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**DIPLOMA VIEP COMPUTER SCIENCE  
ENGINEERING (BTCSVI)**

**Term-End Examination**

**June, 2013**

**BICSE-006 : ELECTIVE-COMPUTER  
NETWORKS**

*Time : 2 hours*

*Maximum Marks : 70*

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*Note : Attempt any five questions. Question No.1 is compulsory. All questions carry equal marks.*

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1. Choose the correct answer. 7x2=14
- (a) Which of the following layer of OSI model is also called end - to - end layer ?
- (i) Presentation layer
  - (ii) Network layer
  - (iii) Session layer
  - (iv) Transport layer.
- (b) How many layers are in the TCP/IP Model ?
- (i) 4 layers
  - (ii) 6 layers
  - (iii) 3 layers
  - (iv) 7 layers
- (c) Which of the following IP Address class is Multicast ?
- (i) Class A
  - (ii) Class B
  - (iii) Class C
  - (iv) Class D

- (d) Bridge works in which layer of the OSI Model ?
- (i) Application layer
  - (ii) Transport layer
  - (iii) Network layer
  - (iv) Data link layer.
- (e) A network uses a star topology if :
- (i) Computer are arranged in a closed loop.
  - (ii) All Computers are attached to a central point.
  - (iii) All computer attach to a single long cable
  - (iv) Computer attached to multiple Hierarchical cable
- (f) In OSI network architecture, the routing is performed by :
- (i) Data link layer
  - (ii) Transport layer
  - (iii) Network layer
  - (iv) Session layer
- (g) FDDI is an example of :
- (i) Token Ring
  - (ii) Token Bus
  - (iii) Star topology
  - (iv) Multipoint Network

2. (a) Discuss the TCP/IP protocol suite on the basis of protocol layering principle. 7  
(b) What are the X.25 layers ? How does it relate to the OSI Model ? 7
3. (a) What are Framing Methods ? Explain any two framing methods in detail. 7  
(b) Explain Link Control Protocol (LCP) and Network Control Protocol (NCP). 7
4. (a) How do contention - free protocols differ from contention - oriented protocols ? Discuss any one protocol of contention - free category. 7  
(b) Why is the channel through put doubled in slotted ALOHA compared to pure ALOHA ? 7
5. (a) Compare the performances of virtual circuit and Datagram Subnets. 7  
(b) Compare IPV4 and IPV6. 7
6. (a) Explain about the following issues of transport protocol : 7  
(i) Establishing a connection.  
(ii) Releasing a connection.  
(b) Explain about the Multiplexing and demultiplexing used in transport layer. 7

7. (a) How does DNS work ? Explain. 4  
(b) Write a short technical note on TFTP. 4  
(c) What is the difference between active and dynamic web page ? 6
8. Attempt *any four* part of the following : 4x3.5=14  
(a) Frame Relay  
(b) Selective Repeat ARQ  
(c) Ethernet  
(d) Internet working  
(e) MIME  
(f) Element of Transport protocol.
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