

Seat No.	
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MCA Commerce (Semester - IV) (CBCS)
Examination, December-2024

Internet of Things

Sub. Code : 83617

Day and Date : Wednesday, 18/12/2024

Total Marks : 70

Time : 2:30 p.m. to 05:30 p.m.

Instructions : 1) Figures to the right indicate full Marks.

2) Questions No. 1 and Question No. 7 are compulsory. Solve any three questions from questions from Q. No. 2 to Q. No. 6

Q1) Multiple Choice Questions

[8]

- 1) How many numbers of elements in the Open IoT Architecture?
 - A) 3 elements
 - B) 7 elements
 - C) 8 elements
 - D) 6 elements
- 2) Which of the following is not an IoT platform?
 - A) Amazon Web Services
 - B) Microsoft Azure
 - C) Salesforce
 - D) Flipkart
- 3) An IoT network is a collection of ____ devices.
 - A) Signal
 - B) Machine to machine
 - C) Interconnected
 - D) Network to Network
- 4) Which layer is used for wireless connection in IoT devices?
 - A) Application layer
 - B) Network layer
 - C) Data link layer
 - D) Transport layer

- 5) IoT gateway must provide _____.
A) Protocol abstraction
B) Data storage
C) Security with hardware
D) Simple and fast installation
- 6) What language is a typical Arduino code based on?
A) Assembly Code B) Python
C) Java D) C/C++
- 7) What is the use of the ESP8266 WiFi Module?
A) Network Provider
B) Switches circuits
C) Evaluates air pressure
D) Monitors Motion
- 8) What is the role of Cloud in smart grid architecture of IoT ?
A) Security B) Collect data
C) Manage data D) Store data
- Q2) A) Explain simplified IoT Architecture. [7]
B) Describe various platform and challenges in IoT. [7]
- Q3) A) Justify five different types of sensors with an example. [7]
B) Describe with example basic structure of Arduino Programming. [7]
- Q4) A) Elaborate general commands for RaspberryPi. [7]
B) List and Explain the role of Big Data in IoT. [7]
- Q5) A) Explain different features of RaspberryPi. [7]
B) Describe wireless sensor networks with an example. [7]

- Q6) A) Explain ESP8266 chip for application of IoT. [7]
B) Enlist and explain the categories of IoT application protocols and their transport methods. [7]

Q7) Write Short Notes on (Any Four)

[20]

- A) Cloud Computing in IoT
 - B) IoT communication technologies
 - C) RFID
 - D) Common application of Machine learning in IoT
 - E) Basics of Embedded C Programming
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