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### Third Semester MCA Degree Examination, Dec.2018/Jan.2019

### Computer Networks

Time: 3 hrs.

Max. Marks:100

**Note: Answer any FIVE full questions.**

- 1 a. Explain TCP/IP Reference model. (10 Marks)  
b. Explain in brief different examples of networks. (10 Marks)
- 2 a. Explain transmission impairments. (10 Marks)  
b. Compare analog transmission and digital transmission. Why digital transmission is preferred over analog transmission? Give reasons. (10 Marks)
- 3 a. Explain FDM, TDM and CDM. (12 Marks)  
b. Explain First Generation mobile phone and its technology. (08 Marks)
- 4 a. Explain simplex stop and wait protocol for a noise channel. (10 Marks)  
b. Explain protocol using Go-Back-N. (10 Marks)
- 5 a. Explain bit map protocol and token passing. (10 Marks)  
b. Explain Bluetooth architecture and Bluetooth applications. (10 Marks)
- 6 a. Explain distance vector routing and count-to-infinity problem. (10 Marks)  
b. Explain different approaches to congestion control in brief. (10 Marks)
- 7 a. Explain TCP segment header. (10 Marks)  
b. Explain TCP connection establishment and TCP connection release. (10 Marks)
- 8 a. Explain architecture of the email system. (10 Marks)  
b. Explain content delivery networks. (10 Marks)

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