

VHDL Project Allotment

Group 1:

- a) Design of 64-Bit QAM
- b) VHDL code for counters with testbench

Group 2:

- a) VHDL code for MIPS Processor
- b) VHDL code for a single-port RAM

Group 3:

- a) VHDL code for clock divider
- b) Design Of 32 Bit RISC Processor

Group 4:

- a) VHDL code for ALU
- b) Shifter Design in VHDL

Group 5:

- a) VHDL code for a simple 2-bit comparator
- b) VHDL code for Traffic light controller

Group 6:

- a) Write a VHDL program to design a 2 bit ALU containing 4 arithmetic and 4 logical operations.
- b) Design and implementation of RAM using VHDL

Group 7:

- a) Design and implementation of ROM using VHDL
- b) Design and implementation of Floating Point multiplier Design using VHDL

Group 8:

- a) Design and implementation of Digital Code Lock using VHDL
- b) Design and implementation of Floating Point multiplier Design using VHDL

Group 9:

- a) Design and implementation of SIPO and PISO using VHDL.
- b) 16-bit ALU Design in VHDL using Verilog N-bit Adder

Group 10:

- a) VHDL Code for Clock Divider.
- b) VHDL code for MIPS Processor

Group 11:

- a) A complete 8-bit Microcontroller in VHDL.
- b) VHDL code for Arithmetic Logic Unit (ALU)

Group 12:

- a) Design memory using VHDL.
- b) Write a VHDL program for a BCD to GRAY code converter and check the wave forms and the hardware generated.

Group 13:

- a) Design a decimal up/down counter that counts up from 00 to 99 or down from 99 to 00.
- b) Write VHDL code to generate different waveforms (Sine, Square, Triangle, Ramp etc.,) using DAC change the frequency and amplitude.

Group 14:

- a) Write a VHDL program for the following combinational designs
 - (i) 2 to 4 decoder
 - (ii) 8 to 3 (encoder without priority & with priority)
 - (iii) 8 to 1 multiplexer
 - (iv) 4 bit binary to gray converter
- b) Design 4 bit binary , BCD counters (Synchronous reset and asynchronous reset) and “any sequence” counters

Group 15:

- a) Implements a simple 2 input priority encoder. Illustrates the use of IF-THEN-ELSE as a prioritised selector
- b) Implements a simple parallel-serial converter- with load and shift left modes. Illustrates the use of the FOR loop to facilitate multiple access operations. Also illustrates the use of internal signals.

Student Group

Name	Enrollment	Group
Janaki ram	U101116FCS152	1
Lohith desu	U101116FCS159	
Ajay sharma	U101116FCS006	1
Ravi teja.k	U101116FCS056	1
Venkata ramana	U101116FCS148	1
Anshit Saxena	U101116FCS011	2
Abhijeet Bhupendra		2
Deeptonabho Dutta	U101116FCS030	2
Gnana Harha	U101116FCS041	2
Deepak Atreja	U101116FCS029	2
Avi Gupta	U101116FCS011	3
Devansh Anhal	U101116FCS031	3
Harsha Deuri	U101116FCS043	3
Hritik Raj	U101116FCS047	3
GANGAM RUSHIK REDDY		4
AETUKURI.SRINATH		4
ELURI SRIRAM		4
SHESHAGONI.ADITHYA GOUD		4
POTHANA.NIKHIL		4
AJINKYA BEDEKAR	U101116FCS183	5
BIREN SHARMA	U101116FCS246	5
DHRUVA AGARWAL	U101116FCS177	5
KENNETH PRABHAKARAN	U101116FCS275	5
KOLLI NETHRE SAI	U101116FCS058	6
SYED TASLEEM	U101116FCS141	6
GOTTUMUKALA RITESH VERMA	U101116FCS042	6
FAAIZ ARZOO SHAIK	U101116FCS034	6
BATCHU NAGA MAHITHA	U101116FCS019	6
RITIK JANGIR	U101116FCS179	7
PRAKRITI PRATAMANI	U101116FCS080	7
HITESH MITTAL	U101116FCS045	7
SAHIL GOYAL	U101116FCS106	7
VENKATA DATTA KAMESAM	U101116FCS149	7
Gauri Sinha		8
Gehna Ahuja		8
Chirag Jain		8
Adya Mahlawat		8
ARNAV AJAY	U101116FCS014	9
ASHWIN JAWAHAR-	U101116FCS017	9
ASHISH DWIVEDI	U101116FCS016	9
GAYATHRI	U101116FCS039	9
SABYASACHI MISHRA	U101116FCS104	9

Oleti Bhanu Prakash	U101116FCS080	9
CH VISHNUVARDHAN	U101116FCS026	10
KDS VIVEK	U101116FCS055	10
EHVD PRASAD	U101116FCS032	10
POTHANA NIKHIL	U101116FCS087	10
Anirudh Sharma		11
Harshil Sachdeva		11
Harshit Bhardwaj		11
Jatin C. Ninawe		11
Soumyadip	U101116FCS133	12
arshita batra	U101116FCS284	12
arpita sejai	U101116FCS249	12
gaurav mundra	U101116FCS179	12
Ankit Kumar Singh	U101116FCS010	13
Arjun sambyal	U101116FCS013	13
Animesh Singh	U101116FCS008	13
SHRAVAN SRIDHAR	U101116FCS118	13
JOBIN JOSEPH	U101116FCS053	14
JATIN GUPTA	U101116FCS052	14
AMAN KHANDELWAL	U101116FCS007	14
AMANPREET SOHI	U101116FCS242	14
AMAN GARG	U101116FCS281	15
JAVED AKHTAR	U101116FCS269	15
KARAN INDER SINGH	U101116FCS057	15