

A-1315

Total Pages : 3

Roll No.

MCA-E11/MCS-E11

Master of Computer Application (MCA)

Introduction to Internet of Things

Examination February, 2026

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

(Long Answer Type Questions) (2×19=38)

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

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(1)

P.T.O.

1. Define IoT. Draw IoT stack and explain IoT layers in detail.
2. Explain with example, how IoT is incorporated in Smart grid Technology ?
3. Discuss cloud computing and its architectural framework using diagrams.
4. Define Arduino and its application. Explain Integration of Sensors and Actuators with Arduino.
5. What is Raspberry Pi ? Explain with example Implementation of IoT with Raspberry Pi.

Section–B

(Short Answer Type Questions) (4×8=32)

Note :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. What is Machine to Machine communication M2M ?
List out six pillars of M2M.
2. Explain different types of Communication Protocols in IoT.

3. Explain in detail SON for IoT.
4. Explain Industrial IoT with example.
5. What is sensor ? Draw the WSN middleware architecture
6. What are the issues with IoT standardization ?
7. Explain, what are the applications of Python programming ?
8. Explain in detail smart application of IoT for healthcare.
