Reg.	No

# Name.....

## **B.TECH. DEGREE EXAMINATION, MAY 2016**

## Eighth Semester

Branch: Computer Science and Engineering / Information Technology

ADVANCED NETWORKING TRENDS (Elective-III) [R, T]

(Old Scheme-Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time: Three Hours

#### Part A

Answer all questions.
Each question carries 4 marks.

- 1. State and briefly explain Ethernet's media access control policy.
- 2. What is a wireless LAN? Discuss.
- 3. Explain basic rate interface and primary rate interface digital subscriber loops in integrated services digital network.
- 4. Explain in-band signalling and out-of-band signalling in integrated services digital network.
- 5. What are permanent virtual circuits in ATM networks?
- 6. Which channels are used in ATM networks to convey signalling messages? Discuss.
- 7. What is geostationary earth orbit? Discuss.
- 8. Explain elevation angle and coverage angle in satellite communication.
- 9. What is infrared transmission? Discuss.
- 10. Explain an ad-hoc network with diagrammatic illustration.

 $(10 \times 4 = 40 \text{ marks})$ 

#### Part B

Answer all questions.
Each question carries 12 marks.

- 11. (a) What is Ethernet? Explain with diagrammatic illustration Ethernet frame format. (6 marks)
  - (b) Compare Ethernet, fast Ethernet and Gigabit Ethernet.

(6 marks)



Maximum: 100 Marks

- 12. What is synchronous optical network (SONET)? Explain multiplexing in SONET with example.
- 13. Explain with diagrammatic illustration integrated services digital network protocol architecture.

Or

14. (a) List and explain the three basic types of channels the integrated services digital network standard defines.

(6 marks)

(b) List and explain the four distinct interfaces integrated services digital network standard specifies in the customer's connection to the network.

(6 marks)

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15. Explain with diagrammatic illustration asynchronous transfer mode (ATM) protocol reference model.

Or

- 16. List the ATM adaptation layer (AAL) functions and discuss AAL type 1 protocol.
- 17. Present the general block diagram of a satellite earth station and discuss the same.

Or

- 18. What is very small-aperture terminal (VSAT)? How VSAT works? Discuss.
- 19. Discuss the IEEE 802.11 standard.

Or

20. (a) Explain piconets and scattemets with diagrammatic illustration.

(6 marks)

(b) Explain passive attacks and active attacks with example.

(6 marks)

 $[5 \times 12 = 60 \text{ marks}]$ 

