

Assignment 2

Electronic Devices [Mid Term]

Submission Deadline: 06 March 2021 (Saturday) until 11:00 PM

1. Apply the knowledge of series diode configuration to determine I_R , V_D and V_R for the network shown in Fig. 1. [3]
2. Determine I_D , V_o , and voltage drop across $5\text{ k}\Omega$ resistor (V_R) for the circuit shown in Fig. 2. [3]

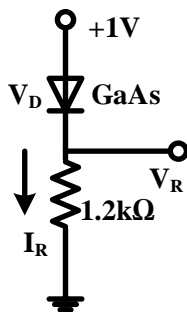


Figure for Question 1

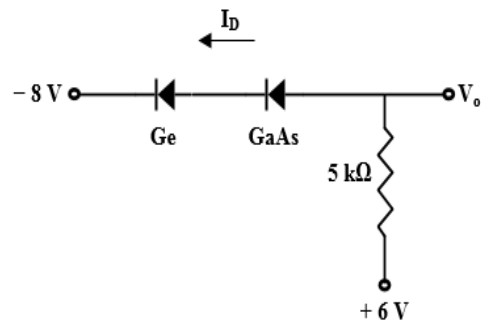


Figure for Question 2

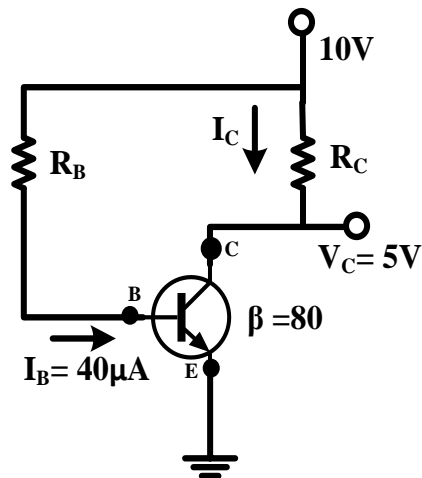


Figure for Question 3

3. For the circuit shown in Fig. 4, determine I_C , R_B and R_C . [6]
4. Imagine a situation where your cellphone is almost out of charge. To charge up your cell phone, you have to use the wall socket which provides a sinusoidal AC output of 160 V (rms), but your cellphone needs to receive a DC voltage to be charged. Apply the knowledge of **full wave bridge rectifier circuit** to determine the following:
 - i) Draw the full wave bridge rectifier circuit with proper labeling. [2]
 - ii) Sketch and properly label the input and output voltage wave shapes of the circuit. [4]
 - iii) Determine the dc level of the output voltage of the circuit. [2]

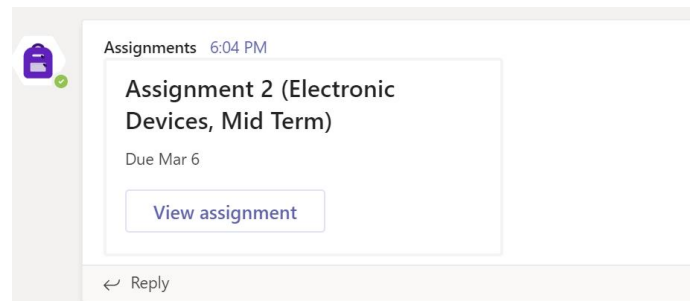
Assignment 2 Instructions

1. Assignment should be Handwritten. In the top page, write down your name, ID, Subject Name, and Section.
2. After that, scan it using suitable mobile scanner (cam scanner, adobe scanner etc.) and make it as pdf file.
3. Rename the pdf file name with your ID.
4. Copied/identical submissions will be graded as 0.

The deadline to submit this assignment is 06 March 2021 (Saturday) until 11:00 PM. Please prepare your assignment and submit it in Microsoft teams within this deadline. The submission procedure is mentioned below

Submission Guidelines:

1. **Click on the view assignment** in Microsoft teams as shown below. You will get it in our class in Microsoft teams.



2. After that, click on the **Add work**. Here you can upload your assignment.
3. After upload, click on the **turn in option (laptop view)** or click **Hand In option (mobile view)**.

With best regards,

Dr. Rifat