SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, APRIL 2017 Computer Science Engineering

CS/IT 14 604—COMPUTER NETWORKS

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Time: Three Hours

Maximum: 100 Marks

Part A

Answer any eight questions. Each question carries 5 marks.

- Write a short note on Bluetooth technology.
- 2. Draw the process flowchart for CSMA/CA used in wireless LAN and explain.
- 3. List out the features of wireless LAN and explain it in detail.
- 4. Explain the CRC error detection mechanism using Generator polynomial.
- 5. List out the various approaches of quality of service.
- 6. Explain the congestion control technique in TCP.
- What are the flags available in TCP header? Explain.
- 8. What are the performance issues associated with Transport layer protocols?
- 9. Explain in detail about major components of an electronic mail system.
- 10. Why is data compression necessary for multimedia?

 $(8 \times 5 = 40 \text{ marks})$

Part B .

Answer all questions.

1. (a) Explain various layers of OSI reference model with a neat diagram.

Or

- (b) What are the common standard Ethernet implementations? Explain each Ethernet standard with a neat diagram.
- 2. (a) Describe various Error detection and Error correction methods with suitable example.

Or

(b) Discuss about congestion control algorithms.

Turn over

3. (a) Explain UDP and TCP protocols.

Or

- (b) Explain the state transition diagram for TCP connection establishment, data transfer and connection termination.
- 4. (a) Discuss about the DNS in internet.

Or

(b) Write short notes on World Wide Web.

 $(4 \times 15 = 60 \text{ marks})$