

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2023

B.Sec-1<sup>st</sup> Semester

COURSE CODE (CREDITS): 22BS1CI111 (3)

MAX. MARKS: 35

COURSE NAME: Computer Fundamentals

COURSE INSTRUCTORS: Dr. Pankaj Dhiman

MAX. TIME: 2 Hours

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*Note: (a) All questions are compulsory.*

*(b) Marks are indicated against each question in square brackets.*

*(c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems*

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Q1. Discuss the characteristic features of each computer generation, highlighting technological advancements and key innovations that distinguish one generation from another.

[CO-1][5 Marks]

Q2. Detail the basic organization of a computer system, covering components such as the central processing unit (CPU), memory, and input/output devices. Explain how these components interact to execute instructions.

[CO-2][4 Marks]

Q3. Differentiate between various types of memory used in a computer system, such as RAM, ROM, and cache. Explain the specific roles each type plays in supporting computer operations.

[CO-3][8 Marks]

Q4. Explain in detail the functions performed by an operating system. Discuss its role in resource management, process scheduling, and providing a user interface. Illustrate how these functions contribute to system efficiency

[CO-4][8 Marks]

Q5. Discuss the challenges associated with multi-programming in operating systems.

[CO-4][10 Marks]