

M.Sc. - II (Computer Science) (NEP Pattern) Semester-III  
**03MSCCS04.3 - Major Elective-III Paper-V : Internet of Things (IOT)**

P. Pages : 2

Time : Three Hours



**GUG/S/25/15972**

Max. Marks : 40

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- Notes :
1. All the questions are compulsory and carry equal marks.
  2. Draw net and labelled diagram wherever necessary.
  3. Avoid vague answer and write answer relevant and specific to question only.

**Either:**

1. a) Define IoT. Explain the concept of IoT. 4
- b) Write a advantage of IoT. 4

**OR**

- c) Explain the IoT system Architecture. 4
- d) Write down the characteristics of IoT. 4

**Either:**

2. a) Write a note on: 4
  - i) Arduino UNO
  - ii) ESP 32
- b) Explain the types of IoT board categories. 4

**OR**

- c) Explain the following: 4
  - i) Raspbeny Pi
  - ii) Banana Pi
- d) Explain the open source tools. 4

**Either:**

3. a) What is Protocol? Write down a role of protocol. 4
- b) Explain the following: 4
  - i) WiFi
  - ii) Bluetooth

**OR**

c) What is Sensors? Explain Analog Sensors. 4

d) Explain in detail of Human attention actuators. 4

**Either:**

4. a) What are the Benefits of cloud for IoT projects. 4

b) Write a note on: 4

i) IBBM Watson IoT

ii) ARM Pelion

**OR**

c) Write a note on: 4

i) ESP 8266

ii) NodeMCU.

d) Explain in detail of creating a blinking of five LED Wave. 4

5. Attempt all the questions:

a) Write a note on IoT Devices. 2

b) What is Curl? Explain. 2

c) Write note on LTA 4G. 2

d) Explain Google cloud IoT. 2

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