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END SEMESTER EXAMINATION, NOVEMBER 2018

Semester – 3rd

Subject Code : AMT-301

MULTIMEDIA SYSTEMS AND TECHNOLOGY

Full Marks – 70

Time – Three hours

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

Illustrate your answers with suitable sketches and examples wherever necessary.

PART – A

Marks – 25

All questions are compulsory.

1. Fill in the blanks :

1 × 10 = 10

(a) Windows 10 is a _____ software.

(b) A signal is any kind of physical quantity that conveys _____.

[Turn over

- (c) Apart from letters, alphabets and symbols, icons are also considered as _____ in multimedia.
- (d) Alpha Channel contains _____ information.
- (e) Sound whose frequency is below 20 Hz is called _____.
- (f) The process of building a single frame from two fields is called _____.
- (g) An application software which is used for accessing websites is called _____.
- (h) Head Mounted Displays are used in _____.
- (i) *Proof of Concept* is also known as _____.
- (j) Unauthorized usage of copyrighted material is called copyright _____.
2. Write true or false : $1 \times 10 = 10$
- (a) Continuous media are time independent.
- (b) Huffman Encoding is a type of Lossy Data Compression algorithm.

- (c) All icons are symbols but all symbols are not icons.
- (d) A 24-bit image is also known as a true color image.
- (e) MIDI can generate speech.
- (f) All current television broadcasting system are analog in nature.
- (g) The reach of a PAN is 100 metres.
- (h) Adobe Flash is a Card or Page-based Authoring Tool.
- (i) Major bugs are fixed during Alpha Testing.
- (j) When a project is close to being finished, its status can be called as gold.
3. Choose the correct answer : $1 \times 5 = 5$
- (a) Which among the following is not a multimedia component ?
- (i) Graphics (ii) Workstations
- (iii) RAM (iv) MS Word

(b) What is the shortcut key combination to merge layers in Adobe Photoshop ?

(i) Ctrl + T

(ii) Ctrl + D

(iii) Ctrl + M

(iv) Ctrl + E

(c) Which Colour Model is used by analog television broadcasts ?

(i) RGB

(ii) YUV

(iii) CMYK

(iv) HSB

(d) Which amongst the following digital image formats doesn't support Alpha Channel ?

(i) GIF

(ii) BMP

(iii) PNG

(iv) TIFF

(e) Web pages are coded using ?

(i) Unicode

(ii) ASCII

(iii) FTP

(iv) HTML

PART - B
Marks - 45

Answer any five questions.

4. (a) Why do we need multimedia ?

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(b) Describe Analog and Digital Signals with diagrams.

2+2+1=5

5. (a) What is the ASCII Character set ?

3

(b) What is the Extended Character set ?

3

(c) Write a brief note on Unicode.

3

6. (a) Explain anti-aliasing using diagrams.

3

(b) What are the benefits of using an Alpha Channel ?

4

(c) What are warm colours and cool colours ?

2

7. (a) What are the characteristics of musical sound ? Describe them briefly.

6

(b) Describe the composition of a MIDI file with a diagram.

3

8. Describe the different types of Television broadcast standards. 9
9. Explain the different types of computer networks with a diagram. 9
10. (a) What are the different types of Authoring Tools ? Explain briefly. 6
- (b) Describe the role of a Project Manager. 3