

B.Sc. - III (Information Technology) (CBCS Pattern) Semester-VI
**002 / UBITT601.2 - Paper-I - Elective-II : Data Communication and Cloud
Computing**

P. Pages : 2

Time : Three Hours



GUG/W/24/13313

Max. Marks : 40

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- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagram and use supporting data wherever necessary.
 3. Avoid vague answer and write specific answer related to questions.

Either:

1. a) Explain the Digital Data Transmission in detail. 4
- b) Differentiate between Asynchronous and Synchronous Transmission. 4

OR

- c) Write a short note on Data Link Control Protocols. 4
- d) Explain the Error Detection Techniques in brief. 4

Either:

2. a) Explain concept of signaling in detail. 4
- b) Explain the concept of Digital Network. 4

OR

- c) Define Topology. Explain any one types of Topology with example. 4
- d) Explain the following: 4
 - i) LAN
 - ii) MAN

Either:

3. a) What is OSI Model? Explain the OSI model in detail using suitable diagram. 4
- b) Write a note on principles of internetworking. 4

OR

- c) Define Bridge. Explain the term Routing with Bridge in detail. 4
- d) Write a note on connectionless internetworking. 4

Either:

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|-----------|----|---|----------|
| 4. | a) | Define Cloud Computing. Explain the various cloud computing services in detail. | 4 |
| | b) | Write a note on Deployment Model. | 4 |

OR

- | | | | |
|-----------|-----|---|----------|
| | c) | Explain the following: | 4 |
| | i) | Security issues | |
| | ii) | Regular issues | |
| | d) | Explain the application of cloud computing in detail. | 4 |
| 5. | | Solve all the questions. | |
| | a) | Explain Analog Data Signal in brief. | 2 |
| | b) | Write a short note on Virtual Circuit. | 2 |
| | c) | Explain the TCP/IP protocol in brief. | 2 |
| | d) | Explain the Network Security in brief. | 2 |
