2012

M.Sc.

3rd SEMESTER EXAMINATION

COMPUTER SCIENCE

PAPER—COS-305

(PRACTICAL)

Full Marks : 50

Time : 6 Hours

The questions are of equal value.

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

Group—A

(Network Lab)

[Marks : 25]

Answer any *one* question *(Lottery basis)* : 15

1. Write a program in C to construct a client that accepts a string from a server, using TCP, and displays it.

2. Construct a server that sends a string : "Hello World" to clients, asking for this service, using TCP.

3. Write a UDP client program in C that sends your name to the server, receives it and displays it. (Assume the server echoes whatever it receives).

4. Write a UDP server program that receives an integer from a client and sends the square value of the integer.

5. Write a program in C to demonstrate a broad cast sender.

6. Construct a broadcast receiver to demonstrate broad casting service.

7. Write a program in C to implement a multi cast receiver such that it joins a specified group, receives and prints a single multi cast message from the group.

8. Write a program in C to construct a multi cast sender which multi casts a unique prime number to a specific multi cast address in every three seconds.

9. Write a program for echo client-server communication using UDP socket where the client and server will exchange strings dynamically.

10. Write a program for echo client-server communication using TCP socket where the client and server will exchange strings dynamically.

11. Write a program for concurrent client-server communication using UDP socket where the server will exchange strings dynamically with 5 numbers of clients simultaneously.

12. Write a program for concurrent client-server communication using TCP socket where the server will exchange strings dynamically with 5 numbers of clients simultaneously.

13. Write a program for concurrent client-server architecture based chat application where the three clients will that among themselves through the server. The program will be UDP based.

14. Write a program for concurrent client-server architecture based chat application where the three clients will chat among themselves through the server. The program will be TCP based.

15. Implement the stop-and-wait ARQ and show the result for the following errors :

(i) Lost packet.

(ii) Lost acknowledgment.

Viva-voice	**5**
Practical Note Book	**5**

Group—B

(Web Page Designing Lab)

[Marks : 25]

Answer any *one* question : 20

1. Design a web page with 4 frames. Each frame should contain an image at the background using CSS and a marquee running from left to right in any one frame.

2. Design a login page using CSS for an administrator with the following fields. User name, Password and a Submit button. Font color : red, Size : 10 px, bold, italics.

3. Design a web page to compose email with C_{cc} and B_{cc}.

4. Design the web page with following information : All text must be red colored.

   Name : Text Box.

   Organization : Radio Button

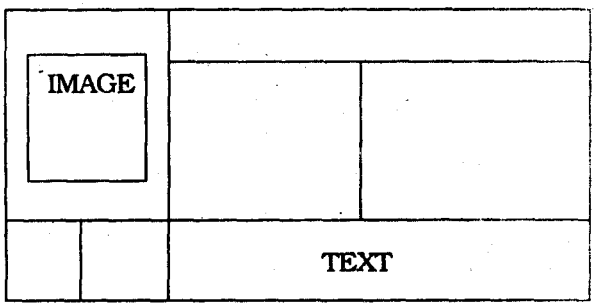
   Designation : Combo Box

   Date of Submission : Combo Box
   (each for day, month, year)

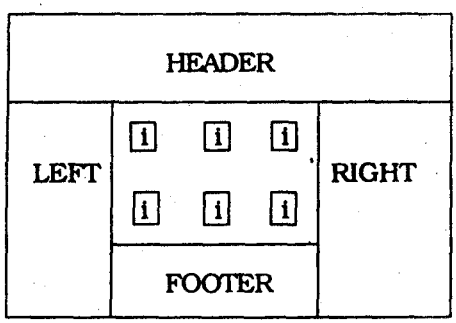
5. Design a web page for a sports company with its name, address, phone no. at top and introduce companies product base line at the bottom. You are supposed to use headers and footers in the creation of the said document.

6. Design a web page using CSS for registration of a student [Use atleast 5 fields].

7. Designs a web page to obtain the below interface.



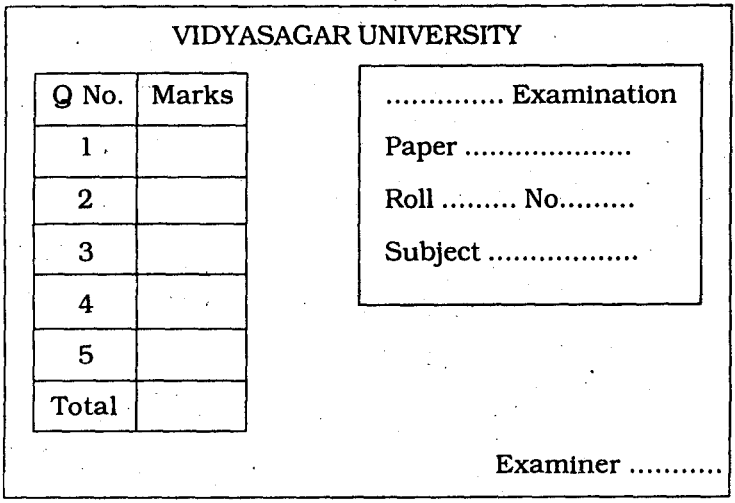
8. Design a web page to obtain the below interface.



[i = image]

9. Design a web page of your department which includes hyperlinked text, frame, hyperlinked emailid of teachers, using CSS and HTML.

10. Design a web page as below figure :



11. Design a HTML form using CSS for the registration of students in a university. Use any five fields but with differed field attributes along with submit and cancel button.

12. Design a web page of your department which must have some hyperlinked text, frames and hyperlinked e-mail id of teachers user CSS and MTML.

13. Design at least three hyperlinked web pages which should have a scrolling image and a five column table with differed back ground colors using HTML and CSS.

14. Design an web page using CSS and HTML as shown below :

REGISTRATION FORM

NAME : [ ]

ROLL : [ ]

SUBJECT : [M.Sc ▼]

⊙ MALE ◯ FEMALE

ADDRESS : [ ]

[SUBMIT] [RESET]

15. Design a web page using CSS and HTML which should have a hyperlinked text as an element of a table and the document of the hyperlinked text will display a bar chart representation of that table.

16. Design a web page to compare email with C_{cc} and B_{cc}.

17. Design a web page using CSS and HTML which divided into three frames. One of the frame can be used as HEADER, second as FOOTER and the middle frame should contain some hyperlinked images with 4px border around it. It should also contain title and alternate text attributes.

18. Design a web page with 4 frames. Each frame should contain an image at the background using CSS and a marquee running from top to bottom in any one of the frame.

19. Design a web page for the following table. Title of the page will be your name. Table border is 1px.

<table>
<tr><td rowspan="2">(Add image)</td><td colspan="2"></td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td></td><td>(Write some text and hyperlinked to go to dummy page)</td></tr>
</table>

The page also has a reputed background image.

20. Design the following web page with given fields. All text must be red colored :

Name : Text Box

Organization : Radio Button (Govt., Private)

Designation : Combo box

Date of submission : Combo Box
(each for day, month and year)

[ ] Submit

[Internal Assessment — 5 Marks]