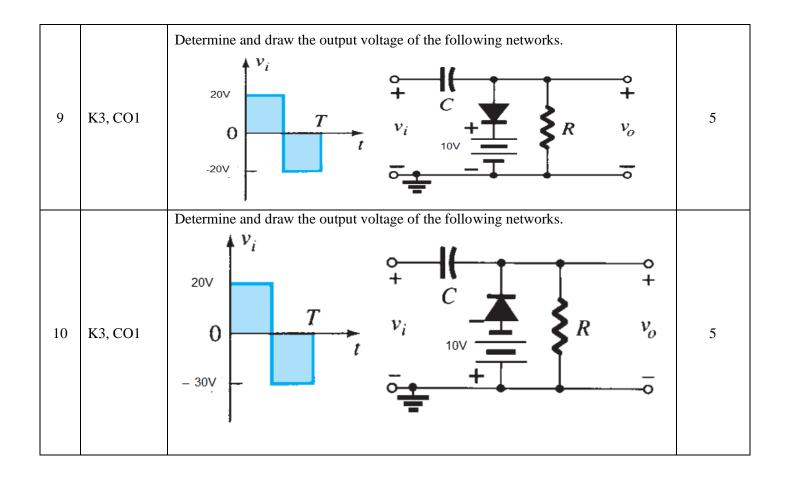


Session: 2023-24 Semester: I Course Code: BEC-101

Course Name: Fundamental of Electronics Engineering

Assignment 2

S.N o.	KL, CO	Question	Marks
1	K3, CO1	The reverse saturation current of a Si diode at room temperature is 5nA. Calculate the diode current at room temperature when the voltage across diode is 0.7V.	5
2	K3, CO1	Determine V_o & I_D of the following networks, (voltage drop across red LED in ON state=1.8v) $ \begin{array}{cccccccccccccccccccccccccccccccccc$	5
3	K3, CO1	Determine V_0 , I_1 , I_D , and I_{D2} for the networks given below $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5
4	K3, CO1	Determine the output waveform for the networks given below and calculate the output dc level and the required PIV of each diode. $ \frac{v_i}{100 \text{ V}} = \frac{170 \text{ V}}{100 \text{ V}} = \frac{100 \text{ V}}{100 \text{ V}} = \frac{170 \text{ V}}{100 V$	5
5	K2, CO1	Explain the working of P-N junction diode in Unbiased and Biased conditions.	5
6	K2, CO3	Explain the working of Bridge type full wave rectifier with proper circuit diagram and waveforms.	5
7	K2, CO1	Draw and explain the full wave voltage doubler with proper circuit diagram.	5
8	K2, CO1	Draw and explain the Voltage Tripler/Quadrupler with proper circuit diagram.	5



CO-Course Outcomes mapped with respective question

KL- Bloom's Knowledge Level (K₁,K₂,K₃,K₄,K₅,K₆)

 $K_1 - Remember \\ K_2 - Understand \\ K_3 - Apply \\ K_4 - Analyze \\ K_5 - Evaluate \\ K_6 - Create$