

Roll No. ....

Total No. of Questions : 10]  
(1048)

[Total No. of Printed Pages : 3

**B.C.A. (CBCS) RUSA Vith Semester  
Examination**

**4037**

**COMPUTER NETWORKS**

Paper : BCA0601

Time : 3 Hours]



Maximum Marks : 70

*Note :-* Attempt all questions from Part-A and *one* question each from Parts-B, C, D and E.

**Part-A**

1. (a) What is MAC Address ?
- (b) What is a Server ?
- (c) Give an important advantage of Star topology.
- (d) ..... multiplexing technique transmits digital signals.
- (e) What is DSL ?
- (f) What should be the flag value to indicate the last fragment of a message ?

- (g) What is TELNET ?
- (h) What is UDP ?
- (i) What do you understand by burst error ?
- (j) What is PAN ? 1×10=10
2. (a) What are the factors that must be considered before making a choice for the topology ?
- (b) Differentiate between guided and unguided media.
- (c) What is the use of DNS ?
- (d) What is the use of Repeater in a network ?  
How is it different from Hub ?
- (e) How the concept of layers is used in OSI Reference Model ? 4×5=20

### Part-B

10 each

3. Discuss the advantages of computer network. Discuss network models in detail.
1. What are the uses of a computer network ? How to categorize networks according to size ? Give important characteristics of the categories.

**Part-C**

10 each

5. Discuss Wireless Transmission Media. Discuss advantages and disadvantages of each wireless transmission medium.
6. What is an error ? How to correct errors using FEC ?

**Part-D**

10 each

7. Discuss the following :
  - (a) DSL
  - (b) Brouter
  - (c) ISDN
8. Discuss the operation of Token Ring Network. How this network is maintained ?

**Part-E**

10 each

9. Discuss important features of TCP and UDP. Discuss the frame format of UDP.
10. (a) Differentiate between Supernetting and Subnetting.
  - (b) Differentiate between Classful and Classless Addressing.