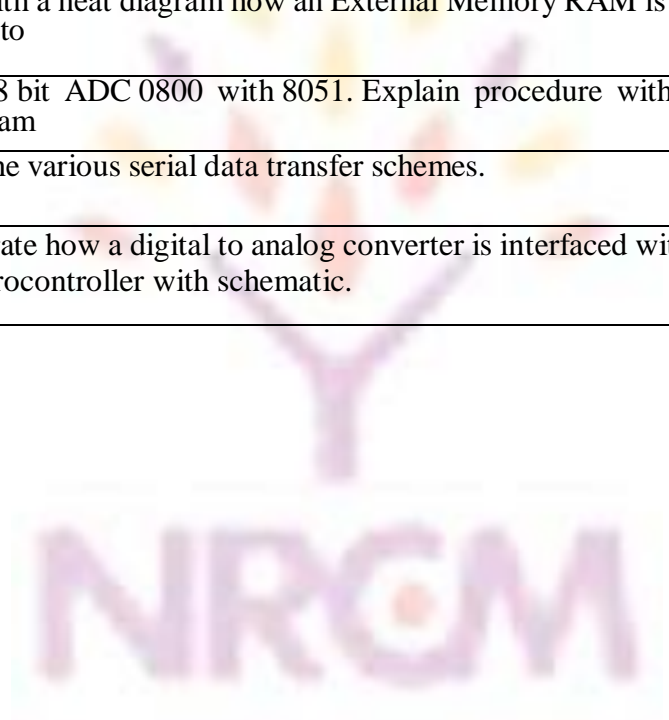




UNIT-III
MEMORY AND I/O INTERFACE

S.No	Questions	BT	CO	PO
Part – A (Short Answer Questions)				
1	What is the necessity of interfacing .	L1	Co3	PO1, PO2, PO3
2	Write Process of transferring data serially using 8051.	L2	Co3	PO1, PO2, PO3
3	Compare the features of SPI and I2C communication	L4	Co3	PO1, PO2, PO3
4	Write a ALP program to toggle the p1.2 . port	L2	Co3	PO1, PO2, PO3
5	When are timer overflow bits set and reset?	L1	Co3	PO1, PO2, PO3
6	What is the use of timing and control unit?	L3	Co3	PO1, PO2, PO3
7	Draw the blocks of Micro controller and explain each block	L1	Co3	PO1, PO2, PO3
8	Explain SJMP and LJMP instruction	L2	Co3	PO1, PO2, PO3
9	Explain about SMOD and SCON register .	L2	Co3	PO1, PO2, PO3
10	Explain about Each and every bit in IE and IP register	L2	Co3	PO1, PO2, PO3
Part – B (Long Answer Questions)				
11	a) Explain with a neat diagram how an External Memory RAM is interfaced to 8051.	L2	Co3	PO1, PO2, PO3
	b) Interface 8 bit ADC 0800 with 8051. Explain procedure with neat diagram	L2	Co3	PO1, PO2, PO3
12	a) Discuss the various serial data transfer schemes.	L2	Co3	PO1, PO2, PO3
	b) Demonstrate how a digital to analog converter is interfaced with 8051 microcontroller with schematic.	L2	Co3	PO1, PO2, PO3





13	a)	Design the circuit diagram to interface a keyboard with microcontroller and explain how microcontroller recognizes the key pressed	L4	Co3	PO1, PO2, PO3
	b)	Explain the serial communication and write ALP to send bytes of data serially?	L4	Co3	PO1, PO2, PO3
14	a)	Explain the steps involved in the generating a delay using Timers..	L4	Co3	PO1, PO2, PO3
	b)	Write a ALP program to toggle all the bits of P0 continuously with 250 ms delay.	L2	Co3	PO1, PO2, PO3
15	a)	Interface two chips of 8kb EPROM with 8051 consider starting address as 0FFFH .	L4	Co3	PO1, PO2, PO3
	b)	Write short notes on synchronous and asynchronous communication standards.	L2	Co3	PO1, PO2, PO3
16	a)	Explain about how to communicate I/O devices using RS-232?	L2	Co3	PO1, PO2, PO3
	b)	Enumerate how to interface an LCD display with microcontroller.	L2	Co3	PO1, PO2, PO3