

Time: 3 Hours

Dated: 15-05-2008
Max Marks: 70

INTERNET TECHNIQUES & THEIR APPLICATIONS
(CT-517)

Instructions: Attempt ALL questions. All parts carry 3 marks unless not mention.

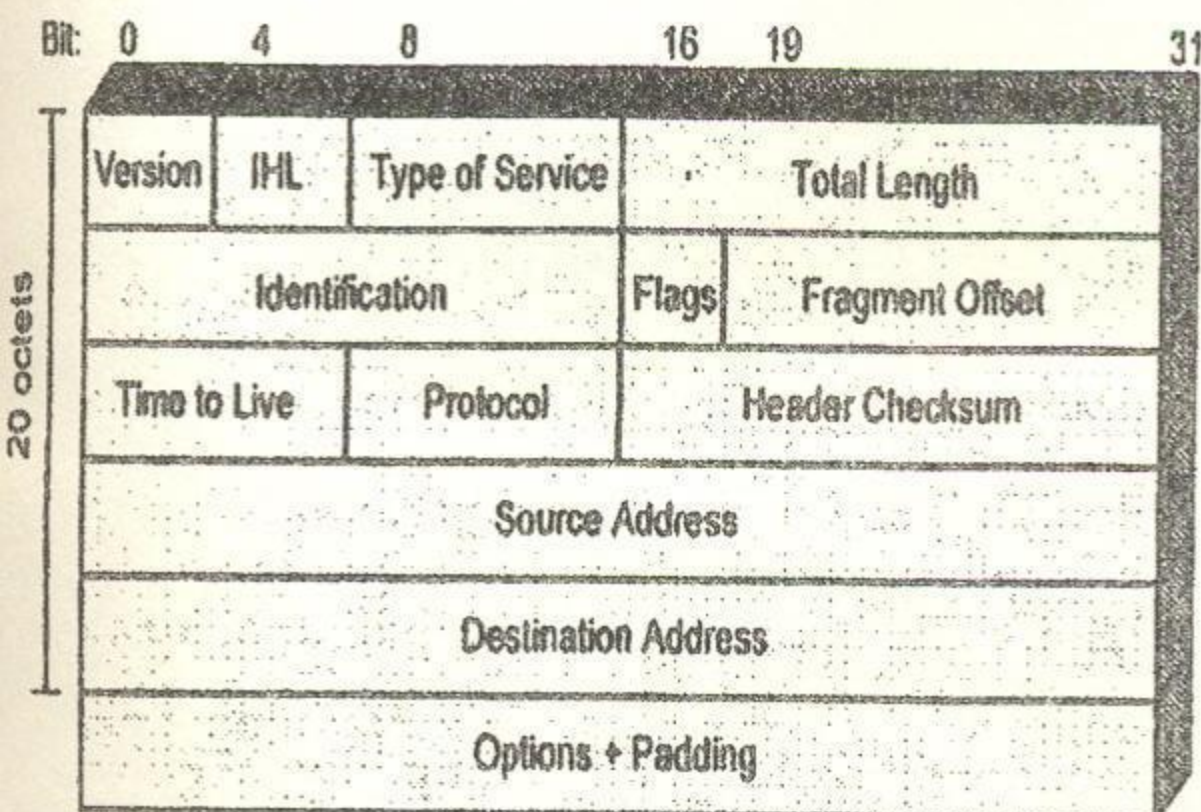
- Question 1**
- a) Highlight the advantages of Internet and differentiate between the Network Layer vs Session Layer?
 - b) Identify some basic features of IP and mention the advantages and disadvantages of connectionless IP internetworking.
 - c) How does DHCP and BOOTP handle multiple subnets?

- Question 2**
- a) What is meant by FTP? What sort of files that are publicly available through anonymous FTP ?
 - b) Give the name of the fields they are deleted in an IPv6, but they exist in IPv4?
 - c) Differentiate between internal and external DTDs?

- Question 3**
- a) What is the function of the Next Header field in the IPv6 protocol? Identify the disadvantages of IPV4 and discuss how they are solved in IPV6?
 - b) Explain how XML is used for structuring data? Mention some similarities of XML and HTML?

- Question 4**
- a) Identify the rules of XML? When an XML document called a well formed document? Differentiate between #pcdata and #cdata?
 - b) When an IP packet captured in its binary format on the way from its source to destination. Now looking at the starting few bytes of the Packet (shown below), provide following information about the packet.

(18)



```

01000101000000000000000011111111
00000000001111110010000000000000
00111011000001101111111100000000
11000001000000010001000100100001
00001010000010100000101000000101
    
```

- i. What is the total length of the packet
- ii. What is the length of the header
- iii. Is the packet allowed to be fragmented
- iv. If it is fragmented then is it the last Packet
- v. What is the source IP address

c) Define the message type defined by ICMP? How the QOS and security achieved in IPV6?

P.T.O

Question 5:

- a) Why are DTD important? Give some examples of DTDs?
- b) XML Parsers are required to support three types of encodings, what are? Why is this important?
- c) Give comments on the following: (any three)
 - i) XML is verbose by design
 - ii) XML is new, but not that new
 - iii) XML is modular
 - iv) XML is license-free, platform-independent and well-supported

Question 6:

- 1) HTML stands for _____.
- 2) Who is making the Web standards? _____.
- 3) The correct HTML tag for the largest heading is _____. (<h6>, <heading>, <h1>, <head>)
- 4) What is the correct HTML tag for inserting a line break? _____ (<break>, <lb>,
)
- 5) What is the correct HTML for adding a background color?
 - a) <body bgcolor="yellow">
 - b) <background>yellow</background>
 - c) <body color="yellow">
- 6) The correct HTML tag to make a text italic is _____. (<i>, <italics>, <ii>)
- 7) How can you make an e-mail link?
 - a) <mail href="xxx@yyy">
 - b)
 - c)
 - d) <mail>xxx@yyy</mail>
- 8) How can you open a link in a new browser window?
 - a)
 - b)
 - c)
- 9) How can you make a list that lists the items with numbers?
 - a)
 - b)
 - c) <dl>
 - d) <list>
- 10) ICMP stands for _____.