



**B.TECH.**

**THEORY EXAMINATION (SEM-IV) 2016-17**

**MULTIMEDIA AND ANIMATION**

**Time : 3 Hours**

**Max. Marks : 100**

**Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.**

**SECTION – A**

**1. Explain the following:**

**10 x 2 = 20**

- (a) List out the Characteristics of Multimedia System.
- (b) A digital signal is always a degraded version of the original Analog signal. Explain.
- (c) The sampling frequency is 1.5 times the true frequency means, what is the alias frequency?
- (d) Mention some of the Major Applications where graphics can be used.
- (e) Write notes on Tweened Animation.
- (f) Why file or Data Compression is necessary for Multimedia Activities?
- (g) Write the difference between bitmap and vector drawn images.
- (h) State the basic principles of animation.
- (i) Write a short note on Characteristics of Sound.
- (j) Differentiate between Cell Animation and Path Animation.

**SECTION – B**

**2. Attempt any five parts of the following questions:**

**5 x 10 = 50**

- (a) Illustrate Various Compression Formats in detail.
- (b) List out the Steps in Creating a Movie Clip Symbol.
- (c) In relation to OCR-Software, Distinguish between Pattern Match and Feature Extraction.
- (d) Explain how compression is achieved using the GIF Standard. Is it lossy or lossless?
- (e) Elaborate the Various Phases of Multimedia Application Development in detail.
- (f) How does the Process of Raster Scanning create an Image on monitor? How can interlacing be useful for displaying steady images on slower monitors?
- (g) Explain briefly on any two 2D Animation Tools.
- (h) State the Procedure for Creating Classic Tween Motion along a Path.

**SECTION – C**

**Attempt any two parts of the following questions:**

**2 x 15 = 30**

- 3 (i) Explain the various media that are normally incorporated in multimedia presentation? Give examples of how information may be conveyed through each of these media components.
- (ii) How is the DCT is different from the DFT? Which Transform is more efficient?
- 4 Derive expression for the Transformation Matrix for rotating a Point around an Arbitrary Line.
- 5 How does motion cycling help to create compact animation sequences? Explain.

