



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act 1956)

School of Computer Science and Engineering

Winter Semester 2024-25

CAT I

SLOT: E2+TE2

Programme Name & Branch: B.Tech (CSE)

Course Name & Code: Wearable Computing BCSE315L

Class Number (s): VL2024250501820

Faculty Name (s): Jafar Ali Ibrahim.S

Exam Duration: 90 Min.

Maximum Marks: 50

General instruction(s):

Course Objectives (CO)

CO1: To explore Wearable components and building blocks of Wearable Computing.

CO2: To enumerate the details of Body Sensor Networks (BSN).

Answer all the questions

Q. No.	Question	Max Marks	CO	BL
1.	Explain the concept of Wearable Computing and discuss the history of its development.	10	CO1	BL1
2.	Explain the role of the Internet of Things (IoT) in enabling wearable technology. Highlight key benefits that IoT brings to wearables.	10	CO1	BL3
3.	Describe the various types of sensors used in wearable devices and discuss their role in collecting bio-physiological signals.	10	CO2	BL2
4.	Explain the concept of Bluetooth Low Energy (BLE) in wearable computing. Discuss its advantages over traditional Bluetooth technology.	10	CO2	BL2
5.	Discuss the architecture of a Body Sensor Network (BSN) in the context of wearable health applications for monitoring bio-physiological signals. How do power consumption and communication standards influence the design of a BSN?	10	CO2	BL3