A1021

Name.....

Register No.....

NAIPUNNYA INSTITUTE OF MANAGEMENT AND INFORMATION TECHNOLOGY (AUTONOMOUS)

FIRST SEMESTER (FYUG) DEGREE EXAMINATION NOVEMBER 2025

INFORMATION TECHNOLOGY

ITY1CJ101 - FUNDAMENTALS OF IT AND COMPUTATIONAL THINKING

Time:Two Hours | Maximum:70 marks

Section A

Answer all questions.
Each question carries 3 marks. Ceiling 24 marks

1. Draw the symbol of a transistor.	CO2
2. What are the components mentioned in Von Neumann basic structure.	CO1
3. Give one example each of inductive and deductive reasoning.	CO4
4. Define the purpose of an operating system.	CO2
5. Write a note on flow chart.	CO4
6. Describe RAPTOR.	CO4
7. What is the main function of the CPU on a motherboard?	CO3
8. Compare APU and GPU.	CO1
9. Define hardware software compatibility.	CO2
10. State the function of a resistor.	

Section B

Answer all questions.
Each question carries 6 marks. Ceiling 36 marks

11. Describe the function of CPU, RAM, and Expansion slots (PCIe) on the motherboard.	CO4
12. Explain the symbols used in flow chart.	CO3
13. Write a short note on dual core processor.	CO1
14. Compare NTFS and FAT.	CO2
15. Briefly explain characteristics of QPU.	CO1
16. Write a short note on booting.	CO2
17. Explain the steps involved in a systematic problem-solving approach.	CO2
18. Convert the following to BCD, XS-3 and Gray code: i) 6 ii) 25 iii) 97	CO1

Turn Over

Section C

Answer any one question
The question carries 10 marks.

19. Explain various steps in operating system installation.	CO4
20. Describe in detail about the four key components of computational thinking.	CO3

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