

CS/B.Tech/CSE/Odd/Sem-7th/CS-705A/2015-16



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

CS-705A

INTERNET TECHNOLOGY

Time Allotted: 3 Hours

Full Marks: 70

The questions are of equal value.

The figures in the margin indicate full marks.

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

All symbols are of usual significance.

GROUP A

(Multiple Choice Type Questions)

1. Answer all questions.

10×1 = 10

(i) A web server by default runs on port.

- | | |
|--------|--------|
| (A) 23 | (B) 25 |
| (C) 80 | (D) 22 |

(ii) Which of the following methods is used to get meta information of a resource?

- | | |
|---------|----------|
| (A) TOP | (B) HEAD |
| (C) GET | (D) GRAB |

(iii) DHTML is for

- | | |
|----------------|-------------|
| (A) Model | (B) View |
| (C) Controller | (D) Servlet |

7401

1

Turn Over

CS/B.Tech/CSE/Odd/Sem-7th/CS-705A/2015-16

(iv) HTTP status code is

- | | |
|---------------------|----------------------|
| (A) two-digit code | (B) three-digit code |
| (C) four-digit code | (D) five-digit code |

(v) A remote object must be an instance of

- | | |
|---------------------------|--------------------------|
| (A) java.rmi.RemoteObject | (B) java.io.Serializable |
| (C) java.lang.Cloneable | (D) java.rmi.Remote |

(vi) Which of the following is a transport layer protocol in the TCP/IP protocol suit?

- | | |
|----------|---------|
| (A) HTTP | (B) UDP |
| (C) SMTP | (D) FTP |

(vii) A declaration is terminated by a

- | | |
|---------------------------|--------------------------|
| (A) } - end curly bracket | (B) . - period |
| (C) ; - semi colon | (D) ! - exclamation sign |

(viii) Which of the following is recommended XML?

- | | |
|---------|---------------|
| (A) W3C | (B) Microsoft |
| (C) Sun | (D) IEEE |

(ix) Which of the following is an invalid CSS selector?

- | | |
|---------------------|--------------------|
| (A) Title selectors | (B) HEAD selectors |
| (C) TAG selectors | (D) Id selectors |

(x) Which of the following technologies is used to display XML data?

- | | |
|------------|-----------|
| (A) CSS | (B) XPath |
| (C) XQuery | (D) XHTML |

7401

2

CS/B.Tech/CSE/Odd/Sem-7th/CS-705A/2015-16

CS/B.Tech/CSE/Odd/Sem-7th/CS-705A/2015-16

GROUP B
(Short Answer Type Questions)

Answer any *three* questions.

3×5 = 15

- | | | |
|----|--|---|
| 2. | Write a Java Script program to validate email id using regular expression. | 5 |
| 3. | (a) What is firewall? | 1 |
| | (b) Briefly explain any two types of firewall. | 4 |
| 4. | (a) What is network congestion? | 2 |
| | (b) Describe congestion control strategies. | 3 |
| 5. | (a) What is Java applet? | 2 |
| | (b) Differentiate between java applet and application program. | 3 |
| 6. | Describe different types of TCP Timers. | 5 |

GROUP C
(Long Answer Type Questions)

Answer any *three* questions.

3×15 = 45

- | | | |
|----|--|-----|
| 7. | (a) Write down the features of scripting language. How markup language is different from scripting language? | 3+2 |
| | (b) Create a HTML page with the following features
Hyperlink, List and Form. | 5 |
| | (c) Differentiate between Get and Post method. | 5 |
| 8. | (a) Why XML is superior to HTML. What are the different types of parser used in XML? | 2+4 |
| | (b) Explain the life cycle of java applet. | 5 |
| | (c) Explain briefly about the TCP/IP protocol suit. | 4 |

7401

3

Turn Over

- | | | |
|-----|--|-------|
| 9. | (a) Discuss the basic principle of security. Explain active attack <u>passive</u> attack with example. | 4+4 |
| | (b) Differentiate between virus and worm. What is IP sniffing and IP spoofing? Explain DOS. | 2+2+3 |
| 10. | (a) An organization is granted a block of address with starting address 14.24.74.0/24. There are 256 addresses in this block. The organization needs to have 11 subnets, 2 subnets each having 64 addresses, 2 subnets each having 32 addresses, 3 subnets each having 16 addresses and 4 subnets each having 4 addresses. Design the subnets. | 7+5 |
| | (b) With neat diagram differentiate between local and remote login. | 1 |
| | (c) What is NVT? Why NVTs are required? | 2 |
| 11. | Write short notes on any <i>three</i> of the following: | 3×5 |
| | (a) Web Crawler | |
| | (b) RTP | |
| | (c) NAT | |
| | (d) SSL | |
| | (e) SMTP. | |

7401

4