

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2024

B.Tech-VI Semester (BI)

COURSE CODE(CREDITS): 18B11BI612 (3)

MAX. MARKS: 15

COURSE NAME: Computer Aided Drug Design

COURSE INSTRUCTORS: Dr. Raj Kumar

MAX. TIME: 1 Hour

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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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Q. Rational drug design is advantageous than conventional high throughput screening approaches. Justify the statement. (CO-1,2) [2]

Q. Describe the process of HIV-1 entry into target cells. (CO-1) [3]

Q. Discuss the role of specific and non-specific HIV-1 inhibitors. (CO-1) [2]

Q. Outline the stepwise process of a structure-based drug design project for identification of hit compounds? (CO-1,2) [3]

Q. Short notes: (CO-1,2) [1 × 5]

- a) Hit and Lead compounds
- b) HIV-polyprotein
- c) IND and NDA
- d) Drug repurposing
- e) Clinical latency