Explain concept of Identify and access management (IAM) in cloud security. Provide examples of how these policies are implemented in Azure, AWS and Google cloud. **(10)**

OR

Discuss how tools like azure security center, AWS Inspector and Google cloud security command center help organizations. Identify and mitigate security vulnerabilities and threats. **(10)**

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