



BT – 026

VII Semester B.Tech. (CSE/ISE) Degree Examination, January 2022
(CBCS Scheme)
18CIPC701 : INTERNET OF THINGS

Time : 3 Hours

Max. Marks : 100

- Instructions :** 1) Q. No. 1 MCQ is **compulsory**.
2) Q. No. 4 and Q. No. 7 are **compulsory**.
3) Answer **any three** Q. No. 2 or Q. No. 3, Q. No. 5 or Q. No. 6, Q. No. 8 or Q. No. 9.

1. Answer the multiple choice :

(1×15=15)

1. What is the role of Bigdata in smart grid architecture of IOT ?
 - a) Collect data
 - b) Security
 - c) Store data
 - d) Manage data
2. _____ empowers IOT by bringing together everyday object.
 - a) Intelligent
 - b) Connectivity
 - c) Dynamic nature
 - d) Enormous scale
3. Which instruction set architecture is used in Raspberry Pi ?
 - a) X86
 - b) MSP
 - c) AVR
 - d) ARM
4. Which challenge comes when we use many devices on the same network ?
 - a) Signalling
 - b) Security
 - c) Presence detection
 - d) Power consumption
5. Diagnostics service for cars
 - a) MIPS
 - b) Auto Bot
 - c) IOT Assistant
 - d) IOT
6. Which possibility automatically communicator with other vehicles ?
 - a) Transportation
 - b) Energy and utilities
 - c) Automotive
 - d) Connected supply chain
7. Which protocol is used to link all the devices in the IOT ?
 - a) HTTP
 - b) UDP
 - c) Network
 - d) TCP/IP

P.T.O.



8. Which programming language is used by Arduino IDE IOT software for writing codes ?
 - a) Python
 - b) Java
 - c) C/C++
 - d) Javascript
 9. In Raspberry Pi IOT programming, which function is used to send a tweet ?
 - a) tweet()
 - b) update – status()
 - c) status()
 - d) update()
 10. IOT security management includes
 - a) Data storage
 - b) Protocol abstraction
 - c) Simple and fast installation
 - d) Security with hardware
 11. _____ allows us to control electronic components.
 - a) REST ful API
 - b) COAP API
 - c) HTTP
 - d) MQTT
 12. The availability of _____ is the cloud services provider who will host video and data or endusers.
 - a) Devices
 - b) Memory
 - c) Security System
 - d) Objects
 13. _____ will enable the humans to access, control and manage the operation.
 - a) IOT
 - b) Bigdata
 - c) Network
 - d) Communication
 14. _____ performs two functions toward the delivery of the services.
 - a) Global scheduler
 - b) Local scheduler
 - c) Device scheduler
 - d) IOT scheduler
 15. _____ service discovers the virtual sensors ability.
 - a) Register
 - b) Resource discovery
 - c) Unregister
 - d) Suspend
2. a) Discuss the various functional blocks in an IOT.
b) Describe an example of IOT service that uses websocket – based communications.

OR

9

8



3. a) Determine the IOT-levels for designing structural health monitoring system. 10
- b) Describe IOT enabling technologies. 7
4. a) What are differences between SDN and NFV ? 7
- b) Describe how NFV can be used for virtualizing IOT devices. 5
- c) Describe the roles of YANG and Trans API modules in device management. 5
5. a) Explain steps involved in IOT system design methodology. 9
- b) What is the difference between a python module and a package ? 8

OR

6. a) Describe a use case of python dictionary. 9
- b) Describe entities, objects and concepts in the domain of IOT system to be designed. 8
7. a) How is Raspberry Pi different from a desktop computer ? 10
- b) What is the use of SPI and I2C interfaces on Raspberry Pi ? 7
8. a) What is the difference between a xively data stream and a channel ? 9
- b) Describe the use of Amazon Kinesis for IOT. 8

OR

9. a) Describe the architecture of a Django application. 7
 - b) What does a MapReduce Job comprise of ? 5
 - c) What are the uses of messaging queues ? Discuss the message format supported by amazon SQS. 5
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