**Assignment 02**

**Discipline: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Batch: \_\_\_ Semester: \_\_\_**

**Roll no & Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**Instructions**

Solve following questions.

Mention all steps clearly.

Draw graphs and diagrams where necessary.

**Question no.1: solve and find the Fourier transform for the signal.** **(CLO-3)**

**Question no.2: write down the properties of Fourier transform. (CLO-2)**

**Question no.3: Define discrete time Fourier series (DTFS). (CLO-1)**

**Question no.4: Define discrete Fourier transform and it is properties. (CLO-1)**

\_**Question no.5:**

**What is Decimation in time algorithm? Prove this algorithms,**

**Question no.6: What is application of FFT? Write its two algorithms?**

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Good Luck

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