

003-027504

M.Sc. (ECI) Sem.- V Examination January-2015

Department of Electronics

Paper 20: Basic Microprocessor and Interfacing

Faculty Code: 003 Subject Code: 027504

Time:	[Total Marks	[Total Marks: 70					
Instructions:		(1) (2) (3)	Answers to question one must be answered in main answer book. Figures on right indicate marks. All the questions are compulsory.	ook.			
1. An (1) (2) (3) (4) (5)	Ment What Write Whic	y seven from the following: ion the similarities and differences of registers PC and HL. t each bit flag register represent? the how SP register is used in PUSH instruction? the pins are used for DMA operation in 8085A? the the functions of ALE and READY pins.					
(6) (7) (8) (9) (10)	Draw Draw Write	the b the b on th	neaning of all the combinations of IO/\overline{M} , S_1 , S_2 pins of 8085A. lock diagram of 8253. lock diagram of 8255. he mode definition word of 8255. ALL instruction.				
(A) Write) Write	on al	om the following: l data transfer instructions of 8085A. t the interrupts of 8085A. M and RIM instructions.	7 7 7			
		on th	owing: ne state transition diagram of 8085A. explain the MR cycle of 8085A.	7 7			
	Six b bytes	e follo e on th ytes o . Use	wing: the arithmetic instructions of 8085A. In the data are stored in memory locations starting at 8250H. Add all data register B to save any carries generated while adding the data bytes. It is sum and carries at two different ports.	7			

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4.	Answer	tne	TOIL	owing	:
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(A) Consider the following interfacing circuit. Determine the port addresses. Write a BSR control world to set PC₇ and PC₃ and reset them. Write a subroutine to set PC₇ and PC₃ and then reset them after a given delay. Assume delay is available.

(B) Discuss different modes of 8253. 7

5. Write any **two** from the following:

(A) Discuss model of 8255. 7

(B) Draw the block diagram of 8279 and explain each block. 7

(C) Discuss programming aspects of 8259. 7

(D) Discuss block diagram of 81251. Explain its mode definition word. 7