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## MCS-E11

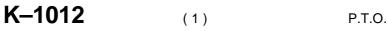
# MCA IVth Semester Examination Dec., 2023 INTRODUCTION TO INTERNET OF THINGS

Time : 2 Hours][Max. Marks : 70Note :- This paper is of Seventy (70) marks divided into<br/>two (02) Sections 'A' and 'B'. Attempt the questions<br/>contained in these Sections according to the detailed<br/>instructions given there in. Candidates should limit<br/>their answers to the questions on the given answer<br/>sheet. No additional (B) answer sheet will be<br/>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.



- What are enchanted objects ? Explain with examples how the technology has always been associated with magic.
- 2. What are the benefits of using IPV6 in IOT ? Explain the use of TCP and UDP ports. Give examples.
- 3. Which sensors are used in weather monitoring system ? Which IOT level is used for weather monitoring system ?
- 4. Illustrate Python programming. Explain Raspberry Pi with Implementation of IoT with Raspberry Pi.
- 5. What is Data Analytics ? How it is implemented in Data Handling ?

#### 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 fog computing and its role in the development of smart applications ?
- 2. What are the applications of SDN ?
- 3. What lot ? What are the key application functionalities of IoT system ?



- 4. How loT is used in smart cities ?
- 5. Explain Machine-to-Machine Communication.
- 6. Define Integration of Sensors and Actuators with Arduino.
- 7. What is the use of Sensor-Cloud ?
- 8. Why fog computing is called fogging ?

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