DIP-389	DMS–1

DIPLOMA EXAMINATION – JANUARY 2016.

Multimedia Systems

MULTIMEDIA SYSTEMS

Time : 3 hours   Maximum marks : 75

PART A — (20 × 1 = 20 marks)

Answer ALL questions.

1.   GIF stands for

 (a)   Graphics Ingration Format

 (b)   Graphics Interchange Form

 (c)   Graphics Interchange Format

 (d)   None

2.   An 8 bits image each pixel has ——————— possible value.

 (a)   124   (b)   128

 (c)   254   (d)   256

3. UDP stands for

    (a) User Data Protocol

    (b) Usual Datagram Protocol

    (c) User Datagram Protocol

    (d) None

4. Power point slides delivered as part of a streaming lecture presentation display smaller size usually around

    (a) 300×300 (b) 400×300

    (c) 200×300 (d) 200×400

5. OCR stands for

    (a) Optical Character Reader

    (b) Optical Character Recognition

    (c) Optical Code Reader

    (d) None

6. Power point always allow a minimum of ——————— seconds between slides in your presentation.

    (a) 10   (b) 12

    (c) 14   (d) 15

7. The original IBM PC / XT have.

   (a) 83 keys   (b) 86 keys

   (c) 88 keys   (d) 89 keys

8. The digitalized videos are stored as sequence of frames its resolution and size a single frame can consume up to

   (a) 1 MB   (b) 2 MB

   (c) 3 MB   (d) 4MB

9. Magnetic storage was also used for primary storage in a form of

   (a) Magnetic drum   (b) Core memory

   (c) Thin film memory (d) All the above

10. Magnetic materials used a half inch tape at ————————— Inch per second.

    (a) 112   (b) 116

    (c) 118   (d) 120

11. The uncompressed 24-bit RGB bitmap image below would require.

    (a) 219,726 bytes   (b) 219,762 bytes

    (c) 219,672 bytes   (d) 219,219 bytes

12. ADNS-2610 Optical Mouse Sensor Process
———————— frame per seconds

   (a) 1215   (b) 1512

   (c) 1152   (d) 1521

13. Graphics object consists of special data structures
   used to define

   (a) 2D   (b) 3D

   (c) Both (a) and (b)   (d) None of the above

14. A portion of interest in a video can be queried by
   using

   (a) A few sample video frames

   (b) A clip of the corresponding audio track

   (c) A textual description using keywords

   (d) All the above

15. TFT stands for

   (a) Thin Film Transistor

   (b) Thin Film Translator

   (c) Thin film Transaction

   (d) None

16. A hyperspace library contains up to

   (a)   35 K by 21 bit nodes

   (b)   34 K by 22 bit nodes

   (c)   32 K by 20 bit nodes

   (d)   30 K by 22 bit nodes

17. The storage capacity of 3.5 inch disk is

   (a)   1.4 MB   (b)   1.6 MB

   (c)   1.8 MB   (d)   2.0 MB

18. RTCP stands for

   (a)   Real time Transport Control Protocol

   (b)   Real Transport Control Protocol

   (c)   Real time Control Protocol

   (d)   None of the above

19. Most router implementation use only

   (a)   First-Come-First-server

   (b)   Last-Come-First-server

   (c)   Priority base

   (d)   None

20. Optical disk capacity range up to

   (a)   4 gigabytes   (b)   5 gigabytes

   (c)   6 gigabytes   (d)   7 gigabytes

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

21. Discuss about Optical and Mechanical MICR.

22. Explain types of Magnetic Tape construction.

23. Describe the properties for MDBMS.

24. Explain how JPEG works.

25. Explain about Rich Text format.

26. Explain about multimedia tools

27. Explain about keyboard layout.

28. Explain the basic approaches for data retrieval.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

29. Write details about Compression and Decompression techniques.

30. Explain Redundant Array of Inexpensive Disk (RAID).

31. Explain following multimedia streaming.

    (a) Protocol issues.

    (b) Streaming band width and storage.

32. Discuss in detail about the application of E-Publishing.

33. Explain about Audio Plus Power Point.

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DIPLOMA EXAMINATION

DECEMBER 2020

Multimedia Systems

Virtual Reality Technology

Time : 3 hours   Maximum marks : 75

SECTION A — (20 × 1 = 20 marks)

Answer ALL questions.

