

**DIPLOMA IN SMART CITY DEVELOPMENT
AND MANAGEMENT (DSCDM)**

Term-End Examination

December, 2022

**MIO-002 : SMART TECHNOLOGIES (HARDWARE
AND SOFTWARE)**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **seven** questions. All questions carry equal marks.

1. Explain any two applications of IoT in healthcare sector. 10
2. What is Advanced Metering Infrastructure (AMI) ? Discuss the benefits of AMI. 10
3. Describe the components of Blockchain technology ? How is Blockchain technology used in implementation of BITCOIN ? 10
4. What are the areas in healthcare where blockchain applications can be used ? Explain blockchain-based remote patient management. 10

5. What is Artificial Intelligence (AI) ? Write at least five advantages and disadvantages of AI. 10
 6. What is Machine Learning ? Explain supervised learning, with an example. 10
 7. What is Home Energy Management System (HEMS) ? Discuss with an example. 10
 8. What is a Sensor ? List any four types of sensors and explain their features. 10
 9. Discuss the role of data analytics in smart cities. 10
 10. Explain the Data processing in SCADA. 10
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