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Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 81370

M.E. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Elective

Communication Systems

CU 9251/CU 951/10244 CME 41 – COMMUNICATION PROTOCOL ENGINEERING

(Regulation 2009/2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is petrinet model?
2. What is the need of protocol engineering?
3. What is meant by interface?
4. What is encapsulation and segmentation?
5. What is LLC and MAC?
6. Define BGP.
7. Compare D and W method.
8. What is the use of TTCN?
9. Write the protocol synthesis methods.
10. What is meant by Tau SDL suite?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Write about formal and informal method of developing protocols. (8)

(ii) Explain the phases involved in protocol engineering. (8)

Or

(b) Explain about the functions of layers in OSI model and TCP/IP protocol suite.

12. (a) Explain about specification of communication service and protocol entity in detail. (16)

Or

(b) Write in detail about features of SDL with suitable examples. (16)

13. (a) Describe in detail about safety and liveliness properties of protocol verification. (16)

Or

(b) Explain in detail about SDL based protocol verification and validation with examples.

14. (a) Explain about test sequence generation methods in detail. (16)

Or

(b) Explain in detail about conformance testing procedures. (16)

15. (a) Write in detail about interactive and automatic protocol synthesis. (16)

Or

(b) Explain how communication protocol is implemented using object oriented approach. (16)
