***IOT Lab Assignment-2***

1. *What is an Encoding format List down encoding formats for various types of data  ( Text, Number, Photo, Audio, Video).*

An encoding format is a system used to represent data in a specific digital format. It translates information from human-readable form into a format that computers can understand and process. Different types of data require different encoding formats.

Text: 1) ASCII: American Standard Code for Information Interchange

2) UTF-8: Unicode Transformation Format - 8

3) UTF-16: Unicode Transformation Format – 16

Numbers: 1) Binary: Base 2 number system

2) Decimal: Base 10 number system

3) Hexadecimal: Base 16 number system

4) Floating-point: Represents real numbers with decimal points

Photos: 1) JPEG: Joint Photographic Experts Group

2) PNG: Portable Network Graphics

3) GIF: Graphics Interchange Format

4) BMP: Bitmap

5) TIFF: Tagged Image File Format

Audio: 1) MP3: MPEG-1 Audio Layer 3

2) AAC: Advanced Audio Coding

3) WAV: Waveform Audio File Format

4) FLAC: Free Lossless Audio Codec

Video: 1) MP4: MPEG-4 Part 14

2) AVI: Audio Video Interleave

3) MOV: QuickTime Movie

4) WMV: Windows Media Video