315327

3 Hours / 70 Marks   Seat No.

Instructions – (1) All Questions are *Compulsory.*

(2) Answer each next main Question on a new page.

(3) Figures to the right indicate full marks.

(4) Assume suitable data, if necessary.

(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1.   Attempt any <u>FIVE</u> of the following :   **10**

a) Define :

i)   Cloud Computing

ii) Cloud

b) List any four characteristics of cloud computing.

c) List two features of platform as a service (PaaS)

d) State the difference between hybrid and public cloud deployment model (Any two points)

e) Enlist four types of cloud storage.

f) Enlist any two features of Azure ML studio.

g) State two advantages of AWS sagemaker.

2.   Attempt any <u>THREE</u> of the following :   **12**

a) Explain cloud computing architecture.

b) What is virtualization and give application of virtualization.

c) Explain batch data streaming in Machine Learning.

d) Explain supports for ETL or ELT pipelines.

P.T.O.

Marks

3.   **Attempt any THREE of the following :**   **12**

   a) Explain platform as a service in details.

   b) Write an advantages of cloud computing in Machine learning. (Any four points)

   c) Explain community cloud storage with advantages and disadvantages.

   d) Explain Jupyter Notebook with its workflow.

4.   **Attempt any THREE of the following :**   **12**

   a) Explain software as a service in details.

   b) Difference between virtualization and cloud containerization.

   c) Explain Block-Based cloud storage system.

   d) Give Benefits and Limitations of machine learning in the cloud.

   e) Explain supports for scale-up and scale out training.

5.   **Attempt any TWO of the following :**   **12**

   a) Explain types of virtualization.

   b) Describe the architecture and working of AWS Red shift as a cloud data warehouse.

   c) Explain Azure Machine Learning studio and Google Cloud Auto ML in Machine Learning with functionalities.

6.   **Attempt any TWO of the following :**   **12**

   a) Explain Amazon Sagemaker with its components and characteristics.

   b) Describe the complete process of training Machine Learning project in the cloud.

   c) Explain Pre-tuned AI services and Monitor prediction performance with real - world example.

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