

School of Engineering & Technology
Guru Ghasidas Vishwavidyalaya (Central University)
Department of Information Technology
CT-1 EXAMINATIONS – October, 2020

Subject: Analog Electronic Circuit.

Duration: **1 Hour**

Date 12/10/2020

M.M:15.

Branch: B.tech 3rd sem

Attempt any 5 question. All carries equal marks.

Q.1) Derive expression for A_i and R_i in terms of h parameters and Load impedance? [CO-1, BTL-4, Marks-3]

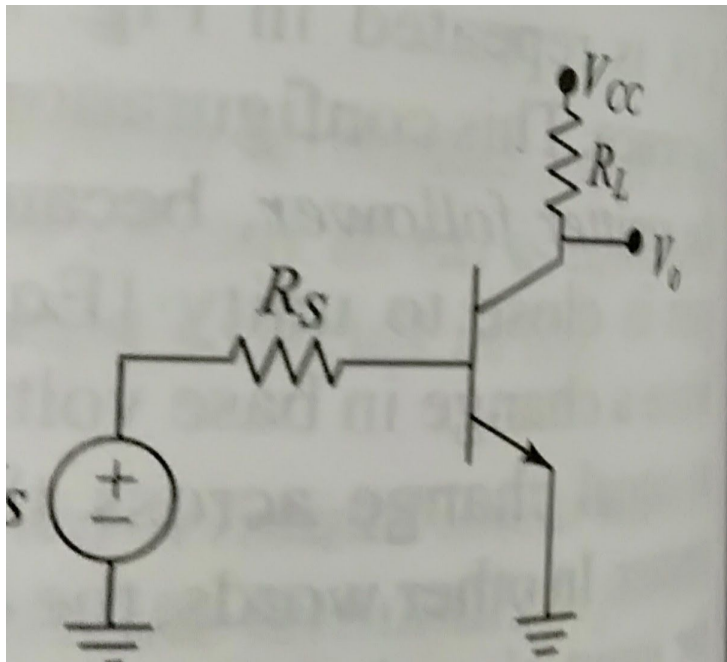
Q.2) Draw the circuit of Darlington pair and list that three most important characteristics? [CO-1, BTL-2, Marks-3]

Q.3) State Miller's theorem and dual of Miller's theorem with the aid of circuit diagram? [CO-1, BTL-1, Marks-3]

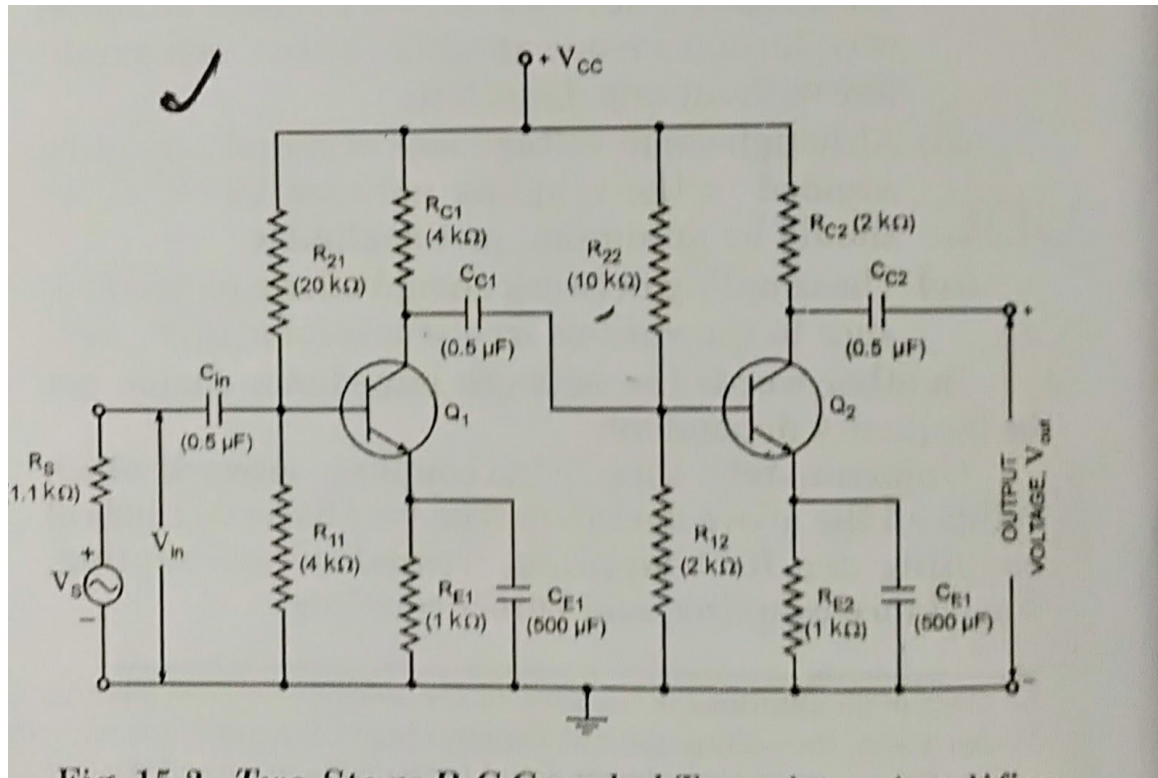
Q.4) Draw the approximate h parameter model for CC and CB in terms of hybrid parameter of CE. Justify the approximation used? [CO-1, BTL-3, Marks-3]

Q.5) Express h_{ib} , h_{rb} and h_{ob} in terms of hybrid parameter of CE? [CO-1, BTL-1, Marks-3]

Q.6) For the given fig. determine current gain, voltage gain and input impedance?
 $R_s = 100\Omega$, $R_L = 4\text{ k}\Omega$ [CO-1, BTL-4, Marks-3]



Q.7) For the given Circuit find overall current gain ,input impedance of second stage and effective load impedance of first stage?[CO-1,BTL-4 ,Marks-3]



Note: For Q6 and Q7 take standard values of h parameter used for CE configuration.