

[This question paper contains 4 printed pages.]

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Your Roll No. ....

**B.Sc. (Hons.) / Computer Science / VI Sem. D**

**Paper 605 (i) – MULTIMEDIA APPLICATIONS**

(Admissions of 2001 to 2010)

Time : 3 Hours

Maximum Marks : 75

*(Write your Roll No. on the top immediately  
on receipt of this question paper.)*

**SECTION A is compulsory.**

*Attempt any 4 questions from SECTION B.  
Parts of a question must be attempted together.*

**SECTION A (Compulsory)**

1. (a) What is Virtual Reality (VR)? Explain the components in a VR Set up. (5)
- (b) What are the advantages that Non-immersive virtual reality systems have over Immersive systems? (4)
- (c) What are the CMYK, Grayscale and L\*a\*b color models? (6)

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- (d) Discuss the different Animation file formats. (4)
2. (a) What are the functions of the Input and Output subsystems of a multimedia development system? (4)
- (b) Discuss the applications of Audio media type. (4)
- (c) Discuss any 4 incompatible international standards for Broadcast TV and videotape. (4)
- (d) Discuss the use of Computer-based training (CBT) and Just-in-time training (JIT). (4)

### SECTION B

*(Attempt any 4 questions.)*

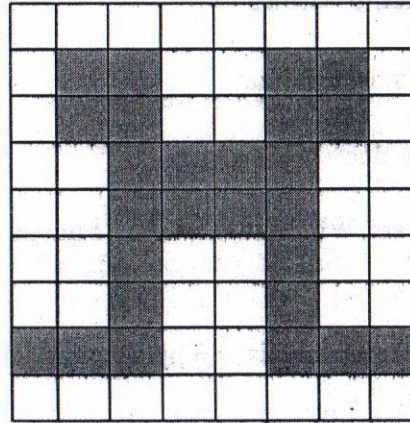
3. (a) Explain the use of Stereoscopic Shutter Glasses in multimedia systems. (3)
- (b) Explain the Magnetic tracking technique used for tracking the hand in a VR system. (3)
- (c) What are the applications of Virtual Reality in the field of Medicine and Surgery? (4)
4. Describe each of the following file formats :
- (a) PICT graphic format

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- (b) MP3 audio format
- (c) MIDI music format
- (d) DVD video
- (e) Clipboard Windows Metafile Format (WMF) (2×5=10)
5. (a) What is multimedia? Why do we need multimedia systems? (5)
- (b) Differentiate between a TV screen and a Computer Monitor. (5)
6. (a) What is JPEG? What are its applications? (4)
- (b) Differentiate between multimedia applications and conventional applications. (2)
- (c) Discuss the role of multimedia in Decision support systems. (4)
7. (a) Discuss the features of 'Solaris Live!'. (3)
- (b) What are Kiosks? Can off-the-shelf packages be used in Kiosks? Why? (3)
- (c) Encode the following image using 1-D run-length encoding and 2-D run-length encoding. (4)

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8. (a) Describe the Berkom Reference Model. (4)
- (b) Define the template for the Text and Image media types. (4)
- (c) Explain the CD-ROM XA. (2)