Register No: ………………………   Name: ....

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)
(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)
EIGHTH SEMESTER B.TECH DEGREE EXAMINATION(R), MAY 2024
Electronics and Communication Engineering
(2020 SCHEME)

Course Code	:	**20ECT456**	
Course Name	:	**Internet of Things**	
Max. Marks	:	**100**	**Duration:3 Hours**

PART A
(Answer all questions. Each question carries 3 marks)

1. Ouline the wireless sensor networks enabling IoT.

2. State the defenitions of IoT.

3. Recall any two functional differences between M2M and IoT.

4. List various types of sensors used in IoT.

5. compare the imrovements of IEEE 802.15.e standard from the IEEE 802.15.4.

6. Outline the significance of RPL.

7. List the types of cloud deployment models.

8. outline the use of ThinkSpeak platform.

9. illustrate the significance of smart connected lighting.

10. Outline the significance of data layer in IoT smart city.

PART B
(Answer one full question from each module, each question carries 14 marks)
MODULE I

11. Explain communication model and communication API in detail.   14

OR

12. Explain the logical design of IoT in detail.   14

MODULE II

13. i) Explain Network Function Virtualization with necessary diagrams.   7
    ii) Explain Software Define Networking with necessary diagrams.   7

OR

14. Illustrate the Smart object functions in detail along with the recent trends.   14

MODULE III

15. Explain the specifications and significance of LTE-M and NB IoT protocols in detail.   14

OR

16. Contrast IEEE 802.15.4 and zigbee to highlight the distiction of zigbee development details.   14

MODULE IV

17. Explain the privacy and security issues in IoT in detail.   14

OR

18. Explain in detail about various cloud service models.   14

MODULE V

19. Outline the pin details of Raspberry Pi board and explain functionality with diagram.   14

OR

20. Apply the python coding to program Raspberry Pi board to control a LED.   14

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