(For the candidates admitted from 2008-2009 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Sixth Semester

Computer Science

COMPUTER NETWORKS

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. Define broadcasting.
- 2. What is protocol?
- 3. Define Frequency.
- 4. Define Signal to Noise Ratio.
- 5. What is contention system?
- 6. Define point to point protocol.

- 7. What is routing algorithm?
- 8. Define congestion.
- 9. What is DNS?
- 10. What is cryptography?

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

11. (a) What are the design issues for the layers?

Or

- (b) Explain the protocol hierarchies.
- 12. (a) Explain about radio transmission and micro wave transmission.

Or

- (b) Write a note on geostationary satellites.
- 13. (a) Write a note on error correcting codes.

Or

(b) What are services provided to network layer from data link layer?

14. (a) List out the congestion prevention policies.

Or

- (b) Compare the virtual circuit and datagram networks.
- 15. (a) Explain the various services of Email.

Or

(b) Write a note on digital signatures.

PART C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE out of Five questions.

- 16. Describe TCP/IP reference model with neat diagram.
- 17. Explain in brief about various transmission media.
- 18. Explain one bit sliding window protocol.
- 19. Explain shortest path algorithm and distance vector algorithm.

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20. Explain about the secret-key algorithm.