Course Name : O Level(B3-Ist sem.)   Subject : ITT&NB

Topic: QR Code(Quick Response Code)   Date   : 04-06-20

QR Code(Quick Response Code)

The abbreviation for QR Code is **Quick Response Code**. A QR Code is a two-dimensional barcode that is readable by smartphones. QR Codes may be used to display text to the user, to open a URL, save a contact to the address book or to compose text messages. "QR Code" is a registered trademark of **DENSO WAVE INCORPORATED**. It is a machine-readable optical label with information on the associated item or product. QR codes were designed for car manufacturing plants to manage car part inventories.

A QR code uses four standardized encoding modes (numeric, alphanumeric, byte/binary, and kanji) to store data efficiently.

How to read QR Code?

To read QR codes with your smartphone, you need the appropriate software in your phone. For Android-based devices, you can use a barcode scanner. QR code readers are also available on AppStore on iOS-devices such as iPhones.

Scanning of QR Code

To scan a QR Code, you first need to have a scanner app on your smartphone. A large selection of these can be downloaded for free in the various app stores. When you have installed one, start the application and keep the camera of your smartphone over the QR Code to scan it. If the Code is readable, the encoded address or action will be accessed automatically.

Features of QR Code:

QR Code provides the following features:

- **High Capacity Encoding of Data**:- Conventional bar codes can store up to 20 digits. On the other hand, QR codes can provide up to a hundred times more information than bar codes. QR codes can manage all types of data, for example, letters, numbers, graphics, and audio or video files.

- **Small Printout Size:-** Since a QR code symbol is designed with a two-dimensional structure, it can encode 10 times more data than a barcode of same size. A micro QR code may be used for a smaller print size .
- **Dirt- and Damage-resistant Durability:-** The QR code has the ability to perform error correction. Data in QR codes can be recovered even if parts of the symbol have been destroyed or damaged.
- **Readable from Any Direction in 360 Degrees:-** A QR code is designed to be rapidly readable from any direction in 360 degrees.
- **Structured Appending Feature:-** One QR code symbol can contain up to 16 separate smaller symbols, each of which contains different unique information. The advantage of this structure is that it can be printed in a smaller space. Conversely, multiple QR code symbols can be grouped in a single data symbol.

Exercise:

1. **Write short notes on QR Code.**