

**G.H RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT,  
AMRAVATI  
DEPT. OF COMPUTER SCIENCE AND ENGINEERING  
QUESTION BANK  
SUBJECT :- MULTIMEDIA TECHNOLOGIES.**

**Unit No 1**

1. What is multimedia authoring? Explain some common authoring metaphors.
2. Differentiate between the BMP, JPEG, GIF and TIFF image file formats mentioning where each is used?
3. Explain digital audio file formats? Explain.
4. Explain 1bit and 8 bit gray scale image.
5. Explain gif and png image file format.
6. Explain mp3 audio file format.
7. Explain different multimedia software tool.
8. Explain different components of multimedia technology.
9. Explain the various steps of multimedia production.
10. How digital image represented? Explain image formats.

**Unit No 2**

1. Explain RGB and CMY color model?
2. Explain NTSC analog signal.
3. Explain luminance and chrominance in detail.
4. Explain image formation model in color science.
5. Explain different types of video signal?
6. Explain difference between NTSC and PAL?
7. Explain composite video signal?
8. Explain CCIR standard for digital video?
9. Explain HDTV in brief?

### **Unit No 3**

1. Explain digitization of sound?
2. Explain Nyquist theorem with example?
3. Explain signal to noise ratio in brief?
4. Explain hardware aspects of MIDI.
5. Explain MIDI to WAV conversion?
6. Explain quantization and transmission of audio?
7. Explain lossless predicative coding with example?
8. Explain pulse code modulation in brief?
9. Explain signal to noise ratio?

### **Unit No 4**

1. Explain the different methods of data compression?
2. Explain lossless compression method with example?
3. Explain Run-Length coding with example?
4. Explain variable length coding with example?
5. Explain lossless image compression technique?
6. Explain different JPEG standard?
7. Explain dictionary based coding with example?
8. Difference between dictionary based coding and Run-Length coding?
9. Difference between lossey and lossless compression.

### **Unit No 5**

1. Explain the different video compression technique?
2. Explain video compression based on motion compression?
3. Explain H.261 standard in brief?
4. Explain the difference between I-frame and P-frame?
5. Explain MPEG-1 in brief?
6. Explain encoder and decoder in H.261?
7. Explain MPEG-2 AAC?
8. Explain predictive coding with example?

## **Unit No 6**

1. Explain basic audio compression technique?
2. Explain channel vocoder in brief?
3. Explain linear predictive coding?
4. Explain MPEG audio compression algorithm?
5. Explain MPEG-2 advance audio coding in brief?
6. Explain temporal masking?
7. Explain ADPCM in brief?
8. Explain phase insensitivity and linear predictive coding?

**PREPARED BY: - PROF. M.S.MAHALLE**