

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.Cs with DS - END SEMESTER EXAMINATIONS - NOVEMBER 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. Predict the impact of data management on IoT applications and performance.
2. Apply the IoT reference model to a smart home and explain each layer's role.
3. Illustrate any four industrial IoT applications and analyze their benefits.
4. Interpret privacy concerns in embedded IoT (e.g., wearables) and evaluate user impact.
5. Examine the IoT value chain and explain its global significance.
6. Classify and contrast the functional and information views of IoT architecture and their design contributions.
7. Describe IoT applications in e Health and assess their impact on healthcare.
8. Evaluate security challenges in IoT smart cities and suggest mitigation strategies.

### Section C

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

9. Distinguish the main issues in IoT data collection, communication, and management, and apply suitable solutions.
10. Explain the emerging IoT industrial structure and predict how global value chains and information monopolies shape it.
11. Critique the deployment and operational views of IoT reference architecture and justify their role in IoT application design.
12. Explore the IoT applications in the retail and oil gas industries, and apply the concepts of big data and serialization to explain how they drive value creation.
13. Devise strategies to ensure security, privacy, and trust in IoT applications on embedded platforms, using smart city examples to illustrate your approach.

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