

[Time: 3 Hours]

[Marks: 80]

- N.B:
1. Question.No.1 is compulsory.
 2. Solve any three from remaining questions.
 3. Assume suitable data if required.

- Q. 1 a) What are the designing considerations for WSN? (05)
b) Explain challenges of MAC Protocols in WSN. (05)
c) Compare WSN, CR based WSN and Nano WSN. (05)
d) Explain the working of UDP protocol. (05)
- Q. 2 a) Draw the protocol stack and explain integration of MANET and cell network. (10)
b) Explain any reactive routing protocol with diagram. (10)
- Q. 3 a) Compare WLAN, WPAN and WBAN. (10)
b) Explain any two variations in LEEACH Protocol with their advantages and shortcomings. (10)
- Q. 4 a) What is Nano sensor network? Explain any one application in detail. (10)
b) What are the designing considerations for Routing Protocol in WSN? (10)
- Q. 5 a) What are the different types of broadcasting algorithms? Explain any one detail. (10)
b) Draw the component of WSN architecture and explain each term in detail. (10)
- Q. 6 Write Short Notes on Following:
- a) CR Based WSN (05)
 - b) ZRS Protocol (05)
 - c) UDP Protocol (05)
 - d) Integrating IP with WSN (05)