ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

Mid-Semester Examination   Summer Semester, A.Y. 2019-2020
Course No.: EEE 4201   Time: 30 Minutes
Course Title: Electrical Circuit II   Full Marks: 25

Marks in the margin indicate full marks. It is an open book exam. Students are not allowed to use any keyboard and mobile during the examination time. Assume suitable values for any missing data.

All questions must be answered

2. a) What do you understand by electrical isolation and impedance matching operation of a   04
        transformer?

    b) For the circuit in Fig. 2(b), determine the phasor currents I_1 and I_2.   08
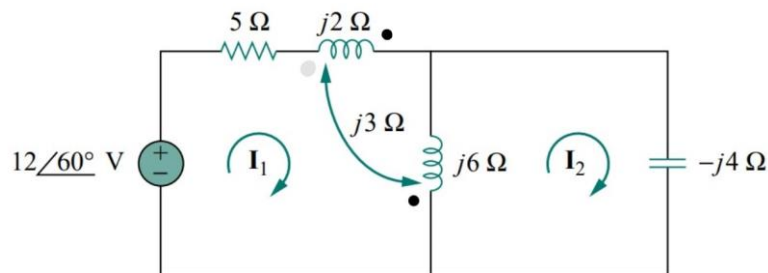

Fig. 2(b)

    c) Given the signal in Fig. 2(c), express $v(t)$ in terms of singularity function.   08
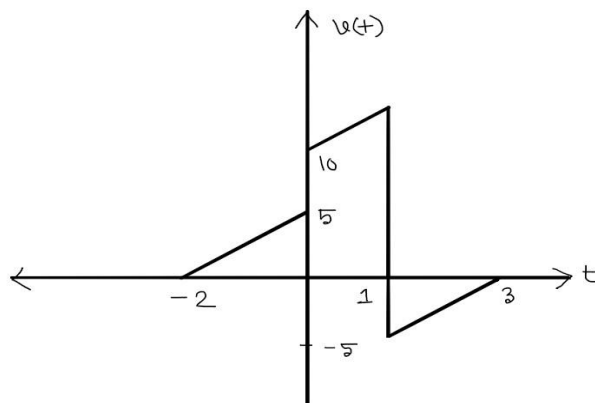

Fig. 2(c)

    d) Sketch the source-free response curves and step response curves of a parallel RLC circuit and   05
        compare them.