

Government College of Engineering, Aurangabad
(An Autonomous Institute of Government of Maharashtra)

B.E.(ECT) Old Examination

ESE: NOV - DEC 2016

ET404 : Data Communication Network

Time: 03 Hours

21 NOV 2016

Max. Marks: 60

"Verify the Course Code and Check Whether you Have Got the Correct Question Paper"

N.B.

1. All Questions are Compulsory
2. Figures To The Right Indicate Full Marks
3. Assume Suitable Data If Necessary And State It Clearly
4. Use Of Non-Programmable Calculator Is Allowed

- Q 1.. A. Explain with suitable schematic Reference models ISO OSI for data networks (06)
B. What are similarities and dissimilarities of OSI reference model TCP/IP model (06)
- Or**
- Q 1.A. Compare and contrast all types of communication medias used in data networks (06)
B. Explain various Service primitives and relationship of services to protocols (06)
- Q 2. A .Explain CSMA /CD protocol. Discuss briefly Ethernet MAC sub layer protocol (08)
B. Discuss in detail Sliding window protocol (04)
- Or**
- Q 2. Discuss in detail with reference to X.25 , call setup & packet format. (12)
- Q 3. A. What are various routing algorithms? Explain any two in detail (06)
B. Discuss in detail the various class of IP version IV addressing. What is the use of Subnet Masking (06)
- Or**
- Q 3. A. Explain in detail with reference to Transport Protocols, Addressing, Establishing & releasing a connection configurations. (06)
B. Explain in detail OSPF and BGP (06)
- Q 4. A. Explain in detail the architecture of POP3 and SMTP protocol (08)
B. Compare and contrast Centralized and Distributed data networks system with suitable Example (04)
- Or**
- Q 4. What is cryptography? What are the different goals of Cryptography? Discuss the various cryptographic primitives(tools) used to provide information security. (12)
- Q 5. Discuss in detail Client- Server system architecture and Peer to Peer system architecture in data networks with suitable example (12)
- Or**
- Q 5. Discuss in detail TCP and UDP Server – Client socket programming primitives and implementation (12)