**20CS/CB703/JO**

**Hall Ticket Number:**

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| **IV/IV B.Tech (Regular) DEGREE EXAMINATION** | | | |
| **January, 2024** | **Computer Science & Engineering / Cyber Security** | | |
| **Seventh Semester** | **Cloud Programming/ Cloud Programming & Security** | | |
| **Time:** Three Hours | | **Maximum:** 70 Marks | |
| ***Answer question 1 compulsory.*** | | | **(14X1 = 14Marks)** |
| ***Answer one question from each unit.*** | | | **(4X14=56 Marks)** |
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|  |  |  | CO | BL | M |
| 1 | a) | Define Cloud Computing. | CO1 | L1 | 1M |
|  | b) | List the windows Azure features. | CO1 | L2 | 1M |
|  | c) | What is .NET Framework? | CO1 | L1 | 1M |
|  | d) | Differentiate GET and POST methods in Razor C# form method attribute. | CO1 | L2 | 1M |
|  | e) | What is the purpose of .cscfg file? | CO2 | L1 | 1M |
|  | f) | Write the Significance of RowKey and PartitionKey in Table storage. | CO2 | L2 | 1M |
|  | g) | Define Visibility Timeout Period of Storage Queue. | CO2 | L2 | 1M |
|  | h) | What is the maximum size of Storage Queue and Storage Queue Message? | CO2 | L2 | 1M |
|  | i) | What is Virtual Machine? | CO3 | L1 | 1M |
|  | j) | What is a .vhd file? | CO3 | L1 | 1M |
|  | k) | List the three ways to migrate local SQL Database to SQL Azure. | CO3 | L1 | 1M |
|  | l) | What is ServiceBus? | CO4 | L1 | 1M |
|  | m) | Differentiate Peek Lock Mode and Receive and Delete Mode in service bus Queue. | CO4 | L2 | 1M |
|  | n) | Differentiate ServiceBus Queue and Storage Queue. | CO4 | L2 | 1M |
| **Unit-I** | | | | | |
| 2 | a) | Explain in detail about the three service models of Cloud Computing with a neat diagram. | CO1 | L2 | 7M |
|  | b) | List and explain the cloud deployment models with their advantages and disadvantages. | CO1 | L3 | 7M |
| **(OR)** | | | | | |
| 3 | a) | Explain with examples for each of the following features in Razor C# for designing Layout of web pages.   |  |  |  | | --- | --- | --- | | * 1. Layout property | * 1. Partial pages | * 1. Content page | | * 1. RenderPage() | * 1. RenderBody() | * 1. RenderSection() | | CO1 | L3 | 7M |
|  | b) | Design WebPages in Razor C# to display Book details (ID, Title, Author, Price) and to add records in a SQL database with validation. Specify the table structure. | CO1 | L4 | 7M |
| **Unit-II** | | | | | |
| 4 | a) | Discuss in detail about Azure SDK for .NET framework | CO2 | L2 | 7M |
|  | b) | Explain in detail about the cloud service project architecture with a neat diagram. List and explain the steps to create a cloud service project. | CO2 | L3 | 7M |
| **(OR)** | | | | | |
| 5 | a) | What is storage account. Explain in detail about the File Storage API and its features. | CO2 | L2 | 7M |
|  | b) | Design a cloud service application with WebRole to demonstrate File Storage. | CO2 | L4 | 7M |
| **Unit-III** | | | | | |
| 6 | a) | List and explain the steps in creating a Virtual Machine with SQL Server in Windows Azure. | CO3 | L3 | 7M |
|  | b) | Design a C# application to Perform Read, Update and Delete operations on SQL Server Database in the Azure Virtual Machine. | CO3 | L4 | 7M |
| **(OR)** | | | | | |
| 7 | a) | What is SQL Azure. Explain the steps in creating SQL Azure database and its features. | CO3 | L2 | 7M |
|  | b) | Design a C# application to Perform Read, Update and Delete operations on SQL Azure Table. Write the table Structure. | CO3 | L4 | 7M |
| **Unit-IV** | | | | | |
| 8 | a) | Explain Relayed messaging service in detail. | CO4 | L2 | 7M |
|  | b) | Design a console application to demonstrate ServiceBus Relay Messaging. | CO4 | L4 | 7M |
| **(OR)** | | | | | |
| 9 | a) | Explain in detail about Microsoft Azure ServiceBus Brokered messaging. | CO4 | L2 | 7M |
|  | b) | Design an application to demonstrate ServiceBus Topic. | CO4 | L4 | 7M |

