

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Sc.DS - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - VI

22UDSCT6009 - Internet of Things

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Explain the key research topics and innovation directions in IoT.
2. Prepare the main design principles and capabilities needed for an IoT architecture.
3. Classify the IoT reference model and its different architectural views.
4. Explain the role of IoT in the oil and gas industry and its benefits.
5. Illustrate the importance of trust and data aggregation in IoT security.
6. Predict the role of data management, security, and privacy in IoT.
7. Explain how does IoT contribute to value creation in industries. Give examples.
8. Ascertain the key components and features of an IoT reference architecture.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Explain IoT vision, research directions, and future internet technologies.
10. Compute the efficiency and cost benefits gained by transitioning from M2M to IoT-enabled solutions.
11. Diagnose the key components and their interactions within IoT reference model.
12. Explain the opinions on IoT Application and value for Industry in the field of Home Management.
13. Conclude the potential risks posed by data breaches, unauthorized access, and cyber threats in IoT ecosystems.
