### CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A), HYDERABAD-500075

# 1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years

	INDEX: AY:2020-2021				
S.No	Name of the value added courses (with 30 or more contact hours)offered	Page No.			
3	Fresh man course	3			
4	Indian Constitution	10			
5	Ancient Indian Knowledge	29			
6	Environmental science	41			
7	Wild life Ecology	47			
8	Bio interface Engineering	51			
9	Biomechanics of Joints and Orthopaedic implants	55			
10	Biomedical Nanotechnology	59			
11	Cell culture technologies	63			
12	Computer Aided drug design	67			
13	Conservation Economics	71			
14	Drug delivery principles and Engineering	75			
15	Ecology and Environment	79			
16	Forest and their Management	83			
17	Human Molecular Genetics	87			
18	Introduction to Mechanobiology	91			
19	Introduction to Proteogenomics	96			
20	Introduction to proteomics	101			
21	Legal and regulatory issues in biotechnology	106			
22	Neuroscience of Human Movements	110			
23	Organic farming for sustainable Agriculture production	112			
24	Patent law for engineers and scientists	118			
25	Principle and Practices of process Equipment and plant design	124			
26	Structural Biology	128			
27	Functional Genomics	133			
28	Technologies for clean and Renewable energy production	137			
29	Web development	143			
30	Algorithmic toolbox	143			
31	Android app development	144			
32	Python Bootcamp	145			
33	Basics of Machine Learning	147			
34	C & C++	147			
35	Functions in Python	148			
36	Cyber security	149			
37	Responsive web design	150			
38	Programming for Everybody (Getting Started with Python)	151			
39	Crash course on python	151			

### CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(A), HYDERABAD-500075

# 1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years

INDEX: AY:2020-2021				
S.No	Name of the value added courses (with 30 or more contact hours)offered	Page No.		
40	Introduction to software product management	150		
41	Al for every one	152		
42	Getting started in google analytics	152		
43	Using python access the web data	152		
44	Python for data structures	153		
45	Deep Learning using python	153		
46	Google IT support	155		
47	The fundamentals of digital marketing	156		
48	Introduction to Cybersecurity Tools & Cyber Attacks	156		
49	IT Fundamentals for Cybersecurity	157		
50	Artificial Intelligence	157		
51	Machine Learning	158		
52	The Joy of Computing using Python	159		
53	Programming in java	160		
54	Programming with python	161		
55	Full Stack with Django and React	162		
56	Introduction to machine learning	163		
57	The bits and bytes of computer networking	164		
58	Operating systems and you	164		
59	System adminstration and IT infratructue services	165		
60	IT Security	165		
61	Advanced Styling with Responsive Design	165		
62	Introduction to HTML5	166		
63	Interactivity with javascript	167		
64	Java and python	167		
65	Introduction to C# programming and unity	167		
66	Full Stack Development	168		
67	Using python to interact with operating system	168		
68	Introduction to game development	169		
69	Getting started with AWS and machine learning	169		
70	Introduction to CSS3	169		
71	Front-End development with react	171		
72	Essential Mathematics for Machine Learning	172		
73	Essential Datascience with R software-2	174		
74	Advanced Graph Theory	175		
75	Privacy and security in online social media	176		

# Title of the value-added course

Freshman Course Code : CBIT/20MEV09 Duration: 32 hrs

## Target participates: Semester II

### Duration of the course: 21.12.2020 to 16.04.2021

Academic year : 2020 - 21



PROFESSOR & HEAD Department of Civil Engineering Chatterya Bharabi Institute of Technology GANDIPET, HYDERABAD-5000 075

## Syllabus

Introduction to science and technology, role of engineer, various streams of technology, myths in technology, expectations from the current and future engineers. Outcome based education. NBA programme outcomes. Roll of Engineers in the society

Engineering problems and Design, introduction to econometrics system, multiple solutions and optimization.

Basic Mechanisms, Introduction to programming platforms such as Arduino and its essentials, sensors, transducers and actuators and their interfacing with Arduino.

Data Acquisition and Analysis: Types of data, of data, types of graphs and their applicability, MS-Office. Exporting acquired data to spreadsheets, and analysis using representation.

Agile manufacturing, project management tools, charts, Ethics & Sustainability in Engineering, professional ethics, code of conduct. Sustainability in Engineering. life cycle assessment, carbon foot print.

