

MID-TERM EXAMINATION PAPER

FACULTY : **COMPUTER SCIENCE AND MULTIMEDIA**
COURSE : **BACHELOR OF INFORMATION TECHNOLOGY (BIT)**
YEAR/ SEMESTER : **THIRD YEAR / SIXTH SEMESTER**
MODULE TITLE : **MULTIMEDIA SYSTEM**
DATE : **7TH MARCH 2022**
TIME ALLOWED : **3 HOURS**
START : **6:30 AM – 9:30 AM**
SET : **A**

Instruction to candidates

1. This question paper has THREE (3) Section
2. Answer **ALL** questions in Section A, MCQ.
3. Answer **5** questions in Section B, MSAQ
4. Answer **2** questions in Section C, MEQ
5. No scripts or answer sheets are to be taken out of the Examination Hall.
6. For Section A, answer in the OMR form provided.

Do not open this question paper until instructed.

(Candidates are required to give their answers in their own words as far as practicable)

SECTION A

Multiple Choice Questions

(30*1=30)

1. The ability of seeing the picture of the other person in a video conference is a major improvement over just hearing the
 - a. Voice
 - b. Speech
 - c. Video
 - d. Audio
2. Many web-based systems have interfaces based on forms.
 - a. Server
 - b. Web
 - c. Chrome
 - d. Browser
3. Which compression loses data?
 - a. Lossy compression
 - b. Lossless compression
 - c. Both A and B
 - d. None of the above
4. The should use terms and concepts which are drawn from the experience of the people who will make most use of the system.
 - a. Interface
 - b. Interact
 - c. Symbol
 - d. None of above
5. If frames are displayed on screen fast enough, we get an impression of
 - a. signals.
 - b. motions.
 - c. packets.
 - d. bits.
6. In Audio and Video Compression, each frame is divided into small grids, called picture elements or
 - a. frame.
 - b. packets.
 - c. pixels.
 - d. mega pixels.
7. Joint Photographic Experts Group (JPEG) is used to compress
 - a. music.
 - b. pictures.
 - c. images.
 - d. frames.
8. The expansion for MIDI is
 - a. Musical Instrument Digital Interface
 - b. Musical Instrument Data Interface
 - c. Musical Instructions Digital Interface
 - d. Musical Information Data Interface
9. Information presentation is concerned with system information to system users.
 - a. Representing
 - b. Presenting
 - c. Requesting
 - d. None of above
10. There are _____ main elements in multimedia.
 - a. 4
 - b. 3
 - c. 5
 - d. 2
11. Visualization can reveal between entities and trends in the data.
 - a. Relationships
 - b. Contrition
 - c. Information
 - d. Data
12. Repeated occurrence of the same character is called
 - a. Word
 - b. Run
 - c. Bit
 - d. Character

13. is a text which contains links to other texts.
 - a. Hypermedia
 - b. Hypertext
 - c. Mark up
 - d. None of above
14. is the perception of sound by human beings?
 - a. Pitch
 - b. Frequency
 - c. Amplitude
 - d. Wave length
15. Kinematics refers to the position and velocity of....
 - a. Direction
 - b. Angle
 - c. Point
 - d. Illusion
16. GIF stands for
 - a. Graphic Interconnection File
 - b. Graphical Interface Format
 - c. Graphic Information Format
 - d. Graphic Interchange Format
17. A digital image is represented by a matrix of numeric values each representing a quantized intensity.....
 - a. Quality
 - b. Attribute
 - c. Value
 - d. numerical
18. Multimedia ____ of elements grabs the viewer's attention and retains it.
 - a. Mixture
 - b. Combination
 - c. Control
 - d. Contribution
19. There are ____ types of video compressions.
 - a. 1
 - b. 2
 - c. 3
 - d. 4
20. A video consists of a sequence of
 - a. frames.
 - b. signals.
 - c. packets.
 - d. Slots
21. The visual effect of is due to a biological phenomenon known as persistence of vision
 - a. Motion
 - b. Vision
 - c. Illusion
 - d. None of above
22. GUI is a
 - a. Operating system
 - b. Hardware
 - c. Language interpreter
 - d. Software interface
23. When bit integers are used to store the intensity values, the gray levels range from 0 to 255.
 - a. 4
 - b. 8
 - c. 16
 - d. 32
24. The first step in producing computer animation is process
 - a. Input
 - b. Output
 - c. In between
 - d. Middle
25. What is compression?
 - a. To compress something by pressing it very hardly
 - b. To minimize the time taken for a file to be downloaded
 - c. To reduce the size of data to save space

- d. To convert one file to another
26. How many attributes control the characteristics of sound?
- | | |
|------|------|
| a. 5 | c. 3 |
| b. 4 | d. 2 |
27. One component which contains nearly all GUI programs will have
- | | |
|----------|------------|
| a. Frame | c. Monitor |
| b. Mouse | d. Button |
28. Another problem known as flicker occurs due to a fluctuation of brightness perception.
- | | |
|-------------|-----------------|
| a. Sporadic | c. Aperiodic |
| b. Periodic | d. All of above |
29. adds an extra dimension to an interface and can help the user understand complex information structures.
- | | |
|----------------|----------|
| a. Information | c. Color |
| b. Fact | d. Paint |
30. _____ are typical examples of static images.
- | | |
|----------------|-------------|
| a. Photographs | c. Jokes |
| b. File | d. Messages |

SECTION B

Short Question Answer

Attempt any five (5) questions out of eight (8) questions

(5*6=30)

1. Define Multimedia. Explain the characteristics of multimedia.
2. Explain the various user interfaces.
3. Discuss the color dithering technique with example.
4. Explain the advantage and disadvantages of bitmap over vector image.
5. How can you generate animation using computer?
6. Differentiate between lossless and lossy compression.
7. Explain the applications of multimedia in e-learning.
8. Discuss the abstraction levels of the programming of multimedia system.

SECTION C

Long Question Answer

Attempt any two (2) questions out of three (3) questions

(2*20=40)

1. What are the steps of JPEG compression? Explain. Why do we need Huffman coding? Explain it with suitable example.
2. 10 seconds of stereo music at 44.1 KHz sampling rate having 16 bits' resolution then what will be the file size? Explain computer animation as well as steps required to produce computer animation in details. Elaborate video resolution with example.
3. Differentiate between image and graphics. List and explain the various color models used in image and videos.

******BEST OF LUCK******