

END SEMESTER/ RE-TEST EXAMINATION, 2020

(New Syllabus)

Semester: 3rd

Subject Code: AMT-301

Subject: **MULTIMEDIA SYSTEMS & TECHNOLOGY**

Full Marks – 70

Duration – 3 Hours

The figures to the right indicate full marks for the questions

Illustrate your answers with suitable sketches and examples wherever necessary.



PART-A

Marks - 25

(All questions are compulsory)

Q.1. Fill in the blanks: (1x10 =10)

- a) Machines installed at public places for users to search information or perform transactions are called _____.
- b) A signal is any kind of physical quantity that conveys _____.
- c) In multimedia, symbols are considered to be concentrated _____.
- d) The biggest benefit of using alpha channels is _____.
- e) Image resolution is the number of _____ in an image.
- f) _____ printers create a huge amount of noise.
- g) Sounds higher than 20 kHz are called _____.
- h) The amount of data that can be transmitted in a fixed amount of time is called _____.
- i) The range of a personal area network is _____.
- j) One or more files of a project can be compressed or packed into a single file called an _____.

Q.2. Write True or False: (1x10 =10)

- a) Animation is a multimedia component.
- b) Hand gestures are signals which conveys information only in presence of light.
- c) The 'No Smoking' symbol is an icon.
- d) The Korean Hangul script works for two languages.
- e) Images reflect the intensity of light.
- f) 32-bit depth images are also called hi-colour images.
- g) Tones between 4 and 16 Hz can be perceived via the body's sense of touch.
- h) Television screens use progressive-scan technology.
- i) In video, *luma* represents the brightness in an image.
- j) Unauthorized use of copyrighted material is called copyright infringement.

Q.3. Choose the correct answer:
5)

(1x5 =

A) Which among the following is not an application software?

- | | |
|------------------------|--------------------------|
| i) Microsoft Excel | ii) Windows Media Player |
| iii) Microsoft Windows | iv) Microsoft Word |

B) Combination of Red and Blue colour in computer graphics produces:

- | | |
|-----------|-------------|
| i) Cyan | ii) Magenta |
| iii) Grey | iv) Yellow |

C) Which digital image file format does not support alpha channel?

- | | |
|-----------|----------|
| i) TGA | ii) JPEG |
| iii) TIFF | iv) PNG |

D) The artistic colour model is also called:

- | | |
|-----------------|---------------|
| i) RYB model | ii) RGB model |
| iii) CMYK model | iv) YUV model |



E) Video signals that contains both the luminance and chrominance information on a single channel are called:

- | | |
|----------------------|------------------------|
| i) RGB Video | ii) Component Video |
| iii) Composite Video | iv) Multi-format Video |

PART-B

Marks - 45

(Answer any *five* questions)

- Q.4. a) Define multimedia. What are the components of multimedia? (3+2 = 5)
b) Explain Static and Continuous Media with examples. (2+2= 4)
- Q.5. a) What are the different types of Cases in text? Explain them. (1+2 = 3)
b) What do you understand by *case sensitive* and *case insensitive*? (2)
c) Describe the ASCII character set. (4)
- Q.6. a) State three differences between Raster and Vector Graphics. (3)
b) Explain the fundamental characteristics of colour. (6)
- Q.7. a) Briefly describe *Trimming*, *Splicing* and *Assembly* in Audio Editing. (6)
b) What do you understand by MIDI? (3)
- Q.8. a) What is a field in video? Explain how fields create a frame. (3)
b) What are the various methods by which stereoscopic videos can be created? (6)
- Q.9. a) How does a Web Browser differ from a Search Engine? Give examples. (5)
b) Name the different types of VR systems. (4)
- Q.10. What are the different stages of a Multimedia Project? Describe any one of them. (4+5 = 9)

