

Duration: 3hrs

[Max Marks:80]

- N.B. :** (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Assume suitable data, if required and state it clearly.

- 1** Attempt any FOUR **[20]**
- a Explain wireless network architecture.
 - b Introduce UWB with its working.
 - c Discuss the exponential backoff algorithm used in WLAN.
 - d Write short note on “IEEE 802.16 standard”.
 - e What is mobile adhoc network? Highlight on MAC protocols.
- 2**
- a Describe WBAN architecture with diagram. **[10]**
 - b Explain Bluetooth security features and security levels with proper diagrams. **[10]**
- 3**
- a Explain zigbee network components and network topologies. **[10]**
 - b Explain RFID technology with radio specifications and architecture. **[10]**
- 4**
- a What are the factors influencing design of Wireless Sensor Network. Describe the components of a sensor node. **[10]**
 - b Draw the suitable diagrams for the downlink and uplink link budgets for GSM 1800 and give their equations of signal received(S) and noise (N). **[10]**
- 5**
- a Explain different planning and designing phases in Wireless Networks. **[10]**
 - b Discuss the classifications MANET routing protocols. **[10]**
- 6**
- a Compare main features of IEEE 802.11 a,b,i and n. **[10]**
 - b Explain the framework and architecture of IoT. **[10]**
