CLASS: MTECH/PRE-PHD   SEMESTER : I/NA
BRANCH: CIVIL/CAAD/EEE/ECE/MECH/CS/AMS/PRE-PHD   SESSION : MO/18

SUBJECT: IT518 INTERNET OF THINGS

TIME: 3 HRS.   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)   Elaborate IoT architecture explaining the asset, resource and communication layers.   [5]
Q.1(b)   Point out the different types of devices which are important for IoT domain model.   [5]

Q.2(a)   For COAP explain the following interactions with example: a) Request - response b) Dealing with   [5]
         packet loss.
Q.2(b)   For the Bluetooth protocol explain: a) the method of connection establishment b) modes of   [5]
         operation.

Q.3(a)   Discuss the components of a Zigbee network? Explain the formation of a Zigbee network.   [5]
Q.3(b)   Explain REST architectural style. Apply it for an example of Request – response.   [5]

Q.4(a)   What is a stanza in XMPP? Illustrate with example message, presence and IQ stanza.   [5]
Q.4(b)   Discuss control messages in RPL and apply them to make a DODAG formation.   [5]

Q.5(a)   Analyse the improvement in security due to adoption of decentralization in IoT?   [5]
Q.5(b)   Justify that interoperability is a must for IoT applications.   [5]

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