

STESC104 - Introduction to Internet of Things (IOT)

P. Pages : 2

Time : Three Hours



GUG/W/24/16155

Max. Marks : 80

- Notes :
1. All questions carry equal marks.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Diagrams and Chemical equation should be given wherever necessary.
 5. Illustrate your answers wherever necessary with the help of neat sketches.
 6. All questions are compulsory.

1. a) Elaborate in detail about enabling technology in IoT with suitable example. **8**
- b) Write short note on **8**
- i) Identifiers of IoT
- ii) M2M

OR

2. a) What is IoT? Explain its characteristics applications and features. **8**
- b) Discuss physical and logical design of IoT. **8**
3. a) Explain wireless sensor network in detail. **8**
- b) Write short note on **8**
- i) Arduino Ide board
- ii) WSN node.

OR

4. a) Explain IoT development board types. **8**
- b) Write short note on **8**
- i) Networking node
- ii) Internet of things node

5. a) Discuss the Modbus and why it is important? 8
- b) Write short note on 8
- i) BLE
- ii) Bacnet

OR

6. a) Explain Z-Wave in detail. Explain its features. 8
- b) Describe the IEEE 802.15.4 standard and its applications in IoT. 8
7. a) What is CoaP? How does it work? 8
- b) Explain the role of IPv6 in IoT connectivity. 8

OR

8. a) Describe the 6LoWPAN protocol with its features and advantages. 8
- b) Discuss different protocols and age connectivity in IoT. 8
9. a) Describe how environment can be more protected with the help of IoT. 8
- b) How IoT is useful in healthcare and medical sector? 8

OR

10. a) What are the future trends and opportunities for IoT applications? 8
- b) What impacts IoT have on agriculture sector? 8
