

# AE-1315

B.C.A. New Course (Part - II)  
Term End Examination, 2016-17

# COMPUTER NETWORK AND CYBER TECHNOLOGY

*Time : Three Hours]      [Maximum Marks : 100*  
*[Minimum Pass Marks : 33*

**Note** : Answer **all** questions. The figures in the right-hand margin indicate marks.

**1. Answer all questions :**  $2\frac{1}{2} \times 10$

- (a) What is LAN, MAN and WAN ?
- (b) Differentiate between Analog and Digital Signal.
- (c) What is Data Link Layer ?
- (d) Briefly explain stop and wait and sliding window protocol.
- (e) What is Network Layer ?

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- (f) Write functions of IPV<sub>4</sub> addressing.
- (g) What is ATM ?
- (h) Write characteristics of wireless LAN's-802.11.
- (i) What is Application Layer ?
- (j) What is E-mail ?

Answer the following Long answer type questions : 15×5

2. (a) What is the Transmission Media ?  
Explain the different transmission media with their advantages and disadvantages.  
(b) What is TCP / IP Model ? Explain it.
3. (a) Explain data link protocols with their uses.  
(b) What do you mean by redundancy in error detection ? Also explain the error recovery techniques with example.
4. (a) Explain Routing Protocols and algorithms used in Network and Transport Layer with one example.  
(b) What are the functions of Network Layer and Transport Layer ? Explain it.
5. (a) Explain Broad Band Networks with their advantages and disadvantages.

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(b) Differentiate between Connection Oriented and Connection Less Networks.

6. (a) Explain HTTP.

(b) What is IT Act, 2000 ?  
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