

TCS/TIT-604

B. TECH. (CS/IT) (SIXTH SEMESTER) MID SEMESTER EXAMINATION, 2019

INTERNET OF THINGS

Time : 1 : 30 Hours

Maximum Marks : 50

Note : (i) This question paper contains two Sections.

(ii) Both Sections are compulsory.

Section—A

1. Fill in the blanks/True-False : (1×5=5 Marks)
 - (a) Father of IoT _____.
 - (b) Tree topology is also called as _____ topology.
 - (c) The key of IoT is _____.
 - (d) Internet connectivity is not required in IoT. (True/False)
 - (e) M2M communication doesn't include wireless communication. (True/False)
2. Attempt any *five* parts : (3×5=15 Marks)
 - (a) What do you understand by the term IoT ?

(2)

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- (b) Explain the 3.0 view of IoT.
- (c) Explain RFID.
- (d) What is M2M communication ?
- (e) Briefly explain the components of IoT.
- (f) Explain WSN.

Section—B

3. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
- (a) Give a detailed explanation about SCADA.
 - (b) Explain IEEE 802.15.4 with its architecture.
 - (c) Write short notes on the following :
 - (i) Middleware of IoT
 - (ii) BACNet protocol
4. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
- (a) Explain the four pillars of IoT.
 - (b) Differentiate between Web 1.0, Web 2.0 and Web 3.0 and give a suitable example.
 - (c) What do you understand by the concept of IoT ? Briefly describe the functioning of IoT with an example.

(3)

5. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
- (a) Give a detailed explanation about ZigBee protocol.
 - (b) Define the following :
 - (i) M2M and WSN protocol
 - (ii) SCADA and RFID protocol
 - (c) Explain the various applications of IoT.

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