



DG-3774

B. C. A. (Sem. V) (CBCS) Examination

March/April – 2016

503 : Network Technologies

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. C. A. (Sem. 5) (CBCS)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="503 : Network Technologies"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="7"/> <input type="text" value="7"/> <input type="text" value="4"/>	Section No. {1, 2,.....} : <input type="text" value="NIL"/>
Student's Signature	

- (2) Write to the point.  
(3) Provide example and diagrams wherever appropriate/necessary.  
(4) Figures to the right indicate full marks of the questions.

**Q: 1 Answer the following questions in brief: (Any 5) [10]**

- 1) Define Dedicated Servers.
- 2) Why do we require a twist in a twisted pair cable?
- 3) What do you mean by encryption and decryption?
- 4) Explain BitRate.
- 5) Differentiate between star & ring topology.
- 6) Explain Baud rate, Bandwidth.

**Q: 2 Answer the following questions: (Any 4) [20]**

- 1) Write a note on Client Server Networks & Hybrid networks.

- 2) Explain Star and Ring Topology in detail.
- 3) Explain Satellite Communication.
- 4) Explain optical Fibre in brief.
- 5) Explain the features of different Client Operating Systems.

**Q: 3 Answer the following questions in detail: (Any 3) [24]**

- 1) Explain Transmission Media. Explain in detail Guided Media with its applications, advantages and disadvantages.
- 2) Explain Cryptography. Explain Private Key cryptography in detail with an example.
- 3) Write a note on IP address and IP subnet.
- 4) Explain Internet Transport Protocols in detail. Explain TCP with its features and services.

**Q: 4 Write a note on any two: [16]**

- 1) OSI Reference Model
  - 2) Firewall
  - 3) TCP & UDP
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