

**Delhi Institute of Technology and Management, Sonipat**

**Assignment No. — I**

**Subject: Circuit and systems**

**Time: Submit within 7 days**

**Subject Code: ETEE-207**

**Max. Marks: 30**

**Date: 02 Nov 2021**

**Note: Attempt any five questions. All questions carry equal marks.**

**Ques 1.** What are signals? Write its classification?

**Ques 2.** Define types of interconnection of systems.

**Ques 3.** Define step signals and Ramp signals.

**Ques 4.** Express the triangular waveform which has amplitude (K) and time period (1 sec) in terms of ramp and step signals.

**Ques 5.** Synthesize the squarewave from (fig 2.19 on page no. 15).

**Ques 6.** Describe the LTI systems and their properties.

**Ques 7.** What is direct formula. Illustrate the use of Direct formula with the help of an example.

**Ques 8.** Sketch the following signals:

1.  $U(t-5) - U(t-8)$
2.  $(t-4)[U(t-1)-U(t-4)]$

**Prepared By: Mr. Kapil Sharma**