

B.C.A. (CBCS) DEGREE EXAMINATION,  
APRIL 2023.

Sixth Semester

Computer Application — Core

## COMPUTER NETWORKS

(For those who joined in July 2017-2020)

Time : Three hours Maximum : 75 marks

## PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The reliable connection oriented protocol is \_\_\_\_\_.  
(a) TCP (b) HTTP  
(c) UDP (d) SNTP
7. The change in their routing decisions to reflect change in their topology  
(a) Adoptive algorithm  
(b) Optimality principle  
(c) Routing algorithm  
(d) Non adoptive
8. Which of the following are transport layer protocols used in networking?  
(a) TCP and FTP  
(b) UDP and HTTP  
(c) TCP and UDP  
(d) HTTP and FTP
9. A \_\_\_\_\_ is a TCP name for a transport service access point.  
(a) port (b) pipe  
(c) node (d) protocol
10. The keys used in cryptography are \_\_\_\_\_.  
(a) secret key (b) private key  
(c) public key (d) all of the above

2. The standard for wireless LAN is \_\_\_\_\_.  
(a) 802.1 (b) 802.2  
(c) 802.3 (d) 802.11
3. Which of the following is not an unguided transmission media?  
(a) Magnetic media (b) Infrared wave  
(c) Micro wave (d) Radio transmission
4. The number of oscillations per second of a wave is called \_\_\_\_\_.  
(a) Wavelength (b) Frequency  
(c) light (d) none
5. The change made in one bit in the entire data sequence is known as \_\_\_\_\_.  
(a) Burst error (b) Multiple bit error  
(c) Single bit error (d) None
6. The strategy for handling errors when frames are pipelined is called \_\_\_\_\_.  
(a) selective repeat (b) go back n  
(c) pipelining (d) none

## PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write a short note on Wireless Networks.  
Or  
(b) Compare OSI reference model and TCP/IP Reference model.
12. (a) Write a short note on Geo Stationary Satellite.  
Or  
(b) Explain briefly about Low - earth orbit satellite.
13. (a) Write a short note on Gigabit Ethernet.  
Or  
(b) Write a short note on Bluetooth? Mention any two applications.
14. (a) Explain Distance vector routine in detail.  
Or  
(b) Write a short note on congestion Control.

15. (a) Explain Transposition cipher method with example.

Or

- (b) Write the basic functions of E-mail in detail.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain service Primitives in detail.

Or

- (b) Write the difference between connectionless communication and connection oriented communication.

17. (a) Explain various Guided Transmission media in detail.

Or

- (b) Write a brief note on Electro Magnetic Spectrum.

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18. (a) Write briefly about A Simplex stop-and wait protocol.

Or

- (b) Explain one-bit sliding window protocol in detail.

19. (a) Explain the elements of transport protocol in detail.

Or

- (b) Explain TCP in detail.

20. (a) Explain Caesar cipher with an example.

Or

- (b) Explain RSA algorithm in detail.
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