

OEC-1 / ET705M-1 - Open Elective-III : Internet of Things

P. Pages : 2

Time : Three Hours



GUG/S/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) Define Internet of Things and explain its characteristics. **8**
- b) Describe physical and logical design of Internet of things. **8**

OR

2. Write short note on- **16**
- i) Enabling technology in IoT
 - ii) Identification in IoT
 - iii) Things in IoT
3. a) Compare IPv4 and IPv6 on minimum 8-points. **8**
- b) Write short note on- **8**
- i) SSH
 - ii) SMTP

OR

4. a) Write short note on- **8**
- i) MAC addressing
 - ii) IP addressing
- b) What is anonymous FTP? **4**
- c) How does UDP compute header checksum. **4**
5. a) Compare WSN and IoT. **8**
- b) What are the different types of actuators used in IoT explain in brief. **8**

OR

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| 6. | a) Compare sensor and Actuator in the context of IoT. Explain humidity sensor. | 8 |
| | b) How are RF Id used with IoT devices. | 4 |
| | c) Explain characteristic of sensor. | 4 |
| 7. | a) Describe implementation of IoT with Raspberry Pi. | 8 |
| | b) Summarize integration of sensors and Actuators with Arduino. | 8 |

OR

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| 8. | a) Define interoperability? Explain how interoperability is important in IoT. | 8 |
| | b) Explain Data types, function, variable scope in IoT. | 8 |
| 9. | a) What is Big data? Differentiate Qualitative and Quantitative Analytics. | 8 |
| | b) Write short note on- | 8 |
| | i) Smart City | |
| | ii) Smart Home | |

OR

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| 10. | Write short note on- | 16 |
| | i) Fog computing | |
| | ii) Smart Grid | |
| | iii) Cloud computing | |
| | iv) Activity monitoring in IoT. | |
