

**Code No: D2506****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****M.Tech II - Semester Examinations, March/April 2011****MULTIMEDIA AND RICH INTERNET DEVELOPMENT  
(SOFTWARE ENGINEERING)****Time: 3hours****Max. Marks: 60****Answer any five questions  
All questions carry equal marks**

- - -

1. Explain the compression techniques in details for text, image, audio and video. [16]
2. a) A series of messages to be transmitted between two computers over PSTN. The messages comprise the characters A through H. The probability of the character is as follows.  
A and B=0.25, C and D=0.14, E, F, G, and H=0.055
  - i) Use Shannon's formula to derive the minimum average number of bits per character.
  - ii) Use Huffman coding to derive a codeword set and prove this is the minimum set by constructing the corresponding the Huffman tree.b) What is Run length encoding? Explain with suitable examples. [10+4]
3. a) What is streaming media? Explain with examples.  
b) Explain the role of NTE in multimedia applications. [6+6]
4. a) What is RSS, Atom and JSON? Explain with suitable examples.  
b) What is Web 2.0? Explain the applications of Web 2.0. [6+6]
5. a) What is the procedure to create a shape using oval tool?  
b) How do you add sound to a button in adobe flash CS3? [6+6]
6. a) Explain rich internet application with Ajax by giving suitable examples.  
b) What is the man difference between traditional web application and Ajax based web application? [6+6]
7. a) The band width of music signal is 15 Hz to 2KHz. What is the Nyquist rate of the sampler? Determine the bandwidth of the band limiting filter which to be used for the digitization of a music signal?  
b) What is Text? Explain different types of text available for multimedia communication? [6+6]
8. a) What is Dojo tool kit? Why it is used?  
b) What is tweening? Explain the difference between shape tweening and motion tweening? [6+6]

\*\*\*\*\*