

**OEC-1 / ET705M-1 - Internet of Things**

P. Pages : 1

Time : Three Hours



**GUG/W/23/14253**

Max. Marks : 80

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- Notes :
1. All questions carry marks as indicated.
  2. Assume suitable data wherever necessary.
  3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) What is IOT? Explain in details the framework of IOT. **8**  
b) Discuss in details about the things in IOT and the identification of IOT. **8**

**OR**

2. a) Write a short notes on. **8**  
i) M2M  
ii) Software defined network (SDN).  
b) Elaborate in detail about enabling technologies in IOT with suitable diagram. **8**

3. a) Discuss TCP/UDP port in detail also describe TCP/IP protocol suite. **8**  
b) Describe SNMP and write the limitation of SNMP. **8**

**OR**

4. a) Describe network access layer and internet access layer in TCP/IP protocol suite. **8**  
b) Write a short note on physical addressing in IOT also compare it with logical addressing. **8**

5. a) Discuss pneumatic and electrical actuators in details with suitable diagram. **8**  
b) Illustrate wireless sensor network in detail and also write it's advantages and its advantages. **8**

**OR**

6. a) Describe identification in IOT, distinguish between RFID and NFC. **8**  
b) Describe node connecting nodes also explain sensor node in detail. **8**

7. a) Write a short notes on Raspberry Pi board along with its setup. **8**  
b) Discuss in details about variable scope in python. **8**

**OR**

8. a) Discuss in detail about device interoperability and user interoperability. **8**  
b) Write features and types of Arduino board and write its setup and IDE. **8**

9. a) What is Big Data? Explain types of data analytics compare qualitative analysis and quantitative analysis with example. **8**  
b) Discuss analyze pass. SaaS, and IaaS in detail and also write differences between them. **8**

**OR**

10. a) Describe SDN for IOT in detail along with suitable diagram. **8**  
b) Write a short notes on Healthcare in IOT also write application for it. **8**

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