

**Goa Vidyaprasarak Mandal's
GOPAL GOVIND POY RAITURCAR COLLEGE OF COMMERCE AND
ECONOMICS, PONDA-GOA
B.C.A. (SEMESTER-IV) EXAMINATION, APRIL 2016
COMPUTER NETWORKS**

Duration: 2 Hours

Marks: 50

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate Full Marks.

Q.I.A) Define the following terms:

(5*1=5)

1. Congestion
2. Remote Computing
3. Mesh Topology
4. Half Duplex
5. Semantics

B) Answer the following in one / two sentences each.

(5*1=5)

1. What is the reason for using layered protocols?
2. List out the functions of TCP/IP.
3. What are the ways to address the framing problem?
4. List the different encoding techniques.
5. What are the responsibilities of session layer?

Q.II) Answer the following.

1. List out the different transmission media. (2)
2. Describe TCP Connection Management. (3)
3. Draw the OSI reference model and briefly explain the Functionalities of Physical layer. (5)

Q.III) Answer the following.

1. What is RPC? (2)
2. Explain the services provided by the session layer. (3)
3. Explain the working of Sliding Window Protocol. (5)

contd....2/-

Q.IV) Answer the following.

1. Explain adaptive and non adaptive routing algorithms. (2)
2. Explain elements of Transport protocols. (3)
3. Illustrate with an example Shortest Path Routing Algorithm. (5)

Q.V) Answer the following.

1. Write a short note on Domain Name System. (2)
2. Explain SMTP protocol. (3)
3. Write about the Principles of cryptography. (5)

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