Unique Paper Code	**62345625**
Name of the Course	**B.A. Programme**
Name of the Paper	**Multimedia and Web Designing**
Semester	**VI**
Duration	**2 Hours**
Maximum Marks	**75**
Students admitted in the year	**2015, 2016, 2017**

Instructions for Candidates

Attempt any four questions. All questions carry equal marks.

Q.1   Create a table using HTML with a border of 5 points around it. The table is to display the data about courses available in University of Delhi and the respective contact persons. The table should have 6 columns: *SNo, Name of Course, Number of seats, Contact person, Email Id, Mobile*. The column headings should be displayed in red, appear as bold and aligned to the center of cell. Add three rows in the table consisting information about any three courses. The name of course in each row should appear in italics and left aligned. The data in the rest of columns in these rows should be centered except for *Mobile*, which should be right aligned. Append one row to the table merging the five columns in one column. Display DU logo (stored in the file "**DU.jpg**") in the middle of last row of the table. Further, when a user clicks on the DU logo, DU website (www.du.ac.in) should open up. Display a caption "List of contact persons for DU courses" at the top of the table.

Q.2   A multimedia application requires the developer to create an image consisting of multiple shapes (squares, circles etc.). Which type of graphics should be used by developer to create such an image? Why? Also, explain the other kind of graphics available for the developer and why that won't be suitable for such images. List one most commonly used format each for both the graphics. Describe any three areas where multimedia applications are extremely useful, explaining how the applications are setup in the respective areas.

Q.3   "Multimedia gives you the ability to present information in a variety of ways." Which of these ways is most effective? Describe briefly how this type of multimedia content can be created, played and stored. Also, discuss its advantages and disadvantages. A learner wishes to learn driving a car, but is afraid to actually drive a car, even with an

instructor. What kind of multimedia application can be designed for such learners? Elaborate on the concept used.

Q.4   Justify why HTML is the 'language of tags'. Is a closing tag required for every HTML tag? Support your answer with at least two suitable examples. Write HTML commands to create the following webpage:

&
&&
&&&

Welcome to HTML

Also, create a form using HTML for accepting feedback from the users. The form should accept as input: Name of person (text box of size 25, maximum length allowed-50), Age of person (text box of size 3), Category (Drop down list-Faculty, Student, Parent, Alumna), Feedback (Check Boxes – Excellent, Good, Average, Poor). The form should also have Reset and Submit buttons.

Q.5   In a news application, the presenter wants to get his background changed from studio background to the picture of a historical building. How can this be implemented using multimedia concepts? List the steps carried out to perform this operation. Name and explain the multimedia concept used. When is 2½D animation preferred over 2D animation? A tune played on a musical instrument can be stored as a MIDI score as well as digitized audio. Compare the pros and cons of both the approaches. Multimedia projects usually require a large storage space. Still the project developer would desire these projects to be portable. Describe any two devices/media which can be used for this purpose.

Q.6   A multimedia application consists of multiple videos and color images. Name and describe a technique/software used to reduce the storage requirements of this application. Further, we need to design a multimedia application to show the movement of a walking man. Name and describe the technique used to create such an application. Name and describe the type of authoring tool suitable for developing a multimedia teaching application, in which the students can view the contents in a fixed order only. List any two softwares which support this approach. Now, if the students want to view the contents in the order they desire, can we continue with the same authoring tool? Justify your answer with a suitable explanation.

Unique Paper Code	:	62347627
Name of the Paper	:	Information Security and Cyber Laws
Course	:	B.A.(Prog.)Computer Application DSE
Semester	:	VI

Duration: 2 Hours   Maximum Marks:75

Attempt any 4 Questions.
All questions carry equal marks

Q1. What are the security issues of Windows XP operating system? Suppose IT chief security officer of an organization purchase a highly secure system "Alarm Logic" to meet their security needs. This system works as a gateway to the Organization from outside network by sending alert to the security portal of that organization. What type of system is "Alarm Logic"? Describe the functioning of this "Alarm logic" security system.

Q2. Describe various stages and tools of Hacking . Distinguish between Hacking and Phishing.
Suppose, you have created a website. Some vulnerabilities are reported by exposing and exploiting that website in order to discover its weaknesses. What types of vulnerabilities can be there? List them and explain various ways to fix these vulnerabilities in order to make the website more secure?

Q3. Differentiate between false positive and false negative biometric authentication? Why biometrics are more secure than password? What are the frauds which are possible in biometric authentication? Describe in your own words.

Q4. Differentiate between the following techniques with suitable examples of each.
(a) Symmetric and Asymmetric encryption
(b) Substitution and Transposition cipher

Encrypt the following plain text using
(a) Caesar cipher
(b) Rail fence cipher(key=exam)

Plain text: Online mode of Examination

Q5. Describe various types of cyber crimes. Differentiate between Section 67 and 67 A of IT Act 2008.
Suppose a person fraudulently or dishonestly make use of electronic signature and/or password   of other person. Which   section of IT Act 2008 will be applicable in this case and what are the penalties and punishments under this section?

Q6. What is the difference between electronic signature and digital signature? Explain How do you authenticate an electronic document using digital signature. Assume that Alex is able to observe all messages exchanged between Bob and Cina. Alex knows only public key. Explain how Cina will detect the following attack using digital signature .

Bob sends a message x = "Transfer $1000 to Mike" to Cina. Alex intercepts the message and replaces "Mike" with "Alex".

Unique paper code   :   62347626

Name of Paper   :   Software Engineering

Name of the Course   :   B.A. (Prog): Computer Application: DSE-1B

Semester   :   VI

Duration: Two Hours   Maximum Marks :   75 Marks

Attempt any four questions
All questions carry equal marks

Q1   Suppose you have to develop an online Mobile recharge portal. List the names of functions which
       need to be developed for this system. Also explain the software quality attributes to be considered
       for the system. The following facilities must be included in the system:

       • Select the option from Prepaid/ Postpaid.
       • Select your mobile operator.
       • Check the online recharge plans designed exclusively for you or fill in the amount you want
         to recharge.
       • Online recharges can be done through any online payment mode.

Q2   What do you understand by software development process model? Briefly describe different
       software process models. Which software development process model is more suitable for the
       following projects? Justify your answer.

       • An online inventory management system for an automobile industry.
       • A simple Data processing project.

Q3   Design context diagram, Level 1 and Level 2 Data Flow Diagrams (DFD) for web-based hotel
       booking system, where customer can inquire for the types of rooms, room availability, booking of
       room, online cancellation and payment through any online payment mode. Also design data
       dictionary for the given scenario.

Q4   What are various ways to improve the quality of software projects? What is capability maturity
       model (CMM)? Describe the model and its role in improving the quality of software projects.

Q5   What are the advantages and disadvantages of black box testing? Discuss the functionalities of a
       college website. Use Black box testing to test the functionalities mentioned in the website.

Q6   Describe software requirements specification (SRS) document and design document for automation
     of readymade cloth store. You can take your own assumptions related to categories of cloths
     according to gender, age & occasion etc.