

## SEVENTH SEMESTER B. TECH (ELECTRONICS AND INSTRUMENTATION) PROCTORED ONLINE MAKE UP EXAMINATION Feb 22

## SUBJECT: REAL TIME OPERATING SYSTEM (ICE 4060)

## TIME: 2.20 PM to 3.45 PM DATE: 17-2-2022 MAX MARKS 20

Note: Submit your responses (answer script PDF file) before scheduled time.

1. a	With an example and timing diagram explain the following terms	3
	a. Relative and absolute dead line	
	b. Response time	
b	Explain different types of priority Inversion available under PCP with an	4
	FSM diagram. Also draw the Priority inversion table for the following	
	problem	
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	16	
С	Explain the procedure of synchronization done in presence of byzantine	3
	clock. Show how clock time differs when drived with 3 clock set. Also	
	compute resynchronization period for the same	
2. a	Consider the following three periodic real time task T1- $(10,22)$ , T2 – $(12,55)$ and T3 (18,100). To run in a uniprocessor, determine whether the task is schedulable under, RMA or DMA.	4
b	Explain the SR modelling timing constraint for a washing machine. Also draw its FSM	3
С	With an example and timing diagram explain the following terms a. Task precedence	3
	b. Data sharing	