4076 – B81 – IISS – A – 18

SECOND SEMESTER B.SC. DEGREE EXAMINATION, APRIL 2018
ELECTRONICS (Optional)

Time : 3 Hours] [Max. Marks : 80

Instruction : ***All*** *answers should be written in the* ***same*** *answer book.*

PART – A

Answer **any ten** of the following :

1. What are transfer functions of a two port network ?
2. Define Z_{11} and Z_{22}.
3. Find the value of L for T-section low pass filter. Given $R_o = 600\Omega$ and $f_c = 1$ KHz.
4. Draw frequency response curve for a band pass filter.
5. What do you mean by low pass and high pass filters ?
6. Why coupling capacitors are used in R-C coupled tansistor amplifier ?
7. Voltage gain of an amplifier is 100. Express it in dB.
8. What are the advantages of FET over BJT ?
9. When V_{GS} of an FET changes from – 4.1 volt to – 4 volt, drain current changes from 10 mA to 10.3 mA. What is its transconductance ?
10. For a negative feedback amplifier, the open loop gain is 5000 and $\beta = 0.05$. Find its closed loop gain.