Date & session:



# ST. JOSEPH'S UNIVERSITY, BENGALURU -27 MSc (BIG DATA ANALYTICS) – III SEMESTER SEMESTER EXAMINATION: OCTOBER 2023 (Examination Conducted in November/December 2023) BDA 3421 – DATA ANALYTICS ON CLOUD (For current batch students only)

Time: 2 Hours Max Marks: 50

# This paper contains ONE printed page and THREE parts

## **PART A**

#### Answer All the Questions 5 X 2 = 10

- 1 Define VMM.
- 2 How can organizations benefit from hybrid cloud?
- 3 When server consolidation and live migration be useful?
- 4 Define IAM.
- 5 List any four virtualization tools available in real-time.

#### **PART B**

# **Answer any FIVE questions**

5 X 4 = 20

- When demand of application is raising, we will have to recognize the need to maintain app's accessibility, uptime and capacity in the face of increase load. What are the scaling strategies would you adapt for the business? Explain the mechanism and justify your answer.
- 7 Explain NIST cloud computing reference architecture. Why is it necessary to prefer cloud
  - computing over on-premise computing? discuss your thoughts on it.
- 8 What are the cloud management mechanisms available? Explain.
- 10 Differentiate the deployment models of cloud with neat sketch.

9 Write short note on implementation level of virtualization.

- 11 Explain single sign-on security mechanisms on Cloud.
- 12 Differentiate open nebula and open stack.

## **PART C**

## **Answer Any TWO questions**

2 X 10 =20

- 13 Explain the working model of any three-cloud specialized mechanism with neat sketch.
- 14 Define Hashing. Explain the process of one-way, non- reversable data protection available in Cloud.
- 15.(a) Explain in detail cloud computing architecture with its components.

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15.(b) Define virtualization in detail and explain in brief full virtualization and para virtualization with its pro's and con's.

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