

CORE COURSE – VI - MULTI MEDIA AND AUTHORIZING TOOLS

Objectives:

To introduce the students to the World of Multi Media.

Unit – I

What is Multimedia? Evolution of multimedia, - Making Multimedia - Structure and components of multimedia - multimedia platforms, application domains Macintosh and Windows Production Platforms - Hardware Peripherals - Memory & Storage devices - Input devices - Output Hardware - Communication devices. Basic Tools - making Instant Multimedia - Multimedia Authoring Tools

Unit – II

Sound- music and noise, characteristics of musical sound, tone, note, intensity, pitch, timbre. Digitization of sound; PCM, sampling rate, resolution, Bit rate, quantization error, signal – to-noise ratio, sampling theory.

Unit – III

Video technology: analog video: Principles, Broadcast standards, recording formats & Standards. Digital video: Principles, PC Video, and Motion Picture to video conversion. Video compression. Video formats and quick time.

Unit – IV

Multimedia Authoring Tools and Metaphors: Introduction, definition & functions of metaphors. Basic categories – slide show metaphor, authoring metaphors, book metaphor, windowing metaphor, Icon metaphor and network metaphor.

Unit – VI

Consideration for selecting the authoring tool (hardware, software, utilities etc), Authoring approaches (Programming, Screen based, information centered). Feature of authoring system: Cross platform features, suitability; for Multiple Applications, Extra features, cost, technical support, ease of interface design etc. Introduction to Internet; domain name, FTP etc.

Books and Journal for Study and Reference:

1. Nigel Chapman and Jenny Chapman, Digital Multimedia, John Wiley and Sons 2000
2. James D. Foley et.al Addison Wesley Computer Graphics, 2nd edition 1996
3. John Vince, Virtual Reality systems, ACM Press 1995.
4. S.V.Raghavan and Sathish R.Tripati, Multimedia, Networking PHI 1997.
5. John Vince Addison, 3-D Computer Animation, Wesley 1992

6. Hearn and Baker, Computer Graphics, Second Edition PHI.
7. Tay Vaughan, Multimedia making it work, - TATA Mc Hill - New Delhi - 1998.
8. Mac Multimedia for Teachers, Robinette - IDG Books - California - 1995.
9. K.R.Rao, Zosan S.Bojkovic, Dragorad, Multimedia Communication Systems, A.Milovanovic Pearson Education - New Delhi - 2002.
10. John. F. Koegel Buford, Multimedia Systems, Pearson Education - New Delhi - 2001.
11. Mary Fallenstein, Hellman, W.R. James, Multimedia Case Book - - Van Nestrand Reinhold - New York - 1995.
12. D.P.Mukarjee, Fundamentals of Computer Graphics and Multimedia - - Prentice Hall - New Delhi - 1999.