

P1101

[4066]-402

S.Y. M.C.A. (Engineering Faculty)

WEB TECHNOLOGY

(2008 Pattern) (610910) (Sem. - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Figures to the right indicate full marks.*
- 2) *Answers to the two sections must be written in separate answer books.*
- 3) *From Section-I, answer (Q.1 or Q.2) and (Q.3 or Q.4) and (Q.5 or Q.6).*
- 4) *From Section-II, answer (Q.7 or Q.8) and (Q.9 or Q.10) and (Q.11 or Q.12).*
- 5) *Make suitable assumptions wherever appropriate and relevant.*

SECTION - I

- Q1) a) State whether the following are True or false : [2]
- i) "Protocol used to monitor and control network devices operates at application layer".
  - ii) "The transport protocol used by TFTP is UDP".
- b) Comment and explain : [4]
- i) "All the dissimilar networks must use a common transmission protocol for communication".
  - ii) "MIME defines mechanism to use character encodings other than ASCII, and 8-bit binary content".
- c) What are the major components of a web browser? Draw a neat diagram to explain them. [6]

OR

- Q2) a) What is a bridge? Explain its functions and their types. Explain simple bridge. [6]
- b) What is the "Fat client problem" in 2-tier architecture? Explain how it is solved in 3-tier architecture with an example. [6]
- Q3) a) Write a program to create a web page the displays the output as shown in the fig.1 below : [8]
- Define the frameset document **main.html**.



- In the left frame **left.html** document is loaded which contains a link **SHOW TABLE** which when clicked, the respective link opens in the right frame **right.html** document that displays “List of items”.

SHOW TABLE

LIST OF ITEMS

Item Code	Item name	Price	Discount
01	Pencil	5	1%
02	Pen	20	1.5%
03	Notebook	40	2%
04	Diary	80	2.25%

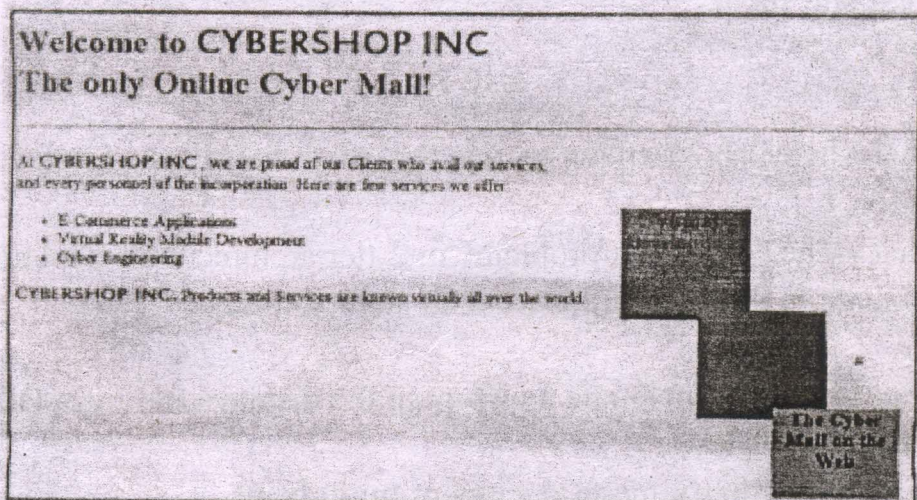
*fig.1*

- b) What is the advantage of document-level style sheets over inline style sheets? What is the format of an external style sheet? [3]

OR

**Q4)** Write a program code for CYBERSHOP INC, using style sheets with the following specifications : [11]

- Define a style class '**.Maxx**' with the following attributes:  
{font-size: 120%; color: 'green'; font-weight: bold; font-family: cursive}.
- Use the defined style class wherever the text 'CYBERSHOP INC.' appears on the web document.
- Use unordered listing giving the list of services offered by CYBERSHOP INC.
- Define three segments using <DIV>...</DIV> tags with background colors Blue, Green and Goldenrod positioned accordingly with the given text, Obtain an output as shown in fig.2 below :



*fig.2*



- Q5) a) Write a code to display the following form and add the VBScript to display the Interest when user enters Principal amount, Rate of Interest, No. of Years and clicks on calculate button. (**Interest,  $I = P \times r \times n$** ).[8]

Principal, $P$	<input type="text"/>	Annual Rate, $r$	<input type="text"/>
No. of Years ( $n$ )	<input type="text"/>		
Interest, $I$	<input type="text"/>		
	<input type="button" value="CLEAR"/>		<input type="button" value="CALCULATE"/>

- b) Describe how a web server can be made dynamic. [4]

OR

- Q6) a) What are the main differences between : [6]
- i) Servlet and CGI.
  - ii) Procedures Vs Functions.
  - iii) VBScript Vs. JavaScript.
- b) Explain the two kinds of procedures in VBScript with example. [6]

## SECTION - II

- Q7) a) What is Object Literal in JavaScript? Explain how JavaScript Objects are different from C++/Java objects. [6]
- b) What is Function Object in JavaScript? Demonstrate how to create function objects that uses **Function** Constructor and **new** Operator.[6]

OR

- Q8) a) Discuss all three approaches to addressing an HTML form element in JavaScript. Also state the disadvantages of first two approaches. [6]
- b) What is Cookie? How it is created and read. Describe difference between Cookie and Session. [6]
- Q9) a) Describe JSP Model-I and Model-II architecture with suitable diagram. [5]
- b) What is AJAX? Describe Ajax Web Application Model? How it is different from traditional web application model? [6]



OR

- Q10)** a) What is AJAX? Explain how AJAX technology works together to update a part of a page with new data from the server. [8]  
b) What is JSP? What are the stages of JSP Life Cycle? Why is JSP preferred over servlets? [3]
- Q11)** a) What is .NET Framework? Explain CLR component with suitable diagram of .NET Framework. [6]  
b) How many types of validation controls are provided by ASP.NET? [6]

OR

- Q12)** Write short notes on : [12]  
a) XML HttpRequest Object in AJAX.  
b) Basic Web control classes.  
c) W3C Event Propagation Model.

