

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

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

**B.Tech. (ECE) (Semester – 6<sup>th</sup>)**  
**COMPUTER COMMUNICATION NETWORKS**  
**Subject Code: BECES-1602**  
**Paper ID: [18111328]**

**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) Explain the term ‘data communication’.
- (b) Explain different data flow directions.
- (c) Explain Wireless networking issues and standards.
- (d) Write about different protocols and standards.
- (e) Describe different layers of OSI model.
- (f) Write about different handoff strategies.
- (g) What are the goals and application of computer network?
- (h) Differentiate between Circuit and Packet Switching.
- (i) Explain speed and data security in WWAN.
- (j) How does VANETs work.

**Section – B** **(5 marks each)**

- Q2. What is the advantage of improving coverage and capacity in cellular systems.
- Q3. What is the difference between wired LAN and wireless LAN?
- Q4. Discuss various applications of Wireless sensor networks.
- Q5. What are the advantages and disadvantages of various topologies?
- Q6. Compare various cellular network features.

**Section – C** **(10 marks each)**

- Q7. Discuss various WLAN protocols for Physical layers.
- Q8. Explain in detail TCP/IP reference model.
- Q9. What is the concept of Frequency reuse in Wireless system design.