Student Name: University Roll No.:	Printed Pages: 01
School of Engineering **First Theory Sessional Examination** **Even Semester (AS: 2024-25)** **B. Tech:CSE (IOTBC3)** **[Year: 3rd] [Semester : 6th]**	
Course Title: Blockchain & Distributed Ledger Technology **Course Code: GE34011**	**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 ASIC resistance.	**CO1**	**1**
b)	List any two advantage of blockchain.	**CO1**	**1**
c)	What is cryptography?	**CO1**	**1**
d)	What is Mining?	**CO1**	**1**
e)	Explain the Two General Problem.	**CO1**	**1**
	SECTION 'B' **Q.N.2. Attempt any two parts of the following:**	**Course Objective**	**Marks**
a)	Explain the architecture of Hadoop distributed file system in detail.	**CO1**	**7.5**
b)	What is difference between symmetric & asymmetric key encryption?	**CO1**	**7.5**
c)	Explain the blockchain network & also discuss the different types of blockchain network in detail.	**CO1**	**7.5**
	SECTION 'C' **Q.N.3. Attempt any one parts of the following:**	**Course Objective**	**Marks**
a)	Explain the Byzantine General problem and also discuss its classical solutions for Byzantine fault tolerance.	**CO1**	**10**
b)	Explain about the digital signature & also discuss its application in detail.	**CO1**	**10**
c)	What is blockchain? How Does a blockchain work? Discuss the advantage over conventional distributed database.	**CO1**	**10**

Table 1: Mapping between COs and questions

COs	Questions Numbers	Total Marks
CO1	1(a) 1(b) 1(c) 1(d) 1(e) 2(a) 2(b) 2(c) 3(a) 3(b) 3(c)	57.5

18.03.2025