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PROFESSOR & HEAD Department of Civil Engineering Chalterya Bharathi Institute of Technology GANDIPET, HYDERABAD-5000 075

Period	1	2	3	L U	<mark>4</mark>	5	6
Time	9.10 to	10.10 to	11.15 to	N	<mark>1.00 to</mark>	<mark>2.00 to</mark>	3.05 to
Time	10.10	11.10	12.15	с	<mark>2.00</mark>	<mark>3.00</mark>	4.05
MON		<u> </u>		н		<u> </u>	
TUE							
WED		<mark>l Course</mark>		В			
THU				R			
FRI				E			
SAT		<u> </u>		A K			

Name of	Course code	Year of	No of time	Duration	No of	Number of
the value		offering	offered		students	students
added			during the		enrolled	completing
course			same year			course in
						the year
Freshman	CBIT/20MEV09	2020-21	1	32 hrs	58	58
course						

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY ENVIRONMENTAL IMPACT AND MONITORING - CBIT/20CEV01 LIST OF STUDENTS			
1601-19-732-001	AISHWARYA CHOUDARY		
1601-19-732-002	AKHILA SRIGADDE		
1601-19-732-003	ANUSHA RACHAPAKA		
1601-19-732-004	CHARVI PANYALA		
1601-19-732-005	CHIHNITHA KONTEMUKKULA		
1601-19-732-006	HARIKA MOKKA		
1601-19-732-007	KAMALA RAMA SRIKARI BHANDARAM		
1601-19-732-008	KHYATHI VARDHINI VANGALA		
1601-19-732-009	LIKHITA YANDAVA		
1601-19-732-010	MAHEEN SADIQ		
1601-19-732-011	MAHIMA DASARY		
1601-19-732-012	MAHITHA KOTTE		
1601-19-732-013	NIKITHA GODISELA		
1601-19-732-014	NIKITHA KARNAM		
1601-19-732-015	PRAGNA KASARLA		
1601-19-732-016	PRAVALIKA BADDAM		
1601-19-732-017	RAMYA BANDI		
1601-19-732-018	SANYUKTA CHENNA		
1601-19-732-019	SHIVANI MAMIDI		
1601-19-732-020	SRAVYA SUTHARI		
1601-19-732-021	VANDANA S VADITHYA		
1601-19-732-022	ADITYA YANAMANDRA		
1601-19-732-023	AKHIL RAJESH GOUD PACHIMATLA		
1601-19-732-024	ANIL YADAV G		
1601-19-732-025	BOBBYROHAN DASARI		
1601-19-732-026	DINESH MODEM		
1601-19-732-027	DROVAN REDDY OBILIGOVENDHUGARI		
1601-19-732-028	HARSHAVARDHAN DONGALA		
1601-19-732-029	HARSHITH REDDY DAWALGARI		
1601-19-732-030	LAXMI TARUN PADUGUPADU		
1601-19-732-031	MANOJ RAMI REDDY PALLAVALI		
1601-19-732-032	MEGHANATH ANNAPURI	lije_	

PROFESSOR & HEAD Department of Civil Engineering Charavya Bharshi Institute of Technology GANDIPET, HYDERABAD-5000 075

1601-19-732-033	NAVEEN KUMAR K
1601-19-732-034	NIKHIL PATHA
1601-19-732-035	NITHIN VARMA POSHALA
1601-19-732-036	PAVAN KALYAN REDDY ERUVURI
1601-19-732-037	RAHUL GUNDOJU
1601-19-732-038	RAJEEV REDDY P
1601-19-732-039	RAJESH KATTA
1601-19-732-040	RAKESH BOLLE
1601-19-732-041	ROHAN GOGIKARI
1601-19-732-042	ROHAN VIVEK ATMAKURU
1601-19-732-043	ROSHAN BAJJURI
1601-19-732-044	SACHIN MUDIGONDA
1601-19-732-045	SAI CHARAN NAGARAM
1601-19-732-047	SAI DARSHAN MEDISETTY
1601-19-732-048	SAI KAMAL ARUKALA
1601-19-732-049	SAI KIRAN NAIK AMGOTH
1601-19-732-050	SAI VAMSHI RAJU TELLAPURAM
1601-19-732-051	SAI VAMSI VINUKONDA
1601-19-732-052	SREE HARSHA GHANDIKOTA
1601-19-732-053	SRI MANJUNATHA VADDEPALLY
1601-19-732-054	SUHAS DASARI
1601-19-732-055	UMAKANTH DESHMUKH
1601-19-732-056	VAMSHI AMGOTH
1601-19-732-057	VENKAT SAKETH APPAJI
1601-19-732-058	VENKATA VIGNAN DOMALA
1601-19-732-059	VIJAY KUMAR VODDEPALLY
1601-19-732-060	VINAY MUNIGANTI
1601-19-732-301	GUNDEBOINA TULASI
1601-19-732-302	K MANIPAL
1601-19-732-303	PALLA DIVYA
1601-19-732-304	VASALA NITHYA
1601-19-732-305	SHAIK IBRAHIM
1601-19-732-306	BUTHAPALLY NANDINI
1601-19-732-061	ATUFA TANYEEM
1601-19-732-062	DEVI CHANDISHWARI MUSLAPURAM

