#### IES COLLEGE OF TECHNOLOGY, BHOPAL

M.E. / M.Tech (1<sup>th</sup> SEM) Assignment -2 Advanced Mathematics (MEDC-101)

Date of Assignment: 28.10.2014

#### Date of Submission: 22/11/2014

## Note: 1.Question should be written in plain A-4 Size Paper.

Minimum 300 Word Limit for each Question.
Assignment should be submitted in stick file.

- Q.1 Obtain the steady state differential equation for the (M/M/1: N/ FC FS) in usual notation and solve for p0 and p1? (2008)
- Q.2 Explain Markov chain. Draw transition diagram and write down the properties of Markov chain ?(2012)

Q.3 Let A and B be the fuzzy sets define on a universal set x

Prove that  $|A| + |B| = |A \cup B| + |A \cap B|$ ?

How fuzzy tools box works ? Explain different function which MAT provide in fuzzy tool box ? (2013)

Q.4 Obtain the steady state differential equation for the (M/M/1: infinity/ FC FS),? (2012)

Q.5 Show that the following operations on fuzzy sets satisfy De morgan's law

 $U \max, I \min, C(\alpha) = (1-\alpha)?$  (2009)

### IES COLLEGE OF TECHNOLOGY, M.E. / M.Tech (1<sup>st</sup> SEM) Assignment -2

Micro Controller System Design (MEDC-102)

#### Date of Assign: 10/10/14

Note: 1.Question should be written in plain A-4 Size Paper.

- 2. Minimum 300 Word Limit for each Question.
- 3. Assignment should be submitted in stick file.

Date of Assignment: 28.10.2014

#### Date of Submission: 22/11/2014

Date of Submission: 10/11/2014

	Explain object oriented interfacing and programming (R.G.P.V. Dec 2012)				
Q.1					
	What is compiler and cross complier? Differentiate with examples. (R.G.P.V. June 2014)				
Q.2					
	Discuss briefly about integrated software development environment? (R.G.P.V. June 2013)				
Q.3					
_	Describe ATMEL 89C52 with applications.(R.G.P.V. Dec. 2012)				
Q.4					
	Write a short note on the following-				
Q.5	(i) Recursion and Debugging				
	(ii) Embedded microcontroller .(R.G.P.V. June.2013)				

#### IES COLLEGE OF TECHNOLOGY, BHOPAL

M.E. / M.Tech (1<sup>st</sup> SEM) Assignment -2

DSP Application (MEDC-103)

Date of Assignment: 28.10.2014

Date of Submission: 22/11/2014

Note: 1.Question should be written in plain A-4 Size Paper.

2. Minimum 300 Word Limit for each Question.

3. Assignment should be submitted in stick file.

	Compute the 8- point DFT of a sequence:		
Q.1	$X(n) = \{ 1 \le n \le 7 \}$		
	(0, otherwise)		
	By using the decimation in frequency FFT algorithm.	(R.G.P.V. Dec 2010)	
	Discuss the designing of Butterworth IIR filter.	(R.G.P.V. Dec 2010)	
Q.2			
	Derive a signal flow graph for the N=16 point, radix-4 decim	ation in time FFT algorithm?	
Q.3	(R.G.P.V. Dec 2012)		
	Discuss the designing of FIR filter using Bartlett window?	(R.G.P.V. Dec 2012)	
Q.4			
	Discuss the following properties of DFT		
Q.5	(1) Circular symmetries of a sequence		
	(2) Symmetric property	(R.G.P.V. Dec.2011)	

#### **IES COLLEGE OF TECHNOLOGY, BHOPAL**

M.E. / M.Tech. (1st SEM) Assignment- 2

VLSI Design (MEDC-104)

## Date of Assignment: 28.10.2014

Date of Submission: 22/11/2014

#### Note: 1.Question should be written in plain A-4 Size Paper.

- 2. Minimum 300 Word Limit for each Question.
- 3. Assignment should be submitted in stick file.

	Write down the characteristics of different Transistor used in programmable gate array Which	
Q.1	makes its structure compatible to VLSI design strategies.(R.G.P.V. June 2014)	
	How will you implement the ROM using sub system design? Explain step by step? (R.G.P.V. Dec	
Q.2	2012)	
Q.3	What are the different modes of operation we can use is Sub system design.(R.G.P.V. June 2014)	
Explain PLA and data operation in sub system Design?		
Q.4		
	Discuss memory and control strategies with suitable example (R.G.P.V. Dec.2012)	
Q.5		

IES COLLEGE OF TECHNOLOGY, BHOPAL M.E. / M.Tech (1<sup>st</sup> SEM) Assignment -2 Data Communication AND Computer Network (MEDC-105)

Date of Assignment: 28.10.2014

## Date of Submission: 22/11/2014

Note: 1.Question should be written in plain A-4 Size Paper.

2. Minimum 300 Word Limit for each Question.

# 3. Assignment should be submitted in stick file.

	Explain Dijkstra and Bellman ford least cost algorithm.(R.G.P.V. June 2014)					
Q.1						
	Discus	ss the following-				
Q.2	(i)	Polling				
	(ii)	Token Parsing (R.G.P.V. Dec 2011)				
Discuss the different congestion control technique? (R.G.P.V. June 2014)						
Q.3						
	What is Deadlock and how it can be avoided?(R.G.P.V. Dec 2010)					
Q.4						
	What are	e virtual circuit and Datagram? Explain IP Datagram.(R.G.P.V. Dec.2010)				
Q.5						