

**Roll No.....**  
**Total No. of Questions: [09]**

**Total No. of Printed Pages: [1]**

**B. Tech CSE (Sem: 7<sup>th</sup>)**  
**ADHOC AND SENSOR NETWORKS**  
**Subject Code: BCSED1-714**  
**Paper ID: [18111142]**

**Time: 03 Hours** **Maximum Marks: 60**

**Instruction for candidates:**

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

**Section – A** **(2 marks each)**

Q1. Attempt the following:

- a) What do you mean by handoff?
- b) Why real-time MAC protocols are used?
- c) Define S-MAC protocol.
- d) What is the importance of table-driven protocols?
- e) List any two design issues for routing protocols.
- f) What is use of MACAW protocol?
- g) Write the significance of ultrawide bandwidth technology.
- h) In which situation, flooding protocols are used?
- i) What is single-sink multihop WSN?
- j) Write the full form of PEGASIS protocol.

**Section – B** **(5 marks each)**

- Q2. Discuss various issues in Adhoc wireless networks.
- Q3. How contention based protocols work?
- Q4. What is the importance of power aware routing protocols?
- Q5. Why AODV protocol is used?
- Q6. Discuss various applications of ZigBee technology.

**Section – C** **(10 marks each)**

- Q7. Draw and explain node and network architecture of WSN.
- Q8. Describe LEACH IEEE 802.15.4 MAC protocol in detail.
- Q9. Write and explain location based routing protocols.