



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
EDUCATION WITH IT/ BACHELOR OF BUSINESS ADMINISTRATION**

3RD YEAR 1ST SEMESTER 2021/2022 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: ITB 9303

COURSE TITLE: Multimedia and Graphics

DATE:

TIME:

TIME: 2 HOURS

Instructions:

1. Attempt **ALL questions**
2. Select the most correct alternative

1. In computer graphics, pictures or graphics objects are presented as a collection of discrete picture elements called_____.

- (A) Dots
- (B) Pixels
- (C) Coordinates
- (D) Points

.

2. The maximum number of points that can be displayed without overlap on a CRT is referred as.

- (A) Picture
- (B) Resolution
- (C) Persistence
- (D) Neither (b) and (c)

.

3. We translate a two-dimensional point by adding.

- (A) Translation distance
- (B) Translation difference
- (C) X and Y
- (D) Only (a)

.

4. Which devices provide positional information to the graphics system.

- (A) Input device
- (B) Output device
- (C) Pointing device
- (D) Both (a) and (c)

.

5. GIF stands for _____.

- (A) Global Image Format
- (B) Graphics Interchange Format
- (C) Graphics Image Format
- (D) None of the above

.
6. Which image files are a lossy format.

- (A) GIF
- (B) MPEG
- (C) JPEG
- (D) PNG

.
7. Which of the following is component of graphics.

- (A) Monitor
- (B) Memory buffer
- (C) Display controller
- (D) All of the above

.
8. CGA stands for.

- (A) Computer graphics array
- (B) Color graphics adapter
- (C) Computer graphics adapter
- (D) Color graphics array

.
9. LCD stands for.

- (A) Liquid cathode display
- (B) Liquid crystal display
- (C) Light cathode display
- (D) None of the above

.
10. Graphics and image processing technique used to produce a transformation of one object into another is called.

- (A) Animation
- (B) Morphing
- (C) Half tuning

(D) None of the above

.

11. _____ are also called gas discharge displays.

(A) Plasma panels

(B) LCDs

(C) CRT

(D) Raster scan devices

.

12. CAD stands for.

(A) Computer Aided Device

(B) Computer Aided Design

(C) Computer Aided Drive

(D) None of the above

.

13. Symbolic representation of some object or process is called _____.

(A) Icons

(B) Menu

(C) List

(D) Label

14. Aliasing means.

(A) Rendering effect

(B) Shading effect

(C) Staircase effect

(D) Cueing effect

.

15. Reflection of an object is same as rotation with angle

(A) 45 degree

(B) 90 degree

(C) 180 degree

(D) 360 degree

16. Multimedia is also used for ___ communications and presentations.

(A) Corporate

(B) Company

(C) Communal

(D) Commercial

17. MIDI was developed in ___ year.

(A) 1962

(B) 1972

(C) 1982

(D) 1992

18. Multimedia is widely used to add special _____ to movies.

(A) arrangement

(B) attachments

(C) control

(D) effects

19. A heavy video in a web based technology may not load because of poor

(A) Signal

(B) KBPS

(C) Presentation

(D) Bandwidth

20. _____ packages are used to train and educate people world over.

(A) Educational

(B) E-learning

- (C) E-tutorial
- (D) E-publishing

.

21. The ___ input addresses the different styles of different users.

- (A) Multi-sense
- (B) Multimedia
- (C) Multi-facet
- (D) Multi-sensory

22. _____ are typical examples of static images.

- (A) Photographs
- (B) File
- (C) Jokes
- (D) Messages

23. Aliasing means

- (A) Rendering effect
- (B) Shading effect
- (C) Staircase effect
- (D) Cueing effect

24. The technique of using a minimum number of intensity levels to obtain increased visual resolution is

- (A) Dithering
- (B) Half toning
- (C) Depth-Cueing
- (D) Rendering

.

25. In graphical system, the array of pixels in the picture are stored in :

- (A) Memory
- (B) Frame buffer
- (C) Processor
- (D) All of the mentioned

26. The maximum number of points that can be displayed without overlap on a CRT is referred a

- (A) Picture
- (B) Resolution
- (C) Persistence
- (D) Neither (b) and (c)

27. The primary output device in a graphic system is :

- (A) Scanner
- (B) Video monitor
- (C) Neither (a) nor (b)
- (D) Printer

28. Aspect ratio means:

- (A) Number of pixels
- (B) Ratio of vertical points to horizontal points
- (C) Ratio of horizontal points to vertical points
- (D) Both (b) and (c)

