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| **ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27** |
| **B.C.A - II SEMESTER** |
| **SEMESTER EXAMINATION: APRIL 2019** |
| **CA 2215- Microprocessors** |
|  |  |  |  |  |  |
| **Time- 2 1/2 hrs** |  | **Max Marks-70** |
| **SUPPLEMENTARY CANDIDATES ONLY****ATTACH THE QUESTION PAPER WITH THE ANSWER BOOKLET** |

**I.Answer all questions (2X10=20)**

1. State the function of given 8085 instructions JP,JPE,JPO,JNZ.
2. How is PUSH B instruction executed? Find the status after the execution.
3. How are the 8085 instructions classified according to the functional categories?
4. State the use of ISR and IRR registers.
5. What is the function of IO/M signal in the 8085?
6. Write the features of mode 0 in 8255?
7. List the operation modes of 8259A?
8. What is TRAP? What are the functions of it?
9. Identify the addressing modes of the instructions LXI,MOV,LDA,RAR?
10. Write a program to multiply two 8 bit numbers

**II.Answer any FIVE questions (6X5=30)**

1. Explain the flag register structure and functions of different flags in 8085.
2. Discuss the various interrupt and peripheral initiated signals in 8085.
3. Explain the control word format of 8255A PPI . Explain the functions of 8255A in different modes.
4. Write an assembly program to check an 8 bit number is palindrome or not.
5. Write the differences between peripheral mapped I/O and memory mapped I/O .
6. Explain the working of the instructions LHLD,LDAX,LDA and MVI with suitable programs.
7. Demonstrate with a program how 8085 handles an interrupt.

**III.Answer any two questions (10X2=20)**

1. Discuss the features of 8085 processor for the support of interrupts and DMA along with the functions of 8257 DMA controller.
2. Explain the architecture of 8085 with a neat diagram.
3. What is look up table? Write an assembly program for interfacing seven segment display to 8085.

CA-2215-A-18