

**GUJARAT TECHNOLOGICAL UNIVERSITY****M.E Sem-I Regular Examination January / February 2011****Subject code: 710205N****Subject Name: Internet Technology****Date: 04 /02 /2011****Time: 02.30 pm – 05.00 pm****Total Mark : 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Compare classful addressing and classless addressing. **07**  
(b) Explain Internet Standards. **07**
- Q.2** (a) List various special addressing in classful addressing **07**  
(b) An organization is granted the block 130.34.12.64/26. The organization needs 4 subnets. What are subnet prefix length, subnet addresses and range of addresses for each subnet? **07**
- OR**
- (b) An organization is granted a block of addresses with beginning address 14.24.74.0/24. There are 256 addresses in this block. The organization needs to have 11 subnets as shown below: **07**  
a) two subnets, each with 64 addresses  
b) two subnets, each with 32 addresses  
c) three subnets, each with 16 addresses  
d) four subnets, each with 4 addresses.  
Design the subnets.
- Q.3** (a) Explain seven major features of TCP. **07**  
(b) Explain IP datagram header format. **07**
- OR**
- Q.3** (a) Explain TCP segment format. **07**  
(b) What is protocol ? List various types of protocols used in internet. **07**
- Q.4** (a) Differentiate HTML and DHTML. **07**  
(b) What is website ? Explain various steps to design a website. **07**
- OR**
- Q.4** (a) Explain major tags used in HTML. **07**  
(b) Explain various advantages and characteristics of JavaScript. **07**
- Q.5** (a) What is the difference between web server and e-mail server ? **07**  
(b) What is Network Interface Card? Explain its various types in details. **07**
- OR**
- Q.5** (a) What is proxy server? Where and how do we use proxy server ? **07**  
(b) List different types of devices used in networking. Explain any two of them. **07**

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