Student Name:
University Roll No.:

Printed Pages:01

School of Engineering
Second Theory Sessional Examination
Even Semester (AS: 2024-25)

B. Tech: CSE (IOTBC) [Year: 3rd] [Semester: 6th]

Course Title: Deployment of Cloud
Course Code: ITBC3601

Max Marks: 30
Time: 1*hrs*

Instructions: 1-Mention any assumptions made.
2-Notations have usual meaning.

	SECTION 'A' **Q.N.1. Attempt all parts of the following:**	**Course Objective**	**Marks**
a)	Define Synchronous and Asynchronous callback.	CO3	1
b)	What is the function of a load balancer in master slave architecture?	CO4	1
c)	Write the main purpose of node.js?	CO3	1
d)	What is the role of the hypervisor in a machine?	CO4	1
e)	List IBM Watson services available on IBM Cloud.	CO2	1
	SECTION 'B' **Q.N.2. Attempt any two parts of the following:**	**Course Objective**	**Marks**
a)	Discuss the features and benefits of IBM Cloudant. Explain how REST APIs can be used to interact with the Cloudant database.	CO2	7.5

b)	Describe cloud resource provisioning and monitoring.	CO4	7.5
c)	Explain the role of Docker in containerization and describe the use of Docker Hub in modern application deployment.	CO4	7.5
	SECTION 'C'	**Course Objective**	**Marks**
Q.N.3. Attempt any one parts of the following:			
a)	Explain the architecture of Representational State Transfer (REST).	CO2	10
b)	What are containers? Discuss how IBM Cloud Container Registry is used for managing container images.	CO4	10
c)	What is Kubernetes? Explain the key capabilities of Kubernetes in the context of cloud-native application orchestration.	CO4	10

Table 1: Mapping between COs and questions

COs	Questions Numbers	Total Marks
CO2	Q1 (e), Q2 (a), Q3 (a)	18.5
CO3	Q1 (a, c)	2
CO4	Q1 (b, d), Q2 (b, c), Q3 (b, c)	37

02.05.2025