

D 112277

(Pages : 2)

Name.....

Reg. No.....

**FIRST SEMESTER (CUFYUGP) DEGREE EXAMINATION
NOVEMBER 2024**

Computer Application

BCA 1CJ 101—FUNDAMENTALS OF COMPUTERS AND COMPUTATIONAL THINKING

(2024 Admission onwards)

Time : Two Hours

Maximum : 70 Marks

Section A*Answer all questions.**Each question carries 3 marks.**Ceiling 24 marks.*

1. Convert the binary number 101101 to its decimal, octal and hexadecimal equivalent.
2. Describe the key features of first-generation computers.
3. Define a diode and explain its function in electronic circuits.
4. Mention the uses of expansion slots in motherboard.
5. Define ROM and its role in a computer system.
6. What is the difference between system software and application software ?
7. What is Booting ?
8. Define problem-solving and its significance.
9. Explain Intuition *vs* Precision.
10. What is the use of Raptor ?

Section B*Answer all questions.**Each question carries 6 marks.**Ceiling 36 marks.*

11. Explain the role of John Mauchly and J. Presper Eckert in the development of computing systems.
12. Explain Gray code and Excess-3 code with example.

Turn over

13. Discuss the different types of RAM.
14. Explain the different storage devices available on motherboard.
15. What is operating system ? Explain types of operating system.
16. What are device drivers ? Explain its need.
17. Discuss the role of computer science in modern era.
18. What is the difference between inductive and deductive reasoning ? Provide an example of each.

Section C

*Answer any **one** question.*

The question carries 10 marks.

19. Explain the passive electronic components with definition, symbol and function.
20. Describe the need for algorithms in modern problem-solving, and explain the qualities that define a good algorithm with suitable examples.

(1 × 10 = 10 marks)