

Exam.Code:0922  
Sub. Code: 6483

2014  
B.E. (Information Technology)  
Fourth Semester  
PCIT-401: Microprocessor and Assembly Language Programming

Time allowed: 3 Hours

Max. Marks: 50

*NOTE: Attempt five questions in all, including Question No. 1 (Part-A) which is compulsory and selecting two questions each from Part B-C.*

x-x-x

Part-A		
I.	a) Write down instructions to add and subtract two 8 bit numbers. b) What is the role of stack pointer and instruction register in 8085 microprocessor? c) Write call instructions corresponding to RST0, RST1, RST2 and RST3. d) Explain role of flags in arithmetic and logical instructions. e) What is the difference between maskable and non maskable interrupts?	10
Part-B		
II.	a) How demultiplexing of data and address bus is done. Explain with the help of a block diagram. b) Draw timing diagram for read and write operations between memory and 8085 microprocessor. Assume address of memory during read cycle as 3000 H and during write cycle memory address = 3005 H	5 5
III.	Interface 8 LEDs with 8085 microprocessor at address 55H: Draw the circuit diagram and write a program to turn ON/OFF LEDs without any delay.	10
IV.	a) Interface 4 KB ROM to 8085 microprocessor and give memory map. b) Interface 8 switches to 8085 microprocessor at address 30H.	5 5
Part-C		
V.	Write down a program to generate delay of 1 second with clock frequency of 2 MHz.	10
VI.	(a) What are various vectored interrupts available in 8085 microprocessor? Explain in detail and also mention their vectored addresses. (b) What is the use of a subroutine? How stack is helpful during call and return from a subroutine?	5 5
VII.	Write note on following chips a) 8255 b) 8259	10

x-x-x