

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, APRIL – 2025**

VIRTUALIZATION TECHNOLOGY AND CLOUD COMPUTING

[Maximum marks: 75]

[Time: 3 Hours]

PART A

I. Answer all the following questions in one word or one sentence. Each question carries 1 mark.

(9 x 1 = 9 Marks)

		Module outcome	Cognitive level
1	Define Hypervisor.	M1.04	R
2	Tell the importance of virtuality.	M1.01	R
3	Define server virtualization.	M1.03	R
4	Define virtual switch.	M2.03	R
5	Define snapshot.	M2.03	R
6	List two cloud service providers.	M3.02	R
7	Name two needs of cloud computing.	M3.01	R
8	Define cloud storage.	M4.03	R
9	List data center elements.	M4.04	R

PART B

II. Answer any eight questions from the following. Each question carries 3 marks.

(8 x 3 = 24 Marks)

		Module outcome	Cognitive level
1	Compare any three hypervisors.	M1.06	U
2	Explain the importance of virtualization.	M1.01	U
3	Interpret the role of hypervisor.	M1.05	U
4	Explain how the CPU is examined in a virtual machine.	M2.02	U
5	Explain the methods for working a virtual machine.	M2.03	U
6	Outline the limitations of cloud computing.	M3.01	U
7	Select the vendors of cloud computing.	M3.02	R
8	Show the various cloud data center requirements.	M3.03	U
9	Outline Platform as a Service (PaaS).	M4.01	U
10	Interpret the three cloud deployments models.	M4.02	U

PART C

Answer all questions. Each question carries seven marks.

(6 x 7 = 42 Marks)

		Module outcome	Cognitive level
III	Explain different types of Virtualization. OR	M1.03	U
IV	Summarize TYPE-1 Hypervisor.	M1.04	U
V	Explain the components of desktop virtualization. OR	M2.09	U
VI	Summarize Virtual LAN.	M2.06	U
VII	Explain the factors that affect the Cloud data center. OR	M3.03	U
VIII	Illustrate cloud computing architecture with a neat diagram.	M3.05	U
IX	Explain the characteristics of cloud computing. OR	M3.06	U
X	Outline Cloud Infrastructure.	M3.02	U
XI	Explain Cloud Service Models. OR	M4.01	U
XII	Summarize Cloud Data Center core elements.	M4.04	U
XIII	Explain Storage Network Technologies. OR	M4.05	U
XIV	Interpret Cloud Deployment Models.	M4.02	U
