

All the Principal Colleges (Arts, Science and Commerce), Affiliated to M.D.University, Rohtak.

Subject: Teaching of Computer Education at the Undergraduate level Sir/Madam,

I am directed to inform you that the Executive Council of the University vide Reso. No. 7 of its meeting held on 9.5.2009 has resolved that compulsory paper of Computer Education in Undergraduate courses except B.Sc (Hons.) Computer Science, B.Sc. with Computer Science/Information Technology as a subject, B.A./B.Com. Computer Application (vocational course) and BCA be introduced in affiliated colleges w.e.f. the session 2009-10. The Executive Council has resolved also that the Colleges may consider use of open source softwares which are economical. The scheme of Compulsory paper of Computer Education is to be implemented for freshers starting from 1st year of undergraduate courses concerned as follows.:-

1. Level-I(Certificate Course in Computer Education)

Level-II (Diploma Course in Computer Education)

Level-III(Advanced Diploma course in Computer Education)

The above papers are compulsory simultaneously with the Undergraduate classes of Part-I, II, & III respectively. The Syllabus & Scheme of Examinations of the said paper are enclosed.

The modalities for introduction of the above said compulsory paper of

Computer Education are as under:

In order to maintain uniformity, a common paper will be supplied by the University to the Colleges. Examination will be conducted as per common University date sheet and answer books will be got evaluated by the respective Colleges. The Principal of the college will also get the practical examination of students conducted in the colleges.

Score of the candidates in theory/practical papers taken together will be given in the form of grades as under:-

A+ 90% and above

A 75% and above but less than 90%

B 60% and above but less than 75%

C 50% and above but less than 60%

D 35% and above but less than 50%

E Marks below 35%

Contd.



Aggarwal College Ballabgarh

A Post Graduate Co-educational College (Affiliated to M. D. University, Rohtak) NAAC Accredited 'A' Grade (CGPA: 3.40)

Advanced Diploma Course in Computer Education (Level-III) Paper-L3-I: (Programming in 'C' Language)

Programming Fundamentals

Planning the Computer Program: Writing of algorithm, Characteristics of algorithm, making flowchart. Advantages/ Disadvantages of flowchart, decision table structured programming.

C Language:

Data Types Operators and Expressions: Character Set, Identifiers and Keywords variables and constants; basic data types; arithmetic relational. Logical and bit-wise operators, Increment, decrement and ternary operators, type def, struct, enumerated data types; type conversion. Control Flows: if statements; switch statement; goto statement; while, do while and for statements, break and continue statement.

Arrays: Declaration, initialization and operations on arrays.

Software Lab.

- 1. Program to compute the average.
- 2. Write a program to check whether a number is even or odd.
- 3. Write a program to check whether a number is prime number or not.
- 4. Write a program to check whether a year is leap or not.
- 5. Write a program to find largest of three numbers.
- 6. Write a program to check whether a character is vowel or consonant using switch statement.
- 7. Write a program to find sum of 'n' natural numbers.
- 8. Program to compute the factorial of a given number.
- 9. Program to generate Fibonacci series.
- 10. Program to compute Least Common Multiple (LCM)
- 11. Program to compute Highest Common Factor (HCF)
- 12. Write a program to insert an element in an array.
- 13. Write a program to delete an element from array.
- 14. Write a program for linear searching.
- 15. Write a program to implement bubble sorting.
- 16. Program to find the largest and smallest element among 'n' numbers.
- 17. Program to add and subtract two matrices.
- 18. Program to compute the transpose of a matrix.

Paper-L3-II: (Web Designing)

Scripting Language

HTML: Basics of HTML, Basic tags, document tags, Empty tags Using lists in websites: nested and unordered list, menu list, Absolute links Relation links in website, image and images maps, Creation of tables. Forms frames and their division Use of Colours, Headings and Animation.

Web Authoring Tools

FrontPage: Front page express explorer, front page editor application of themes formatting of text on web page, creation of web pages, web sites, Hyperlinks images, images boarders, formatting, multimedia, sound and Video effects enhancing tables Rows and Columns, cells, frames and frame properties. Tasks views web wizards. Radio buttons and Command buttons.

Macromedia Flash:

View Movie, Movie properties grid, oval tool creating symbol Gradients, rectangle tool, pencil tool grouping, layers renaming layer Adding new layer, rotate and scale changing the order of layers, key frames, Adding sound, Importing sound, stopping the action, adding button text tool.

Software Lab

HTML

- 1. Create any webpage using following HTML tags.
 - a. Background colour
 - b. Font (colour, size, face)
 - c. Bold, Italic, Underline.
 - d. Big/ Small
 - e. H1, H2 etc.
 - f. Marquee
 - g. Ordered/ Unordered list
 - h. Data list
- 2. Create Employee table and apply various operations on it using HTML also put border around the table.
- 3. Create Internal and External Hyperlinks in a webpage.
- 4. Implement the concept of frames in a webpage.
- 5. Insert an image in a webpage.
- 6. Design Home page of your Institute.
- 7. Design web page for tourism spots in your area.
- 8. Prepare your CV and link on the webpage.
- 9. Use animation of image in a webpage
- 10. Insert table and perform table handling in webpage.

Front Page

- 1. Use front page to create a new page using different text style.
- 2. Use front page to create a new page showing text and table box.
- 3. Use front page to create a new page using clip art gallery.
- 4. Use front page to create a new page using image from a scanner.
- 5. Use front page to create a web page of your institute
- 6. Use front page to create a web page showing tourism spots of your area
- 7. Use front page to use table handling in web page.

<u>Flash</u>

- 1. Create a blank flash document
- 2. Create a flash movie and customize the movie setting.
- 3. Set frame rate back ground colour dimensions to define size tof movie.
- 4. Use of zoom tool from tool box.
- 5. Creating a shape with oval tool.
- 6. Add text to a button.
- 7. Make button symbol interactive (use of edit symbol button)
- 8. Add key frames to a button symbol time line.
- 9. Add sound to a button.
- 10. Verify changes with test movie.
- 11. Add layers to a movie
- 12. Animate text with twining.
- 13. Add a text field containing a string of text that will change every time a user presses button.
- 14. Add action script to the button enabling script to change the contents of the text field every time a user clicks the button.
- 15. Test the movie with flash player, return to main window and save the file.
- 16. Embed a flash movie in a web page.