



M.Sc. IV Semester Degree Examination, October - 2023

COMPUTER SCIENCE

Internet of Things

(NEP)

Time : 3 Hours

Maximum Marks : 70

Note : Answer *any five* questions **Q. No. 1 is compulsory.**

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| 1. | (a) | Define IoT. Enlist various IoT applications area with examples. | 7 |
| | (b) | Explain various IoT communication models with a neat diagram. | 7 |
| 2. | (a) | Discuss on steps involved in IoT system design methodology. | 7 |
| | (b) | Briefly explain IoT level-1 deployment model with a neat diagram. | 7 |
| 3. | (a) | Define packages and give a brief introduction on pandas in Python programming. | 7 |
| | (b) | Categorize the types of data types in Python programming. | 7 |
| 4. | (a) | Discuss on basic building blocks of an IoT device. | 7 |
| | (b) | Write a Python program for controlling an LED with a switch. | 7 |
| 5. | (a) | Explain Web Application Messaging Protocol session between client and router. | 7 |
| | (b) | Explain Hadoop Map Reduce programming model with a neat diagram. | 7 |
| 6. | (a) | Considering weather monitoring system, forest fire detection, Home automation, Pollution monitoring application justify which deployment model would be suitable and why ? | 7 |
| | (b) | Explain file handling operations in Python programming. | 7 |
| 7. | (a) | List out various Raspberry Pi frequently used commands with its function and a suitable example. | 7 |
| | (b) | What is Amazon DynamoDB ? Describe an application that can benefit from AmazonDB. | 7 |
| 8. | | Write short notes on : | |
| | (a) | IoT enabling technologies | 5 |
| | (b) | Cloud storage models | 5 |
| | (c) | Linux OS for Raspberry Pi | 4 |

