2015

M.Sc.

3rd SEMESTER EXAMINATION

COMPUTER SCIENCE

PAPER—COS-306

(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.

MODULE—I

(*Network Lab*)

[Marks : 25]

Answer any *one* question (*on Lottery basis*) : 1×15

1. Write a program to print process id of a process and its parent process id also.

2. Write a program to fork a new child process to display list of files and parent process should wait for the completion of child.

3. Write a program to create a new process using system () that display the process running on your system.

4. Write a program to duplicate a program's process using fork ().

5. Write a program to create a Zombie process.

6. Write a shell program to check a file is exist or not and if it is exist then display its type.

7. Write a shell program to check a string is palindrome or not.

8. Write a shell program to find the highest of three numbers.

9. Write a shell program to make a basic calculator.

10. Write a shell program to generate first 20 Fibonacci number.

11. Write a shell program to display first 100 non-Fibonacci numbers.

12. Write a C program to implement FCFS CPU Scheduling algorithm.

13. Write a C program to implement SJF CPU Scheduling algorithm.

14. Write a C program to implement priority base CPU Scheduling algorithm.

15. Write a shell program to display sum of prime number between 0 to n number.

16. Write a shell program to check a number strong or not.

17. Write a shell program to find the value of GCD and LCM between two numbers.

18. Write a shell program to search an element from n numbers using binary search technique.

19. Write a program to create a child process and killing this process ascending and descending order.

20. Write a program to calculate sum of non-zero digit from a given number. Also calculate count total non-zero digit.

21. Write a program to calculate the value of series i.e.

$S = x + x^2 2! + x^2 3! + \cdots$

22. Write a program to convert a given binary number into its equivalent decimal number.

23. Write a program to create two process and to communicate between them.

Viva-voice — 5

Practical Note Book — 5

MODULE—II

(*Webpage Designing Lab*)

[Marks : 25]

Answer any *one* question (*on Lottery basis*) : 1×15

1. Create a Webpage which will store the last access date & time of your visit using cookie. If you are visiting for the first time, it will show the proper message.

2. Create a login form which provides success or failure message for each year login attempt. Use a MSSQL database to implement your page.

3. Create a website where one user can store an image. One can also search for an image providing the image name.

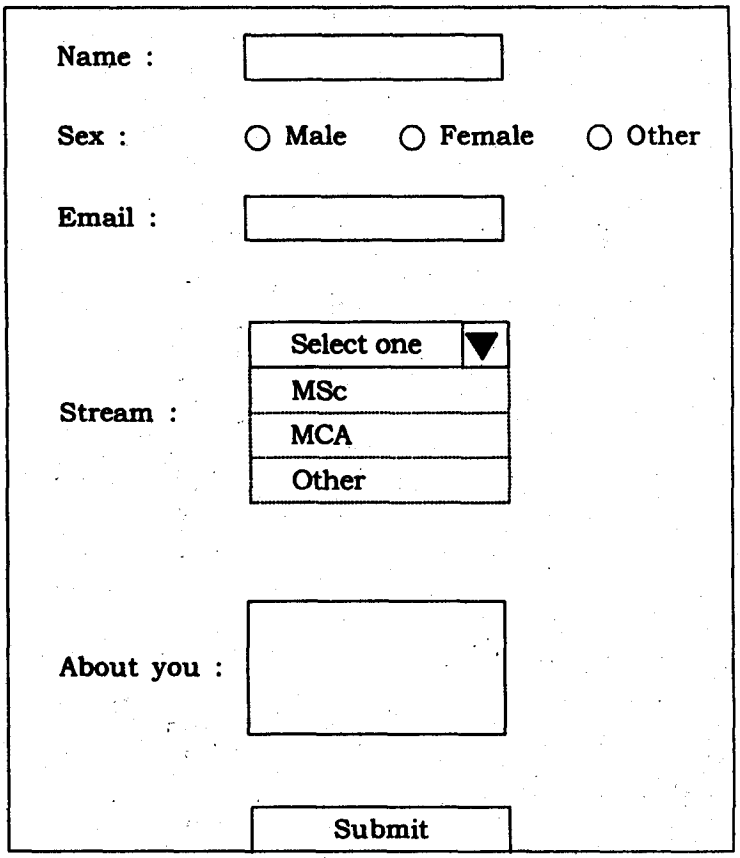
4. Consider the following table :

District	*City*
Purba Medinipur	Tamluk
	Haldia
	Contai
Paschim Medinipur	Midnapore
	Kharagpur
	Jhargram

Create a webpage with two dropdown lists. The First is populated with the district names from the above table. Selecting a district name will populate the second dropdown list with corresponding city names.

5. Create a webpage to send a mail. Before sending mail, the login credentials of the Sender is verified.

6. Consider the form :



Create the above webform, such that on clicking the 'submit' button the informations will be stored in a MSSQL database table.

7. Design new registration form of a student in your University (necessary data are to be used) and connect with database. In this page student id is primary key and format as like VU/MSc/CS/1001. Include all validation checking.

8. Design separate admin and student Master page where logo and name of your University in top. Also design a homepage that connect to admin master page where selective image show in grid view. Another homepage connect to student Master page where shows information about your University.

9. Design webpage to change password for admin or student login page (apply necessary validation) where admin name and student id is the primary key. Both page is connecting to separate admin and student Master page.

10. Design webpage first login or create new Registration page. After login shows your profile into another webpage in this page upload your image.

11. Design a webpage for admission portal of your University where all applicant apply his/her necessary information. After apply his/her form print it.

12. Design webpage in admin zone where display student information category wise either stream or semester/year. Select student (unique) then send any information through email.

13. Create a secession in your login page and transfer your information (after login) through secession on fees payment pages. In fees payment pages you just select semester or year and pay fees via net banking / credit / debit card. If your fees payment process completed, then reply message via email.

14. Design a webpage for student of your College/University where first login then display a homepage of respective institute. If you can agree to upload your document (like marksheet) and download it any time.

15. Design a webpage for student where login if not a member then apply new registration. After login shows a homepage of respective institute where cookies is created.

16. Design separate webpage for student and admin through master page where student apply new registration and get registration number. If student agree to edit his/her information through grid view, Admin shows total applied students through grid view and create option edit, select, delete of student.

Viva-voice — 5

Practical Note Book — 5

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