29. We translate a two-dimensional point by adding :

- (A) Translation distance
- (B) Translation difference
- (C) X and Y
- (D) Only (a)

30. Which one is the rigid body transformation that moves object without deformation.

- (A) Translation
- (B) Scaling
- (C) Rotation
- (D) Shearing

31. Which of the following is not a line-type ?

- (A) Dashed line
- (B) Dark line

- (C) Dotted line
- (D) Only (b)

32. he father of animation

- (A) Walt Disney
- (B) J. Stuart Blackton
- (C) William Horner
- (D) J.A. Ferinard plateau

33. Which one is vertical projection plane used to obtain the objects perspective :

- (A) Orthographic plane
- (B) Vertical plane
- (C) Perspective picture plane
- (D) Horizontal plane

34. The process of mapping a world window in world coordinate system to viewport are called

- (A) Transformation viewing
- (B) Viewport
- (C) Clipping window
- (D) Screen coordinate system

35. The process of extracting a portion of a database or a picture inside or outside a specified region are called

- (A) Transformation
- (B) Projection
- (C) Clipping
- (D) Mapping

36. How many types of video compression ?

- (A) 2
- (B) 3
- (C) 4
- (D) 5

37. How many step process for creating a 3D animation ?

- (A) 1
- (B) 2

- (C) 3
- (D) 4

38. JPEG stands for :

- (A) Joint Photo Experts Gross
- (B) Joint Photographic Experts Gross
- (C) Joint Photographic Experts Group
- (D) Joint Photographic Expression Group

39. Which compression provide some loss of quality?

- (A) Loss less
- (B) Lossy
- (C) Cel based
- (D) Object based

40. The maximum number of dots that can be displayed without overlap on CRT is referred to as

- (A) Refresh rate
- (B) Interlacing
- (C) Screen resolution
- (D) None of these

41. Which is not image file format ?

- (A) bmp
- (B) jpg
- (C) tiff
- (D) Both (a) and (b)

42. DDA stands for :

- (A) Digital differential analyzer
- (B) Digital data analyzer
- (C) Discrete data analyzer
- (D) Discrete differential analyzer

43. Clipping algorithm are

- (A) Two or three dimensional
- (B) Two dimensional

- (C) Three dimensional
- (D) None of these

44. GIF supports

- (A) 256 colours
- (B) 572 colours
- (C) 1024 colours
- (D) 16 million colours

45. Raster means :

- (A) Series of parallel lines
- (B) Series of parallel blocks
- (C) Series of parallel medium
- (D) Series of parallel sweeps

46. The process of selecting and viewing the picture with different view is called :

- (A) Windowing
- (B) Clipping
- (C) Projecting
- (D) Both (a) and (b)

47. Parallel projection shows the :

- (A) True image of an object
- (B) True size of an object
- (C) True shape of an object
- (D) All of these

48. CGA stands for :

- (A) Computer graphics array
- (B) Color graphics adapter
- (C) Computer graphics adapter
- (D) Color graphics array

49. LCD stands for :

- (A) Liquid cathode display
- (B) Liquid crystal display
- (C) Light cathode display
- (D) None of the above

50. LED stands for :

- (A) Light emitting diode
- (B) Liquid emitting diode
- (C) Light energy diode
- (D) None of above

51. The process of determining the appropriate pixels for an object is :

- (A) Power element
- (B) Rasterization
- (C) Simulation
- (D) None of above

52. Which of the following is an impact printer ?

- (A) Dot matrix printer
- (B) Laser printer
- (C) Inkjet printer
- (D) All of the above

53. The resolution by SVGA is ?

- (A) 1024*768 Pixels
- (B) 720*348 Pixels
- (C) 1280*1024 Pixels
- (D) 640*350 Pixels

54. Graphics programs are those which create :

- (A) Image
- (B) Picture
- (C) Designs
- (D) All of the above

55. Pixel stands for :

- (A) Picture element
- (B) File format

- (C) Sound
- (D) None of these

56. There are two types of polygons. They are _____

- (A) Convex and concave
- (B) Square and rectangle
- (C) Hexagon and square
- (D) Octagon and convex

57. Gray scale is used in :

- (A) Monitor that have color
- (B) Monitor that have color not available
- (C) Random scan display
- (D) None of the above

58. Computer graphics models are now commonly used for making :

- (A) Motion Pictures
- (B) Music video
- (C) Television shows
- (D) All of the above

59. Raster is a synonym for the term ?

- (A) Array
- (B) Matrix
- (C) Model
- (D) All of the above

60. CRT stands for :

- (A) Control ray tube
- (B) Computer ray tube
- (C) Cathode ray tube
- (D) Camera ray tube

