Total No. of Questions: 6] SEAT No.: P1340 [Total No. of Pages: 1 BE/Insem/APR-211 **B.E.** (E & TC) WIRELESS SENSOR NETWORK (2015 Pattern) (Elective - IV) (Semester - II) Time: 1 Hour] [Max. Marks: 30 Instructions to the candidates: 1) Neat diagrams must be drawn wherever necessary. 2) Figures to the right indicate full marks. **Q1**) a) What is Wireless Sensor Network? Explain architecture of WSN. [6] b) What are various types of Sensor Network? [4] OR **Q2**) a) Explain various hardware components of sensor node with the help of diagram. [6] Explain following parameters with reference to operating system of WSN.[4] **b**) i) Memory Management ii) Interrupts **Q3**) a) What are metrics of MAC protocol and explain algorithm for TDMA MAC. [6] Explain properties of Wireless Link. [4] b) OR **Q4**) a) What are different Error Control Methods? Explain with examples. [6] Write short note on CSMA. [4] b) **Q5**) a) Draw & explain the protocol stack of WSN. [6] Explain Low rate WPAN protocol. [4] b) OR **Q6**) a) Compare BLE and ANT. What are the advantages of ANT over BLE?[6] b) Explain cross-layer protocol in WSN. [4]

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