TCS–331

B. TECH. (CSE) (THIRD SEMESTER) END SEMESTER EXAMINATION, Jan., 2023

FUNDAMENTAL OF IOT

Time : Three Hours

Maximum Marks : 100

Note : (i) All questions are compulsory.

(ii) Answer any *two* sub-questions among (a), (b) and (c) in each main question.

(iii) Total marks in each main question are **twenty.**

(iv) Each sub-question carries 10 marks.

1. (a) Explain IoT architecture in detail. (CO1)

   (b) What do you understand by IoT ? Write down its applications. (CO1)

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(c) Explain different frameworks of IoT.

(CO1)

2. (a) Describe security and privacy in IoT.

(CO2)

(b) What do you understand by sensor technology and satellite technology ?

(CO2)

(c) How does identification take place in IoT object ? Explain with the help of an example. (CO2)

3. (a) Explain WSN with its architecture. (CO3)

(b) Explain routing protocols in WSN. Also explain Web of Things. (CO3)

(c) What is RFID ? Explain the principle of RFID. (CO3)

4. (a) Explain data synchronization in IoT.

(CO4)

(b) What is clustering ? Explain in detail.

(CO4)

(c) What is federated identity ? Explain user-centric identity management.   (CO4)

5. (a) How IoT is used in home automation ? Explain.   (CO5, CO6)

(b) Explain layered attacker model in IoT.

(CO5, CO6)

(c) What is threat analysis in IoT ? Explain in detail.   (CO5, CO6)

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