D1BCS2501 Name: …......................

Reg. No.: ....

FIRST SEMESTER B.Sc. FYUGP EXAMINATION NOVEMBER 2025

(Regular/Improvement/Supplementary)

COMPUTER SCIENCE AND CS & MATHEMATICS (Double Major)

MAJOR

CSC1CJ101: FUNDAMENTALS OF COMPUTERS AND COMPUTATIONAL THINKING

Time: 2 Hrs. **Maximum Marks: 70**

M: Mark BL - Bloom's Taxonomy Level (1 to 6) CO - Course Outcome

Section A: Answer all questions. Each carries 3 marks.
Ceiling: 24 Marks

No.	Question	M	BL	CO
1.	Describe the significance of number systems.	3	2	CO1
2.	Briefly explain octal number system.	3	2	CO1
3.	Describe the functionalities of a chipset.	3	2	CO2
4.	What is a peripheral port? List any three.	3	3	CO2 CO3
5.	Differentiate between RAM and ROM.	3	3	CO3
6.	What is an open-source operating system?	3	3	CO4
7.	What is Booting?	3	3	CO4
8.	Critique the limitations of a purely systematic approach to problem- solving. When might it be necessary to deviate from a structured approach?	3	5	CO5
9.	Create a flowchart to find the maximum of two numbers.	3	6	CO6
10.	State the qualities of a good algorithm.	3	5	CO6

Section B: Answer all questions. Each carries 6 marks.
Ceiling: 36 Marks

No.	Question	M	BL	CO
11.	Describe the concept of digital codes with reference to Excess-3 code and BCD code.	6	2	CO1
12.	What is Graphics Processing Unit? Explain its key features and applications.	6	2	CO1
13.	Describe the concept of Single-Core Processors.	6	2	CO1
14.	Explain about the storage devices used in computer.	6	3	CO3
15.	What is a Language Translator? Explain.	6	3	CO4
16.	What is a memory partition? Describe primary and extended disk partitions.	6	3	CO4
17.	Summarize the key features of the interactions between device driver and kernel.	6	3	CO4
18.	Compare and contrast inductive and deductive reasoning in algorithmic thinking. Give examples.	6	4	CO6

Section C: Answer any one question. Each carries 10 marks. (1 x 10 = 10 marks)

No.	Question	M	BL	CO
19.	Explain the different active and passive components in detail.	10	2	CO2
20.	Apply the concept of algorithms to create a simple recipe for making a sandwich.	10	3	CO5