PROFESSOR & HEAD Department of Civil Engineering Chalarya Bhasishi institute of Technology GANDIPET, HYDERABAD-5000 075

1601-19-732-063	ESHRATH ANJUM
1601-19-732-064	MANASWINI ASA
1601-19-732-065	POOJITHA CHIPPALAPELLY
1601-19-732-066	PRASANNA MUTHINENI
1601-19-732-067	PRATHYUSHA SAIDU
1601-19-732-068	RISHITHA KOMMIDI
1601-19-732-069	SAI KEERTANA K
1601-19-732-070	SOWMYA GUNDUKADI
1601-19-732-071	SOWMYA LALAGARI
1601-19-732-072	SRI HARINI REDDY CHILUKA
1601-19-732-073	SWETHA KESAVARAPU
1601-19-732-074	SWETHA THUMMA
1601-19-732-075	VAISHNAVI DEVI PATNAM
1601-19-732-076	ABHILASH CHALLA
1601-19-732-077	ABHINAY BHONAGANI
1601-19-732-078	ABHISHEK YADAV BADRI
1601-19-732-079	ANJANEYA VARMA KANUMURI
1601-19-732-080	ASHIR JOSHUA TA
1601-19-732-081	CHARAN NAIK BANOTH
1601-19-732-082	CHIRAG D NANKANI
1601-19-732-083	DHANUSH PULI
1601-19-732-084	HARSHA VARDHAN VYAS AMBATI
1601-19-732-085	HRUSHIKESH REDDY G
1601-19-732-086	JAIVANTH KUMAR G
1601-19-732-087	JAYADEEP BATHINI
1601-19-732-088	KOUSHIK KARRA
1601-19-732-089	KRISHNAIAH DONGALA
1601-19-732-090	LOKESH KUMAR GUNTI
1601-19-732-091	LUKESH GAMPA
1601-19-732-092	MALLIKARJUN OSA
1601-19-732-093	MANISH KUMAR
1601-19-732-094	MANOJ KUMAR AMBATI
1601-19-732-095	MOHAMMED ABDUL QUADAR
1601-19-732-096	MOHAMMED AJMAL ALI
1601-19-732-097	MOHAMMED FASI AHMED

PROFESSOR & HEAD Department of Civil Engineering Chararya Bharaibi Institute of Technology GANDIPET, HYDENABAD-5000 075

1601-19-732-098	NAVEEN NAIDU ALLA
1601-19-732-099	NIKHIL KUMAR K
1601-19-732-100	NITHINREDDY BOGIREDDY
1601-19-732-101	PRASHANTH KUMAR REDDY ANANTHA
1601-19-732-102	PRAVEEN KUMAR SANDYAPOGU
1601-19-732-103	RAHUL KARAN K R
1601-19-732-104	RAKESH PEDDINA
1601-19-732-105	RAVI MALLEVOINA
1601-19-732-106	ROHITH ALETI
1601-19-732-107	SAATHVIK CHERIPALLI
1601-19-732-108	SAI KUMAR SIRAMAINA
1601-19-732-109	SAI VINAY BOGA
1601-19-732-110	SATHWIK REDDY PASHYA
1601-19-732-111	SHIVA NARAYANA KONDAMEDI
1601-19-732-112	SREEJAN REDDY KANDI
1601-19-732-113	SUPREETH REDDY SAMPATH
1601-19-732-114	SWAMY NARAPAKA
1601-19-732-115	UDAY KIRAN REDDY PATNAM
1601-19-732-116	UDHAY GOUD D
1601-19-732-117	UTTAM SAI NAKKALA
1601-19-732-118	VENKATA KOWKUNTLA AKSHATH THIRUPATHI
1601-19-732-119	VENKATESH MARYADA
1601-19-732-120	YUVARAJA YALAMANCHILI
1601-19-732-307	VOODARI SATHWIKA
1601-19-732-308	MUDAM SRIKANTH
1601-19-732-309	GOVINDU SHIVANI
1601-19-732-310	LONKA SHIRISHA
1601-19-732-311	P ANVESH
1601-19-732-312	CHINTHAPALLI MANASA

