



**VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
(AUTONOMOUS)
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**



LESSON PLAN

SUBJECT CODE & NAME : U14CS527 Computer Architecture
YEAR / SEMESTER : III EEE A&B / V

Session No.	Topics to be Covered	Duration in minutes	Teaching Aid	Ref.Book
UNIT-I BASIC CONCEPTS OF COMPUTER				
1	Introduction	45	BB	R-01, R-02
2	Computer – Functional units	45	BB	R-01, R-02
3	Addressing modes	45	BB	R-01, R-02
4	Addressing modes-cotn..	45	BB	R-01, R-02
5	Instruction formats	45	BB	R-01, R-02
6	Stacks and Subroutines	45	BB	R-01, R-02
7	Processing Unit	45	BB	R-01, R-02
8	Execution of instructions	45	BB	R-02
9	- Control step sequence	45	BB	R-02
UNIT-II CONTROL UNIT				
1	Control Design		BB	R-03
2	Hardwired control design	45	BB	R-03
3	Hardwired control design-cotn..	45	BB	R-03
4	Multiplier control unit	45	BB	R-03
5	Design Multiplier control unit	45	BB	R-03
6	CPU control unit	45	BB	R-03
7	Micro programmed control	45	BB	R-03
8	Micro instructions	45	BB	R-03
9	Sequencing – perfecting	45	BB	R-03
UNIT – III ARITHMETIC UNITS				
1	Arithmetic and Logic Unit	45	BB	R-02
2	Arithmetic and Logic Unit-cotn..	45	BB	R-02
3	Fixed point numbers	45	BB	R-02
4	Fixed point numbers-cotn..	45	BB	R-02
5	Floating point numbers	45	BB	R-02
6	Floating point numbers-cotn..	45	BB	R-02
7	Fixed point numbers operations	45	BB	R-02
8	Floating point numbers operations	45	BB	R-02
9	Design of arithmetic units	45	BB	R-02
UNIT – IV MEMORY ORGANIZATION				
1	Memories	45	BB	R-02
2	Cache memories	45	BB	R-02
3	Virtual memories	45	BB	R-02
4	Input Organization	45	BB	R-02
5		45	BB	R-02

6	Output Organization	45	BB	R-02
7	Data transfer	45	BB	R-02
8	Synchronization	45	BB	R-02
9	Interrupt handling-I/O interfaces	45	BB	R-02
UNIT – V				
PARALLEL PROCESSING				
1	Introduction to parallel processing	45	BB	R-02, R-03
2	Introduction to parallel processing-cotn..	45	BB	R-02, R-03
3	Generation of computer systems	45	BB	R-02, R-03
4	Generation of computer systems - cotn..	45	BB	R-02, R-03
5	Parallelism in uniprocessor system	45	BB	R-02, R-03
6	Parallelism in uniprocessor system-cotn..	45	BB	R-02, R-03
7	Parallel computer structures	45	BB	R-02, R-03
8	Parallel computer structures-cotn..	45	BB	R-02, R-03
9	Architectural classification schemes.	45	BB	R-02, R-03

REFERENCES:

1. David A. Patterson and John L. Hennessy, 'Computer Organization and Design: The Hardware/Software interface', 4th Edition, Elsevier, 2009
2. Morris Mano.M., 'Computer system Architecture', PHI, New Delhi, 3rd Edition 1993.
3. William Stallings, 'Computer Organization and Architecture – Designing for Performance', 8th Edition, Pearson Education, 2010.