

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, NOVEMBER - 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 Virtualization.	M1.01	R
2	List any two examples of Hypervisors.	M1.04	R
3	Define storage in VM.	M2.02	R
4	List any two advantages of application Virtualization.	M2.10	R
5	List any two load balancing methods in Cloud Computing.	M3.06	R
6	List any two vendors of Cloud Computing.	M3.02	R
7	List any two benefits of Cloud Computing.	M3.01	R
8	List any two Cloud Deployment models.	M4.02	R
9	List any two Cloud 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	Write short note on Type – II Hypervisors.	M1.04	R
2	Explain Virtual Machine.	M2.01	U
3	Explain Network Virtualization.	M2.05	U
4	Explain the purpose of VM clones.	M2.03	U
5	Write short notes on Desktop and Application Virtualization.	M2.07	R
6	List and explain three needs of Cloud Computing.	M3.01	R
7	Outline Cloud Infrastructure.	M3.02	R
8	Explain Storage management in Cloud Computing.	M3.05	U
9	Write short note on Virtual Switch load balancing.	M3.05	R
10	Write short note on Computing on demand.	M4.07	R

**PART C**

**Answer all questions. Each question carries seven marks**

**(6 x 7 = 42 Marks)**

		<b>Module outcome</b>	<b>Cognitive level</b>
III	Describe the importance of Virtualization. <b>OR</b>	M1.01	U
IV	Outline the role of Hypervisors in Virtualization.	M1.05	U
V	Explain Types of Virtualizations. <b>OR</b>	M1.03	U
VI	Compare Hypervisors with its types.	M1.06	U
VII	Describe the components and benefits of Network Virtualizations. <b>OR</b>	M2.05	U
VIII	Explain the advantages and disadvantages of Application Virtualization.	M2.10	U
IX	Outline Cloud Data center requirements. <b>OR</b>	M3.03	U
X	Describe characteristics of Cloud Computing.	M3.06	U
XI	Explain Cloud Deployment Models. <b>OR</b>	M4.02	U
XII	Explain Cloud Storage.	M4.03	U
XIII	Explain various cloud Service Models. <b>OR</b>	M4.01	U
XIV	Explain Disaster Recovery in Cloud Computing.	M4.06	U

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