Total number of printed pages: 02 **B. Des. (UG)/2nd Semester/UMD201**

2025

INTRODUCTION TO MULTIMEDIA COMMUNICATIONS

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

Answer **Question No. 1** and ***any four*** from the rest.

Central Institute Of Technology
Kokrajhar : : Bodoland
ESTD. : 2006
असतो मा सत गमय
तमसो मा ज्योतिर्गमय

1. A) Fill in the blanks: (10x1 = 10)

   i. Information searching is an example of multimedia application in the field of _____.
   ii. Programs that enable a computer to function are called _____.
   iii. Digital Signals have two amplitude levels called _____.
   iv. A _____ tree can be formed in Huffman Encoding.
   v. A collection of characters of a single size and style belonging to a typeface family is called _____.
   vi. The two print document orientations are _____ and _____.
   vii. Vector Graphics are made up of _____.
   viii. The alpha channel of an image consists _____ information.
   ix. The amount of data that can be transmitted in a fixed amount of time is called _____.
   x. The full form of CAVE is _____.

   B) State True or False.: **(**1 x 10 =10)

   i) The term ‘multimedia’ was first coined by David Sawyer.
   ii) Analog signals are denoted by square waves.
   iii) Data compression can sometimes increase the file size.
   iv) Continuous media are time independent.
   v) Text is a kind of signal.
   vi) Cone cells are better for low light vision.
   vii) Resolution of a bitmap image is fixed.
   viii) Yellow is a primary colour in the Artistic Colour Model.
   ix) Display resolution is measured in dots per inch.
   x) Google is a web browser application.

P.T.O

2. A) Define Multimedia. What do you use multimedia mostly for? (2+3 = 5)
   B) Name any five fields where multimedia can be applied? Give examples of each. (10)
   C) Explain the process of ADC with a diagram. (4+1 =5)

3. A) Why is text still considered as an important multimedia element? (5)
   B) Draw clearly any 5 symbols which are not icons. (5x2 = 10)
   C) Explain case-sensitive and case insensitive text with examples. (5)

4. A) What are the differences between tints, shades and tones? (6)
   B) Describe any two-colour systems/models. (5+5 = 10)
   C) Mention any four ways of acquiring digital images. (4)

5. A) Explain what is MIDI? (4)
   B) State the differences between MIDI and Digital Audio. (5+5 = 10)
   C) In audio editing, what is trimming and splicing and assembly? (6)

6. A) What is sampling? State Nyquist's Theorem. (2+2 = 4)
   B) How does a component video differ from a composite video? (3+3 = 6)
   C) Describe the different type of computer networks with diagrams. (8+2 = 10)

7. Write short notes on *any four* from the following: (4x5 = 20)
   A) Data Compression
   B) Anti-aliasing
   C) Dot-matrix printers
   D) Amplifiers
   E) NTSC
   F) Web Browsers.

Central Institute Of Technology
Kokrajhar, Assam
ESTD. : 2006
असतो मा सत गमय
तमसो मा ज्योतिर्गमय

****