(T-1297) Roll No. .....

ID—220-EL-111621

B. Tech. EXAMINATION, 2023

(First Semester)

COMPUTER SCIENCE AND ENGINEERING
(CYBER SECURITY)

Code : BSP-101

Physics

Time : 3 *Hours* *Maximum Marks :* 70

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Unit I has seven questions. All the questions are compulsory. All the questions carry 2 marks. Unit II has six questions, *four* questions need to be attempted from this Unit. All the questions have two parts of 7 marks each.

Unit I

1. Which types of semiconductors are used for optoelectronic applications?

6. (a) Explain Photovoltaic effect. Discuss the working principle of photovoltaic cell with the help of suitable diagram. 7

(b) What do you understand by the term density of states ? Derive the expression for density of states of quantum wire. 7