1. The ability of seeing the picture of the other person in a video conference is a major improvement over just hearing the ……
   1. **Voice**
   2. Speech
   3. Video
   4. Audio
2. Many web-based systems have interfaces based on ….. forms.
   1. Server
   2. **Web**
   3. Chrome
   4. Browser
3. Which compression loses data?
   1. **Lossy compression**
   2. Lossless compression
   3. Both A and B
   4. 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.
   1. **Interface**
   2. Interact
   3. Symbol
   4. None of above
5. If frames are displayed on screen fast enough, we get an impression of
   1. signals.
   2. **motions.**
   3. packets.
   4. bits.
6. In Audio and Video Compression, each frame is divided into small grids, called picture elements or
   1. frame.
   2. packets.
   3. **pixels.**
   4. mega pixels.
7. Joint Photographic Experts Group (JPEG) is used to compress
   1. music.
   2. pictures.
   3. **images.**
   4. frames.
8. The expansion for **MIDI** is
   1. **Musical Instrument Digital Interface**
   2. Musical Instrument Data Interface
   3. Musical Instructions Digital Interface
   4. Musical Information Data Interface
9. Information presentation is concerned with ……. system information to system users.
   1. Representing
   2. **Presenting**
   3. Requesting
   4. None of above
10. There are \_\_\_\_\_ main elements in multimedia.
    1. 4
    2. 3
    3. **5**
    4. 2
11. Visualization can reveal ……. between entities and trends in the data.
    1. **Relationships**
    2. Contrition
    3. Information
    4. Data
12. Repeated occurrence of the same character is called …..
    1. Word
    2. **Run**
    3. Bit
    4. Character
13. …… is a text which contains links to other texts.
    1. **Hypermedia**
    2. **Hypertext**
    3. Mark up
    4. None of above
14. **…….. is the perception of sound by human beings?**
    1. **Pitch**
    2. **Frequency**
    3. **Amplitude**
    4. **Wave length**
15. **Kinematics refers to the position and velocity of….**
    1. **Direction**
    2. **Angle**
    3. **Point**
    4. **Illusion**
16. **GIF** stands for
    1. Graphic Interconnection File
    2. **Graphical Interface Format**
    3. Graphic Information Format
    4. Graphic Interchange Format
17. A digital image is represented by a matrix of numeric values each representing a quantized intensity………
    1. Quality
    2. Attribute
    3. **Value**
    4. numerical
18. Multimedia \_\_\_\_ of elements grabs the viewer’s attention and retains it.
    1. Mixture
    2. **Combination**
    3. Control
    4. Contribution
19. There are \_\_\_ types of video compressions.
    1. 1
    2. **2**
    3. 3
    4. 4
20. A video consists of a sequence of
    1. **frames.**
    2. signals.
    3. packets.
    4. Slots

|  |
| --- |
| 1. The visual effect of ……. is due to a biological phenomenon known as persistence of vision    1. **Motion**    2. Vision    3. Illusion    4. None of above 2. GUI is a    1. Operating system    2. Hardware    3. Language interpreter    4. **Software interface** 3. When ……. bit integers are used to store the intensity values, the gray levels range from 0 to 255.    1. 4    2. **8**    3. 16    4. 32 4. The first step in producing computer animation is …. process    1. **Input**    2. Output    3. In between    4. Middle 5. What is compression?    1. To compress something by pressing it very hardly    2. To minimize the time taken for a file to be downloaded    3. **To reduce the size of data to save space**    4. To convert one file to another 6. How many attributes control the characteristics of sound? |

* 1. 5
  2. 4
  3. 3
  4. **2**

1. One component which contains nearly all GUI programs will have
   1. Frame
   2. Mouse
   3. Monitor
   4. Button
2. Another problem known as *flicker* occurs due to a …… fluctuation of brightness perception.
   1. Sporadic
   2. **Periodic**
   3. Aperiodic
   4. All of above
3. …… adds an extra dimension to an interface and can help the user understand complex information structures.
   1. Information
   2. Fact
   3. **Color**
   4. Paint
4. \_\_\_\_\_\_ are typical examples of static images.
   1. **Photographs**
   2. File
   3. Jokes
   4. Messages

Answer 6 out 8 questions. (6\*5 = 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.

Answer 2 out of 3 questions. (2\*20 =40)

1. What are the step 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 step 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.