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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.