Choose the correct answer:

1. The basic element of a picture in volume graphics is?
    (a) pixel   (b) volsel
    (c) voxel   (d) none of above

2. Hue of color is related to?
    (a) Luminance   (b) Saturation
    (c) Incandescence   (d) Wavelength

3. The major components of CRT are?
    (a) Electronic Gun

(b)   Phosphorous coated screen

(c)   Control electrodes

(d)   All of above

4.   ——————— used to regulate the flow of elections in CRT?

(a)   Electronic Gun   (b)   Focusing electrode

(c)   Control electrode   (d)   All of the above

5.   Raster is a synonym for the term?

(a)   Array   (b)   Matrix

(c)   Model   (d)   All of above

6.   The ISO standard for computer Graphics is?

(a)   Graphics Kernel System

(b)   Graphics Standard System

(c)   Computer graphics standard

(d)   None of above.

7.   Computer Graphics models are now commonly used for making?

(a)   Motion pictures   (b)   Music Videos

(c)   Television shows   (d)   All of above

8. The maximum number of points that can be displayed without overlap on a CRT is refereed to as ?

   (a) Resolution   (b) Persistence

   (c) Attenuation   (d) None of above

9. Gray scale is used in?

   (a) Monitor that have color capability

   (b) Monitor that have no color capability

   (c) Random scan display

   (d) None of above

10. Film animations require ————————— frames for each second in the animation sequence

    (a) 20   (b) 22

    (c) 23   (d) 24

11. The 3D Clipping Window boundaries to define ————————— Region.

    (a) 21   (b) 23

    (c) 25   (d) 27

12. BSP stands for

    (a) Bit Stand Position

    (b) Binary Space Partitioning

    (c) Binary Station Position

    (d) None

13. HSV means

    (a)   Hue, Saturation and Value

    (b)   High, Saturation and Value

    (c)   Hue, Signal and Value

    (d)   None of the above

14. High quality raster graphics system have ————————— bits per pixel in the frame.

    (a)   20   (b)   22

    (c)   24   (d)   26

15. DDA Stands for

    (a)   Digital Differential Analyzer

    (b)   Digital Differential Analoge

    (c)   Digital Diagram Analyzer

    (d)   None of the above

16. The point at which set of projection parallel lines appears to converge is called

    (a)   Vanishing point   (b)   End point

    (c)   First point   (d)   None of the above

17. PET stands for

(a) Position Emission Tomography

(b) Point Edge Tomography

(c) Part Emission Tomography

(d) None

18. The Depth buffer method is also called

(a) A Buffer method

(b) Z Buffer method

(c) BSP Tree method

(d) None of the above

19. Interactive computer graphics uses various kind of input devices such as

(a) Mouse

(b) Graphic tablet

(c) Joystick

(d) All of these

20. Input function are used for

(a) Control the data flow from these interactive devices

(b) Process the data flow from these interactive devices

(c) Both (a) and (b)

(d) None of these

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

21. Explain the types of coherence.

22. Explain Graphics Monitors and Workstations.

23. Explain Raster scan display systems.

24. Explain DDA line drawing algorithm.

25. Explain various text clipping methods.

26. Explain any five input functions.

27. Explain Back space detection method.

28. Explain Parametric Representations.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

29. Write Bresenham line drawing algorithm.

30. Explain the parallel projection method.

31. Explain the points and vector with suitable example.

32. Explain 3D Display methods.

33. What is Morphing? Explain briefly.

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DIPLOMA EXAMINATION —
DECEMBER 2020

Multimedia Systems

DIGITAL IMAGE PROCESSING

Time : 3 hours   Maximum marks : 75

PART A — (20 × 1 = 20 marks)

Choose the correct answer :

