

Total No. of printed pages = 4

° **BMD 171203**

Roll No. of candidate

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2019

B.Des. (MCD) 2nd Semester End-Term Examination

**INTRODUCTION TO MULTIMEDIA
COMMUNICATIONS**

(New Regulation)

Full Marks – 70

Time – Three hours

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

Answer question No. 1 and any *four* from the rest :

1. Choose the correct answers from the following
questions: (10 × 1 = 10)

(i) The term 'multimedia' was first coined by:

(a) David Sawyer

(b) TayVaughan

(c) Iris Sawyer

(d) Bobb Goldstein

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- (ii) Staff training applications are associated with the field of:
 - (a) Military
 - (b) Education
 - (c) Business
 - (d) Mathematical and scientific research
- (iii) Which among these is a lossy data compression algorithm?
 - (a) Huffman Algorithm
 - (b) RLE
 - (c) LZW
 - (d) JPEG
- (iv) The ASCII character set is made up of how many bits?
 - (a) 7 bits
 - (b) 8 bits
 - (c) 127 bits
 - (d) 128 bits
- (v) Which among the following is not a Graphics?
 - (a) Photographs
 - (b) Buttons
 - (c) Charts
 - (d) Movies
- (vi) In a RGB colour system, adding Red and Blue gives:
 - (a) Yellow
 - (b) Cyan
 - (c) Magenta
 - (d) Black

(vii) The frequency range of normal human beings are between:

- (a) 20 Hz – 20,000 KHz
- (b) 20 KHz — 20,000 KHz
- (c) 20 Hz — 20,000 Hz
- (d) 20 KHz — 20,000 Hz

(viii) The frame rate of a picture in NTSC broadcast system is:

- (a) 24Hz
- (b) 25Hz
- (c) 29Hz
- (d) 30Hz

(ix) Which among the following is a web browser?

- (a) Windows 10
- (b) Adobe Flash
- (c) Safari
- (d) Google

(x) The game 'Pokémon Go' implements the following type of VR system:

- (a) Immersive
- (b) Non-immersive
- (c) Augmented
- (d) Text-based

2. (a) State with examples, the various fields where multimedia can be applied. (10)

(b) Mention five differences between Analog Signals and Digital Signals. (5)

3. (a) What are the 'cases' in Text? Explain them briefly. (2+2=4)
- (b) Write brief notes on: (3 × 2 = 6)
- (i) *The ASCII Character Set and*
- (ii) *The Extended Character Set.*
- (c) How can you differentiate between symbols and icons? (5)
4. (a) What are the differences between Vector Graphics and Raster Graphics? (4)
- (b) What is an alpha channel and what are the benefits of using it? (1+4=5)
- (c) Describe the characteristics of colour. (6)
5. (a) What are the differences between MIDI and Digital Audio? (6)
- (b) Describe the characteristics of musical sound. (6)
- (c) Explain 'noise' and provide examples to support your answer. (3)
6. (a) What are interlaced and progressive video? (3+3=6)
- (b) Write short notes on the following video formats: (3 × 3 = 9)
- (i) .FLV
- (ii) .MP4
- (iii) .MOV
7. (a) Describe LAN and WAN networks with diagrams. (3+3+2=8)
- (b) What are the different tools associated with Virtual Reality? (7)