

CS/B.TECH/CSE/ODD SEM/SEM-7/CS-705A/2016-17



**MAULANA ABUL KALAM AZAD UNIVERSITY OF
TECHNOLOGY, WEST BENGAL**

Paper Code : CS-705A

INTERNET TECHNOLOGY

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following :

$$10 \times 1 = 10$$

- i) The correct HTML tag for the biggest heading is
- a) <h6> b) <heading small>
c) <small heading> d) <h1>
- ii) Which of the following technologies is not a part of J2EE architecture ?
- a) JSP b) Servlet
c) EJB d) COBRA.
- iii) EJB contains
- a) unique interface b) four interfaces
c) two interfaces d) no interface.

7/70401

{ Turn over

<http://www.makaut.com>

CS/B.TECH/CSE/ODD SEM/SEM-7/CS-705A/2016-17

- iv) The JSP tags are interpreted by
 - a) JSP compiler
 - b) JSP engine
 - c) JSP debugger
 - d) None of these.
- v) Which of the following protocols is stateless in nature ?
 - a) FTP
 - b) HTTP
 - c) TCP
 - d) UUCP.
- vi) Variables are declared in Java Script using which of the following ?
 - a) dim
 - b) var
 - c) function
 - d) variable.
- vii) After a servlet is destroyed, garbage collection is performed by
 - a) the server
 - b) the servlet
 - c) HTTP
 - d) JVM.
- viii) The in XML is equivalent to the schema in database.
 - a) Element
 - b) Attribute
 - c) Parser
 - d) DTD.
- ix) An XML parser is used to the contents of an XML document.
 - a) display
 - b) read but not interpret
 - c) read and interpret
 - d) none of these.

7/70401

2

<http://www.makaut.com>

- x) Which statement is true ?
- XML tags are case sensitive
 - XML documents must have a root tag
 - XML elements must be properly closed
 - All the statements are true.

GROUP – B**(Short Answer Type Questions)**

Answer any *three* of the following. $3 \times 5 = 15$

- Why do we need to have a dynamic webpage ? What is the advantage of using style sheet in formatting the different elements of webpages in a website ? How can we link a style sheet to a webpage ?
- What are the different technologies available to make a webpage dynamic ? Why does Java play a vital role in dynamic webpage creation ?
- Write a brief note on the role of Java Script in client side data validation with suitable examples. State also briefly the need of client side validation.
- What is servlet ? What do you understand by servlet API ? Describe the life cycle of a servlet.

GROUP – C**(Long Answer Type Questions)**

Answer any *three* of the following. $3 \times 15 = 45$

- Explain an internal valid XML document with an example. 6
 - Write down the rules for creating a well formed XML document. 2
 - Write the differences between DOM and SAX parser in XML. 3

- Explain the following :
 - `<! ELEMENT section (title +, para(note | code*)>`
 - `<!ATTLIST sign signaturefile CDATA #IMPLIED email CDATA #required>` 2 + 2
- What is Applet ? Discuss life-cycle of an Applet. 1 + 4
 - Discuss an effective communication between a client and a server. 6
 - Write a PERL script to show current date. 4
- Discuss Congesting Policy, Congestion Avoidance and Congestion Detection in TCP with relevant diagrams. 3 x 5
- A block of address is given to a small organization. It is known that one of the addresses is 205.16.37.39/28. What is the first and last address in the block ? What is 'subnet' ? Is 'masking' required at all ? What is the difference between default mask and subnet mask ? 2 + 1 + 1 + 1
 - Explain Denial of Service (DoS) attacks. Discuss Real-time Transport Protocol (RTP). What is the utility of NVT character in remote logging applications such as Telnet ? 4 + 4 + 2
- Write short notes on any *three* of the following : 3 x 5
 - IPTV
 - Web Crawler
 - IP Security
 - Proxy Firewall
 - HTML DOM.