1. What is Pixel?

    (a)   Picture Element

    (b)   Pictorial element

    (c)   Photo Element

    (d)   None of the above

2. What are cones and rods?

    (a)   Rejectors

    (b)   Acceptors

    (c)   Receptors

    (d)   Donors

3. What is the expansion of CCD?

   (a) Charge Coupled Device

   (b) Charge Collecting Device

   (c) Charge Changed Device

   (d) Coupled Charge Device

4. What is the expansion of CAT?

   (a) Computer Aided Tomography

   (b) Computerized Aided Tomography

   (c) Computerized Axial Tomography

   (d) Computer Axial Tomography

5. Spatial domain refers ——————

   (a) Image plane

   (b) Background image

   (c) Image Memory

   (d) Pixels of the Image

6. What is binary image?

   (a) One level image

   (b) Two level image

   (c) Three level image

   (d) Four level image

7. What is CDF?

   (a) Cumulative Distribution Function

   (b) Cumulative Density Function

   (c) Cumulative Distributive Function

   (d) Cumulated Distribution Function

8. SEM is ――――――――

   (a) Scanning Electron Microscope

   (b) Scanning Electronic Microscope

   (c) Scanning Electron Microscopy

   (d) Scanning Electron Microscopic

9. Which is called Minimum Mean Square Error filter?

   (a) Geometric Mean Filter

   (b) Band-pass Filter

   (c) Wiener Filter

   (d) Band-reject Filter

10. Two major area of color image processing are ―――――――― and ――――――――.

   (a) Full-color and half-color

   (b) Full-color and Pseudo-color

   (c) Half-color and Pseudo-color

   (d) None of the above

11. What is the unit of Radiance?

    (a) Lumens   (b) Ohms

    (c) Hertz   (d) Watts

12. Which is the only attribute of light?

    (a) Hue   (b) Intensity

    (c) Color   (d) None of the above

13. The source decoder contains

    (a) Symbol decoder and inverse mapper

    (b) Symbol decoder only

    (c) Inverse mapper Only

    (d) None of the above

14. What is the expansion of BSC?

    (a) Binary Symmetric Channel
    (b) Binary Similar Channel
    (c) Bi-Symmetric Channel
    (d) Bi-Similar Channel

15. Noisy coding theorem is also called as _____

    (a) Shannon's first theorem
    (b) Shannon's second theorem
    (c) Shannon's third theorem
    (d) Shannon's fourth theorem

16. LZW is ——————
    (a) Lempel-Ziv-Window
    (b) Linear-Ziv-Welch
    (c) Lempel-Zoom-Window
    (d) Lempel-Ziv-Welch

17. TIFF is ——————
    (a) Tagged Image Full Format
    (b) Tagged Image File Format
    (c) Tag Information File Format
    (d) Tagged Information File Format

18. Watershed segmentation is ——————
    (a) A morphological approach
    (b) A backward approach
    (c) A negative approach
    (d) A forward approach

19. Region growing is ——————
    (a) Grouping regions
    (b) Grouping colors
    (c) Grouping pixels
    (d) Grouping segments

20. A marker is a ——————

    (a) Connected component of an Image

    (b) Marking of an Image

    (c) Connected component of graph

    (d) Marking tool

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

Short answer questions.

21. What is Image Sampling? Brief.

22. What is image subtraction?

23. What is smoothing? Brief

24. Briefly discuss about Inverse filtering.

25. Discuss about RGB color model.

26. Explain Fidelity Criteria.

27. Explain Channel Encoder and Decoder.

28. Explain the Point Detection.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

Long answer questions.

29. Explain the elements of visual perception.

30. Explain some basic gray level transformations.

31. Explain Constrained Least Squares Filtering.

32. Explain three basic data redundancies.

33. Explain the Edge Detection.

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DIPLOMA EXAMINATION —
DECEMBER 2020

WEB DESIGN

Time : 3 hours   Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1.   Briefly explain Transmission Control Protocol.

    அலை செலுத்துதல் கட்டுப்படுத்தும் நெறிமுறை பற்றி எழுதுக.

2.   Explain URLs.

    URL என்றால் என்ன?

3.   Explain basic HTML tags.

    HTML அடிப்படை tag பற்றி எழுதுக.

4.   Briefly discuss HTML frames.

    HTML frames பற்றி விவரிக்க.

5. Write a HTML code to create a table for Mark statement.

HTML code மூலம் மதிப்பெண் அறிக்கை எவ்வாறு உருவாக்கப்படுகிறது?

6. What is Adobe PhotoShop? Explain Pallets.

Adobe PhotoShop பற்றியும் அதை கையாளப்படும் முறை குறித்து எழுதுக.

7. What is a computer virus? Write any six computer virus.

கணினி வைரஸ் என்றால் என்ன? ஆறு கணினி வைரஸ் பற்றி எழுதவும்.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Write a steps for create Flash Animation.

Flash Animation உருவாக்கும் விதம் பற்றி எழுதுக.

9. Explain OSI Reference Model.

OSI Reference உருவம் என்றால் என்ன?

10. Explain text formatting tags.

எழுத்து மாற்றம் உருவாகும் டாக்குகள் யாவை?

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11. Explain Netscape communicator.

Netscape communicator பற்றி எழுதுக.

12. Explain working with image selection.

Image selection வேலை செய்யும் முறையை பற்றி விவரி.

13. How to embedded Flash in HTML?

Flashயில் HTML எவ்வாறு பதிக்கம் செய்யலாம்?

14. Write in detail on CSS.

CSS பற்றி விவரமாக எழுதவும்.

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