MANIPAL UNIVERSITY

FIRST SEMESTER MSc. TECH (EMBEDDED SYSTEMS) DEGREE EXAMINATION – MAY 2015

SUBJECT: MST 509 – DATA COMMUNICATION

Tuesday, May 05, 2015

Time: 10:00 – 13:00 Hrs.   Max. Marks: 100

✍ **All the questions carry equal marks.**

1. Data communications and networking for today's enterprise.

2. Write a short note on wireless propagation.

3. Differentiate between guided media and unguided media.

4. Explain twisted pair guided transmission medium.

5. Explain sky wave propagation and line-of-sight propagation.

6. Write a short note on B8ZS or HDB3.

7. Discuss quadrature amplitude modulation technique.

8. What is the difference between QPSK and offset QPSK?

9. Explain frequency division multiplexing.

10. Explain how synchronous time division multiplexing (TDM) works.