61. In _____ picture or graphics objects are presented as a collection of discrete picture element.

- (A) Multimedia system
- (B) Software system
- (C) Automated system
- (D) Computer Graphics

62. A device that optically scans images, printed text, hand writing or an object and convert it to a digital image is called _____

- (A) Monitor
- (B) Scanner
- (C) Printer
- (D) Light pen

63. Dot matrix method of character generation is also called _____ method.

- (A) Vector drawn
- (B) Bitmap
- (C) Resolution
- (D) None of these

64. A transformation to alter the size of an object is called :

- (A) Translation
- (B) Scaling
- (C) Rotation
- (D) Wrap around

65. The operation that is used for repositioning the object is called

- (A) Rubber band method
- (B) Gravity method
- (C) Dragging
- (D) None

66. Symbolic representation of some object or process is called _____

- (A) Icons
- (B) Menu
- (C) List
- (D) Label

67. Which are not the graphics object displayed in computer graphics?

- (A) Diagrams
- (B) Text
- (C) Pictures
- (D) charts

68. _____ are described in units of cycles per second or hertz.

- (A) Refresh rates
- (B) Aspect ratio
- (C) Resolution
- (D) None of these

69. Aliasing means

- (A) Rendering effect
- (B) Shading effect
- (C) Staircase effect
- (D) Cueing effect

70. The combination of text, graphics art, sound, animation and video delivered by computer or other electronic devices is called :

- (A) Multimedia
- (B) Hyper media
- (C) Visual media
- (D) None

71. The people who weave multimedia into meaningful tapestries are called :

- (A) Programmers
- (B) Multimedia developers
- (C) Software engineers
- (D) Hardware engineers

72. One of the disadvantages of multimedia is

- (A) Cost
- (B) Adaptability
- (C) Usability
- (D) Relativity

73. Which of the following is a computer based presentation technique ?

- (A) Slides
- (B) Tutorial
- (C) Multimedia
- (D) Data Processing

74. Session initiation protocol (SIP) is very

- (A) Independent
- (B) Flexible

- (C) Dependant
- (D) Complex

75. Which files create a perfect reproduction of the original images ?

- (A) Shockwave
- (B) Nx View
- (C) GIF
- (D) JPG

76. Devices that are used primarily to transport data between the processor and the user are known as

- (A) Data transfer device
- (B) Basic storage device
- (C) Networking devices
- (D) Data presentation device

77. A series of slides displayed in a particular sequence is called.

- (A) Placeholder
- (B) Template
- (C) Layout
- (D) Slide show

78. The text colour in presentation should contrast with the colour of

- (A) CPU
- (B) Frame
- (C) Stack
- (D) Background

79. A smaller version of an image is called a

- (A) Clipart
- (B) Bitmap
- (C) Portable network graphic
- (D) Thumbnail

80. Which of the following is a technique to blend two or more images to form a new image ?

- (A) Modeling
- (B) Morphing
- (C) Animating
- (D) Warping

81. A video consists of a sequence of

- (A) Frames
- (B) Signals
- (C) Packets
- (D) Slots

82. How many attributes control the characteristics of sound ?

- (A) 5
- (B) 4
- (C) 3
- (D) 2

83. A typical CD-R disc can hold approximately :

- (A) 200 MB
- (B) 700 MB
- (C) 500 MB
- (D) 100 MB

84. Which of the following is the fastest method to transfer large files such as video and audio from a peripheral to the computer ?

- (A) FTP
- (B) RAM
- (C) Networking
- (D) IEEE 1394 fire wire

85. A type of virtual reality environment in which subjects are visually isolated from the real environment is called :

- (A) Immersive
- (B) Semi immersive
- (C) Non immersive
- (D) Augmented

86. If frames are displayed on screen fast enough we get an impression of :

- (A) Signals
- (B) Motions
- (C) Packets
- (D) Bits

87. Moving picture experts group(MPEG) is used to compress :

- (A) Frames
- (B) Images
- (C) Audio
- (D) Video

88. Joint photographic experts group (JPEG) is used to compress.

- (A) Music
- (B) Pictures
- (C) Images
- (D) Frames

89. In audio and video compression, each frames is divided into small grids called picture elements or :

- (A) Frames
- (B) Packets
- (C) Pixels
- (D) Mega pixels

90. MMS stands for _____

- (A) Multimedia System
- (B) Multimedia Messaging Services
- (C) Multimedia Messaging System
- (D) Multimedia Services

