

S.No. : 466

BCA 3204

No. of Printed Pages : 03

Following Paper ID and Roll No. to be filled in your Answer Book.

PAPER ID : 31108

Roll
No.

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B. C. A. Examination 2021-22

(Even Semester)

**DATA COMMUNICATION & COMPUTER
NETWORK**

Time : Three Hours/

[Maximum Marks : 60

Note :- Attempt all questions.

SECTION – A

1. Attempt all parts of the following : 1 × 8 = 8

- (a) What is data communication?
- (b) Write the full form of FDM and TDM.
- (c) What is intranet?
- (d) What is extranet?
- (e) What is the number of bits in an IPv4 address?

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- (f) What is the minimum size of a UDP data gram?
- (g) What is cryptography?
- (h) Write the full form of FTP and DNS.

SECTION – B

2. Attempt any two of the following : $6 \times 2 = 12$

- (a) Explain the types of transmission modes.
- (b) What is network topology? Explain the different network topologies.
- (c) Explain cell delay and ATM in detail.
- (d) Explain RSA algorithm in detail.

SECTION – C

Note:- Attempt all questions. Attempt any two parts from each questions. $5 \times 8 = 40$

3. (a) What is synchronous and asynchronous transmission?
- (b) What is transmission impairment and also explain what are the issues involved in wired and wireless communication?

- (c) Explain the various types of multiplexing.
- 4. (a) What is connection-oriented and connection-less communication?
- (b) Write short notes on repeaters and switch.
- (c) Explain ISO-OSI reference model.
- 5. (a) Write the difference between IPV4 and IPV6.
- (b) Explain the basic responsibilities of network layer.
- (c) Explain connection oriented TCP and connectionless UDP.
- 6. (a) What are the different functions of presentation layer and session layer?
- (b) Write short notes on digital signature and message digest.
- (c) Write the difference between HTTP and HTTPS.

