Dr. Hemraj Saini

Roll No.: _____

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- February 2020

M.Tech II Semester

COURSE CODE: 10M11CI214   MAX. MARKS: 15

COURSE NAME: Multimedia systems

COURSE CREDITS: 3   MAX. TIME: 1 Hrs

Note: *All questions are compulsory and carrying equal marks. Carrying of mobile phone during examinations will be treated as case of unfair means.*

Que.1: *[03 Marks; CO1]* What are the application and system QoS parameters for MPEG video stream? Write them in a tabular format.

Que.2: *[06 Marks; CO1]* Provide the detailed explanation of the following terms / statements-

(a) Interdisciplinary aspects of multimedia

(b) Key difference between Lossy and Lossless Compression

(c) Real-time requirements on multimedia system

Que.3: *[02+01+01=04Marks; CO2]*

(a) Provide the Lempel–Ziv–Welch (LZW) compression and decompression algorithms.

(b) Use the LZW algorithm to compress the string: BABAABAAA

(c) Use LZW to decompress the output sequence of : <66><65><256><257><65><260>

Note: Assume that the scheme has an initial table with code words 0 through 255 corresponding to the 8-bit ASCII characters; character "A" is 65 and "B" is 66.

Que.4: *[02 Marks; CO2]* Obtain a set of Huffman code for the message (m1.....m7) with relative frequencies (q1.....q7) = (4,5,7,8,10,12,20). Draw the Huffman tree for the given set of codes.