

DEPARTMENT OF COMPUTER ENGINEERING
GOVERNMENT ENGINEERING COLLEGE DAHOD
GUJARAT TECHNOLOGICAL UNIVERSITY

SEMESTER 4
Term: EVEN 2017-18 [26th Dec 2017 – 20th April 2018]
COMPUTER ORGANIZATION [2140707]

MID-SEMESTER EXAM SYLLABUS

26th December 2017 to 17th February 2018: 7 Weeks x 4 Lectures = 28 Sessions

Syllabus for Mid Semester will cover 28 sessions of lesson plan as listed below.

Lect.	Topic
1	Introduction to the subject, Computer Architecture
2	Basic Computer Data Types
3	Complements, r and r-1
4	Fixed Point Representation , Floating Point Representation
5	Register Transfer, Register Transfer Language, Memory Transfer
6	Arithmetic Micro-Operations, Logic Micro operations, Arithmetic & Logical Shift
7	Timing & Control, Computer Registers and Computer Instructions
8	Instruction Codes, Instruction Cycles
9	Memory Reference Instructions, I/O and Interrupts
10	Basic Computer Design, Design of Accumulator Unit
11	Introduction to Machine Language
12	Assembly Language & Assembler
13	Program Loops, Programming Arithmetic and Logic Operations
14	Sub-Routines and I/O Programming
15	Sub-Routines and I/O Programming
16	Introduction to Micro Program Control
17	Control Memory and Address Sequencing
18	Micro Program Example and Control Unit
19	Introduction to Central Processing Unit, General Register & Stack Organization
20	Instruction Format
21	Addressing Modes
22	Data Transfer and Manipulation
23	Program Control
24	RISC
25	Introduction to Pipelining and Vector Processing
26	Flynn's Taxonomy,
27	Arithmetic and Instruction Pipelining
28	RISC Pipelining,