JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -2 EXAMINATIONS-2022
B.Tech-III Semester (ECE)

COURSE CODE (CREDITS): 18B11EC313(4) MAX. MARKS: 25
COURSE NAME: Electronic Devices and Circuits
COURSE INSTRUCTORS: Er. Munish Sood MAX. TIME: 1 Hour and 30 Minutes

Note: *All questions are compulsory. Marks are indicated against each question in square brackets.*

Q1. For the network of Fig.1 calculate **[5] CO-2 , CO-3**

a) I_B,I_C and r_e
b) Z_i and Z_o and A_v

Fig.1

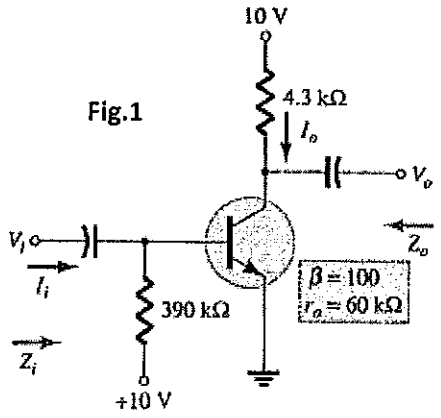
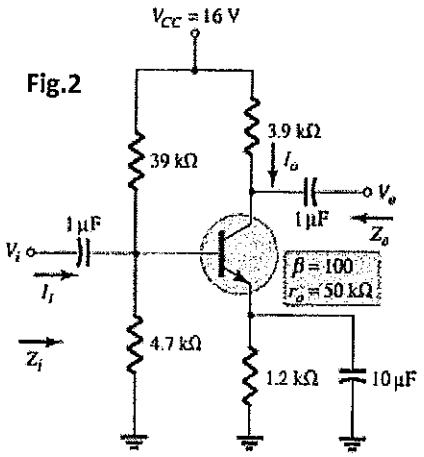


Fig.2



Q2. For the network of Fig.2 calculate **[5] CO-2 , CO-3**

a) I_E and r_e
b) Z_i and Z_o and A_v

Q3) For the network of Fig. 3 calculate **[5] CO-2 , CO-3**

a) Z_i, Z_o
b) A_v and V_o if Vi = 1 mV

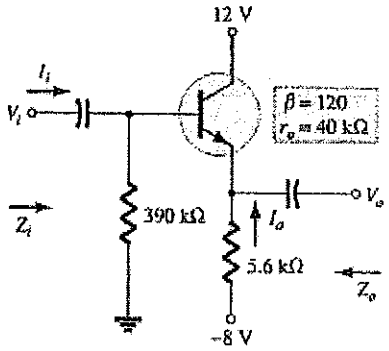
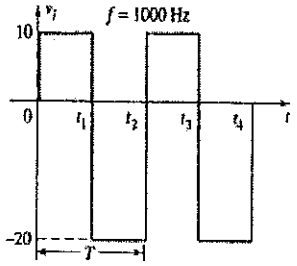


Fig.3

Q4) Determine Vo for the network of Fig.4 **[3] CO-1**



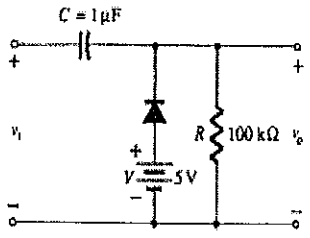


Fig.4

Q5) In the CASCODE amplifier of Fig.5 **[7] CO-2 & CO-3**

a) Calculate the DC bias voltage V_{B1}, V_{B2} and V_{C2}.

b) Calculate the Voltage Gain A_V and output voltage V_O.

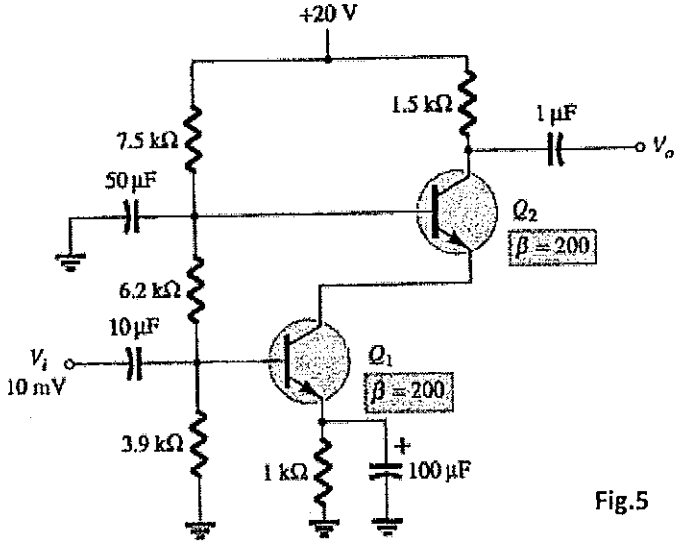


Fig.5