91. XML stands for _____

- (A) Extra Multi Language
- (B) Exprimental Markup Language
- (C) Extensible Making Language
- (D) Extensible Markup Language

92. HTML stands for _____

- (A) Help text markup language
- (B) Hyper text making language
- (C) Hyper torrent marker language
- (D) Hyper text markup language

93. GUI stands for _____

- (A) General user interface
- (B) Graphic user interchange

- (C) Graphical user interface
- (D) Graphical user information

94. In Voice Over IP, Term SIP stands for _____

- (A) Session Initiation Protocol
- (B) Session Initiation Port
- (C) Session Initiation Path
- (D) Session Initiation Packet

95. MIDI stand for _____

- (A) Musical instrument digital interface
- (B) Musical instrument digital instruction
- (C) Musical instrument design interface
- (D) Multimedia instrument digital interface

96. Rich text is known as

- (A) Un-formatted text
- (B) Formatted text
- (C) Hypertext
- (D) None of these

97. Two parts of Morphing algorithms are

- (A) Warp & Tweening
- (B) Tweening & Wrap
- (C) Wrap & Dissolve
- (D) Tweening & Dissolve

98. A good example of hypermedia is

- (A) The internet
- (B) Level1 video disc
- (C) Audiotape
- (D) Videotape

99. A multimedia file

- (A) Is same as any other regular file
- (B) Must be accessed at specific rate
- (C) Stored on remote server cannot be delivered to its client
- (D) None of the mentioned

100. Which one of the following is the characteristic of a multimedia system?

- (A) High storage
- (B) High data rates
- (C) Both (a) and (b)
- (D) None of these

101. MP3 is an extension of a _____ file.

- (A) Video file
- (B) Graphics image
- (C) Audio File
- (D) Text File

102. The process of planning your multimedia presentation is

- (A) Design
- (B) Development
- (C) Layout
- (D) Storyboard

103. Which database system is used in multimedia

- (A) RDBMS
- (B) DBMS
- (C) Data dictionary
- (D) None of these

104. Establishing a session in Session Initiation Protocol (SIP), requires a three-way

- (A) Protocols
- (B) System
- (C) Ports
- (D) Handshake

105. A structure of linked elements through which the user can navigate, interactive multimedia becomes _____.

- (A) Hypermedia
- (B) Hypertext
- (C) Inter media
- (D) Digital media

106. Streaming stored audio/video, files are compressed and stored on

- (A) IP
- (B) Server
- (C) Domain
- (D) Internet

107. The delay that occur during the playback of a stream is called _____

- (A) Stream delay
- (B) Playback delay
- (C) Jitter
- (D) Event delay

108. or music, we need to compress digitize signals at

- (A) 1.41 I-MHz
- (B) 1.42 I-MHz
- (C) 1.45 I-MHz
- (D) 1.48 I-MHz

109. A compressed audio/video file can be downloaded as a

- (A) Image
- (B) Video
- (C) Frame
- (D) Text file

110. Purpose of dividing picture into blocks is to decrease number of

- (A) Channels
- (B) Pixels
- (C) Calculations
- (D) Frames

111. Before audio or video signals can be sent on Internet, they need to be

- (A) Channelized
- (B) Managed
- (C) Digitized
- (D) Organized

112. Moving Picture Experts Group (MPEG-1), was designed for a

- (A) PC
- (B) CD

- (C) DVD
- (D) Floppy

113. Morphing means

- (A) Changing position
- (B) Changing color
- (C) Changing shape
- (D) None of these

114. It is a mediated environment which creates the sensation in a user of being present in a (physical) surrounding.

- (A) WWW
- (B) VR
- (C) HMD
- (D) GUI

115. Video is represented as a series of images formally known as _____

- (A) Pics
- (B) Shots
- (C) Frames
- (D) Snaps

116. With reference to multimedia elements, pick the odd-one out of the following:

- (A) Voice Script
- (B) Animation
- (C) Audio
- (D) Video

117. Random access is not allowed in _____

- (A) Live streaming
- (B) Dead streaming
- (C) Static streaming
- (D) On demand streaming

118. Lossy and lossless are classifications of _____

- (A) Multimedia storage systems
- (B) Files

- (C) Compression algorithms
- (D) All of the above

119. Arithmetic Encoding is

- (A) Lossless compression
- (B) Lossy compression
- (C) LZY coding
- (D) None of these

120. MIDI is

- (A) Protocol
- (B) Device
- (C) Lan
- (D) None of these