



Daffodil International University  
Department of Information Technology & Management  
Faculty of Science & Information Technology  
Mid-Term Examination, Spring 2024

Course Code:ITM4 18; Course Title:Distributed System & cloud computing  
Sections & Teachers: All

Time: 1:30 Hrs

Marks: 25

Answer ALL Questions

*[The figures in the right margin indicate the full marks. All portions of each question must be answered sequentially.]*

1.	a)	What is the transparency of a distributed system? <b>Differentiate</b> between Access and location transparency.	[Marks-3]
	b)	<b>Differentiate</b> among public, private and hybrid clouds.	[Marks-3]
2.	a)	Draw the system architecture for Infrastructure as a Service(IaaS) and <b>explain</b> two main components.	[Marks-5]
3.	a)	Suppose, A startup is developing a new web application and wants to focus solely on coding without worrying about server management or infrastructure. They seek a solution that offers built-in services like database management,testing, debugging and automatic scaling, allowing them to quickly deploy their application and easily handle fluctuations in user demand.  <b>Propose</b> an appropriate cloud service model and justify your suggestion.	[Marks-5]
4.	a)	Suppose you are using a web-based software whereas your friend is using a traditional software. What extra benefits will you get using this hosted software? <b>Discuss</b> at least 4 such benefits.	[Marks-4]
5.	a)	What is legacy infrastructure? <b>Explain</b> with an example.	[Marks-2]
	b)	Suppose you are currently using your own resources but due to some reasons, you have decided to migrate to cloud services. <b>Analyze</b> the potential challenges you will face.	[Marks-3]