

AMIETE – IT (OLD SCHEME)

Code: AT15
Time: 3 Hours

Subject: INTERNET & WEB TECHNOLOGY
Max. Marks: 100

JUNE 2011

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
 - The answer sheet for the Q.1 will be collected by the invigilator after 45 Minutes of the commencement of the examination.
 - Out of the remaining EIGHT Questions answer any FIVE Questions. Each question carries 16 marks.
 - Any required data not explicitly given, may be suitably assumed and stated.
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Q.1 Choose the correct or the best alternative in the following: (2×10)

- a. The 'ping' command produces the summary that
- (A) specifies the network load.
 - (B) specifies the number of packets send and received, packet-loss and minimum mean and maximum round trip time.
 - (C) specifies the network traffic congestion.
 - (D) specifies the network server load.
- b. The Common Gateway Interface (CGI) is the earliest and one of the most important
- (A) Client side programming
 - (B) Server side programming
 - (C) Browser scripting
 - (D) None of the above
- c. The dynamic web page is consisted of
- (A) HTML
 - (B) HTML and javascript
 - (C) HTML, javascript and style sheet
 - (D) HTML, XML and javascript
- d. The address resolution protocol(ARP) is used to discover
- (A) Ethernet Address
 - (B) IP address
 - (C) Physical Address
 - (D) URL address
- e. The 224.0.0.0 – 239.255.255.255 range of IP Address is reserved for
- (A) Broadcasting
 - (B) Multicasting
 - (C) Unicasting
 - (D) Future use

- f. One of the important use of ARP as a
- (A) broadcast protocol
 - (B) multicast protocol
 - (C) unicast protocol
 - (D) none of the above
- g. The 'Digital Signature' is used to
- (A) authenticate a sender of message
 - (B) authenticate a receiver of message
 - (C) authenticate sender and receiver of message both
 - (D) none of the above
- h. How mail client is invoked from browser window
- (A) by using javascript
 - (B) by using 'mailto' tag of html
 - (C) by using special dll or no control
 - (D) None of the above
- i. The Client/Server Communication will become statefull or stateless that depends on
- (A) Application layer protocol
 - (B) Transport layer protocol
 - (C) Network Layer protocol
 - (D) Link layer protocol
- j. SNMP uses five basic messages to communicate between the SNMP manager and the SNMP agent
- (A) GET, GET-NEXT, GET-RESPONSE, SET, and TRAP
 - (B) GET, POST, GET-RESPONSE, SET, and TRAP
 - (C) GET, POST, PUT, SET, and TRAP
 - (D) GET, GET-NEXT, PUT, SET, and SETDO

**Answer any FIVE Questions out of EIGHT Questions.
Each question carries 16 marks.**

- Q.2** a. What is packet? How Time Division Multiplexing is used for sharing channel to send packet? (4+4)
- b. What do you mean by transmission error? What are the techniques available for detecting transmission error? (2+6)
- Q.3** a. What is CIDR? How CIDR defines the boundary between network and hosts? Explain with example. (2+6)
- b. What are the differences between UDP and TCP? What is a TCP/IP Routing table? (2+2)

- c. Describe the Network address translation mechanism. (4)
- Q.4** a. What is Socket? How Socket interface perform data transfer in TCP and UDP? (4)
- b. Explain following application layer protocol
(i) HTTP (ii) SMTP (3+3)
- c. What do you understand by MIME? Explain. (6)
- Q.5** a. What do you mean by MIB in SNMP protocol? Describe SNMP packet format. (2+6)
- b. How information is transferred from web browser to CGI program? (4)
- c. Define session object. How sessions are created and destroyed in ASP? (2+2)
- Q.6** a. List the features of DNS (Domain Name System). Is there any relationship between DNS (Server) and routing table? (6)
- b. What is SIP? What are the elements of SIP technology? (2+4)
- c. Differentiate between repeater and bridges. (4)
- Q.7** a. What is WML and WMLScript? Also explain WAP protocol suite. (2+2+4)
- b. State the new features of IPv6. How many octets does the smallest IPv6 datagram contains? (6+2)
- Q.8** a. Describe the role of Firewall in Network security. What are the capabilities and limitations of the firewalls? (4+4)
- b. What do you mean by RPC? What are the technologies available for implementing RPC? Explain. (2+6)
- Q.9** a. What is E-commerce? List advantages of E-commerce with the help of an example. (2+6)
- b. How Graphic image can be embedded in web page? Explain. (4)
- c. What is the difference between cookies and session variables? (4)