

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

GBGS SCHEME

15MT743

Seventh Semester B.E. Degree Examination, Jan./Feb.2021

Real Time Systems

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

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		Module-1		
1	a.	Define Real Time System. Explain classification of Real Time System.	(08 Marks)	
	b.	Describe the classification of programs.	(08 Marks)	
OR				
2	a.	Explain the concept of a simple chemical reactor vessel (sequence control).	(08 Marks)	
4	b.	With the block diagram, explain direct digital control and mention its advantages.	(06 Marks)	
		Write a brief note on PID control.	(02 Marks)	
	c.	Write a orier note on r ib control.	(02 3.3)	
		Modulo 2		
_		Module-2	(08 Marks)	
3	a.	Explain the general purpose digital computer with the help of block diagram.	(08 Marks)	
	b.	Describe the specialized processor with necessary diagram.	(00 Marks)	
		A OP		
		OR	(00 M)	
4	a.	Describe the Analog input system and output system with the neat diagram.	(08 Marks)	
	b.	Explain the following data transfer techniques: (i) Polling (ii) Interrupts.	(08 Marks)	
		Module-3		
5	a.	Write a brief note on following:		
		(i) Security (ii) Portability (iii) Readability (iv) Efficiency	(08 Marks)	
	b.	Explain data types in language for Real Time application.	(08 Marks)	
		OR		
6		Explain the following: (i) Exception handling.	(16 Mania)	
		(ii) Interrupt and device handing.	(16 Marks)	
Module-4				
7		With the neat diagram, explain Real Time multi-tasking and multi user operating	system.	
/	a.	With the heat diagram, explain real time mater tasting and the	(08 Marks)	
	b.	Describe all 3 priority levels in priority structure with the flow chart.	(08 Marks)	
	U.	Describe and pricing to the		
	OR			
8	a.	Explain the following with respect to code sharing:		
o	a.	(i) Serially Reversible code. (ii) Re-entrant code.	(12 Marks)	
	h	Describe simple monitor and general monitor.	(04 Marks)	
	b.	Describe simple monitor and general monitor.	,	
Module-5				
0		With the help of diagram, describe development phase.	(08 Marks)	
9	a.	With the help of diagram, describe development phase.	(
	b.	Describe the following preliminary design concepts: (i) Hardware design. (ii) Software design.	(08 Marks)	
		(i) Hardware design. (ii) Software design.	(00 1.100)	
OR				
10	1	Write a short note on Hartley Pirabhai and Yourdon methodologies.	(16 Marks)	
10		Willow and Financial Control of Financial Control of Co		

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