

**Scheme – E**

**Sample Question Paper**

**Course Name : Diploma in Computer Technology / Information Technology**

**Course Code : CM/IF**

**Semester : Fifth**

**12180**

**Subject Title : Multimedia and Animation Techniques (Elective – I)**

**Marks : 100**

**Time: 3 Hrs**

**Instructions:**

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

**Q.1 a) Attempt any THREE.**

**12 Marks**

- a. (i) List any four components of Multimedia file.  
(ii) Define Pixel and Roping display terminology.
- b. Describe tightly controlled and bounding related to QOS architecture.
- c. What benefits are achieved by using compression in multimedia systems?
- d. State four design related issues in multimedia authoring system.

**Q.1 b) Attempt any ONE.**

**06 Marks**

- a. State four topologies used for multi-server network.
- b. Which tool is used to create shape in flash? Explain with example.

**Q.2. Attempt any FOUR.**

**16 Marks**

- a. Describe image Annotation and its use.
- b. Why the traditional input devices are not suitable for multimedia systems? List the multimedia devices used for video conference.
- c. State meaning of CD-ROM, WORM, Rewriteable, Multifunction.
- d. Describe working of Digitizer and state function of dictionary of electronic pen.
- e. What are requirements of jpeg?
- f. What are different Authoring Tools. Describe any one in details.

**Q.3 Attempt any FOUR.**

**16 Marks**

- a. Draw a block diagram of video compression technique.
- b. What is the use of paint bucket tool? How Gap size and Lock fill options are used?
- c. Draw a block diagram of model of a Timeline Based Multimedia Authoring System.
- d. What is Scene Change Frame Detection? Why it is required?
- e. Explain Ink bottle tool in details.

**Q.4 a) Attempt any THREE.**

**12 Marks**

- a. Describe with figure DCT Encoding and Quantization related to JPEG.
- b. When different types of multimedia objects on the same server are combined? What should be motive to separate them?
- c. Describe the time-line, tool box, panels, and Stage of the Flash environment.
- d. Explain telephone Metaphor with example.

**Q.4 b) Attempt any ONE.**

**06 Marks**

- a. Explain Network performance issues. Explain any two methods to improve it.
- b. Which storage technologies are used in multimedia senses.

**Q.5 Attempt any FOUR.**

**16 Marks**

- a. Define middleware and list its four functions related to distributed computing.
- b. How the direct and index access to the information can be made in multimedia authoring and user interface?
- c. What is JPEG and its requirement? Write full form of RTF and RIFF.
- d. What is the use of colour mixer and colour component panel?
- e. Explain any four characteristics of multimedia transaction.
- f. Compare circle and rectangle tool with respect to their use.

**Q.6 Attempt any FOUR.**

**16 Marks**

- a. Describe the role of Data-processing server and full motion video server.
- b. Differentiate between embedding and linking with reference to storing and editing of multimedia objects.
- c. Describe how I and B pictures are decoded in MPEG.
- d. Describe the importance of synchronization in multimedia application.
- e. Explain various objectives of jpeg.