PROFESSOR & HEAD Department of Civil Engineering Chartarya Bharabhilteribilite of Technology GANDIPET, KYDEN4BAD-5000 075

#### CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A) HYDERABAD-75 DEPARTMENT OF ENGLISH

VALUE ADDED COURSE Subject: Indian Constitutional Values Subject Code: CBIT/20EGV06 AY 2020-21 YEAR IV SEM VII Total Number of Students: 258

VII Sem CSE-1			
SI. No.	Roll Nos	Name of the Student	
1	1601-17-733-041	SAAD AHMED	
2	1601-17-733-042	SAGNIK ROY	
3	1601-17-733-043	SAI ROHITH RAJ GOUD KALAL	
4	1601-17-733-044	SAI SIDDHANTH POTU	
5	1601-17-733-045	SAITEJA NALLA	
6	1601-17-733-046	SATHWICK REDDY YALLA	
7	1601-17-733-047	SHAIK ABDUL MUQTADEER	
8	1601-17-733-048	SHREEYESH REDDY SUBBAGARI	
9	1601-17-733-049	SRI SAI D	
10	1601-17-733-050	SRI SAI SRAVAN MUDUMBA	
11	1601-17-733-051	SRIDHAR KANDI	
12	1601-17-733-052	SRIJAY PARSI	
13	1601-17-733-053	SRINATH BRAHMESHWARKAR	
14	1601-17-733-054	SRINIVAS PAVAN SINGH RUNVAL	
15	1601-17-733-055	SRIRAM KARTHIKEYA V	
16	1601-17-733-056	TEJA VAMSHI SINGAPANGA	
17	1601-17-733-057	VARUN SUNDARAM	
18	1601-17-733-058	VENKATA SAI ΤΕJΑ ΤΗΟΤΑ	
19	1601-17-733-059	VINAY KUMAR YERROLLA	
20	1601-17-733-060	VINEETH SRIRANGAM	
21	1601-17-733-061	ABHAY SINGH BALORIA (PMSSS for J&K)	
22	1601-17-733-185	DANDAMUDI ROHIT	
23	1601-17-733-301	BOLISETTY BHARGAV SAI	
24	1601-17-733-302	PUDARI VAISHNAVI	
25	1601-17-733-303	KUNDARAPU HARSHINI	
26	1601-17-733-302	PUDARI VAISHNAVI	
27	1601-17-733-303	KUNDARAPU HARSHINI	
28	1601-17-733-304	MOHAMMED ABDUL MUJEEB	
29	1601-17-733-305	MAHADEVUNI ANIRUDH	
30	1601-17-733-306	DABBUKOTTU LAXMAN	
31	1601-17-733-307	DOMMATI SRAVAN	
32	1601-17-733-308	A SHASHANK	

33	1601-17-733-309	KORAMONI AKANKSHA
34	1601-17-733-310	ABHILASH MODUMPALLY
35	1601-17-733-311	UDUTHA AKHILA
	\$	

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L	VII Sem ECE-1				
SI. No.	Roll Nos	Name of the Student			
1	1601-17-735-037	PRANITH AKUNURI			
2	1601-17-735-038	ROHITH REDDY S			
3	1601-17-735-039	SAI GOWTHAM CHITTEMSETTY			
4	1601-17-735-040	SAI PRATHAP REDDY VADICHERLA			
5	1601-17-735-041	SAI TEJA MACHABATHUNI			
6	1601-17-735-042	SHAIK JANI MIYA			
7	1601-17-735-043	SHAIK JUNIATH			
8	1601-17-735-044	SHAIK SOHAIL			
9	1601-17-735-045	SHASHIVARDHAN REDDY KAVELI			
10	1601-17-735-046	SHIVAKUMAR Y			
11	1601-17-735-047	SHRAVAN KUMAR GOUD KALALI			
12	1601-17-735-048	SRIKANTH GAVIDE			
13	1601-17-735-049	SRIKANTH GUNTURU			
14	1601-17-735-051	SUNIL VARMA RUDRARAJU S S			
15	1601-17-735-052	THARUN THOTA			
16	1601-17-735-053	UTHEJ KADARI			
17	1601-17-735-054	VARUN MASKU			
18	1601-17-735-056	VENKATA KRISHNA SATHVIK RALLABANDI			
19	1601-17-735-057	VENKATA PAVAN VISHNU RACHAPUDI			
20	1601-17-735-058	VIJAY BHASKAR NITTALA			
21	1601-17-735-059	VIVEK KALVA			
22	1601-17-735-060	VIVEK PALLE			
23	1601-17-735-181	AMAN AHMED			
24	1601-17-735-301	KOLLA SATISH KUMAR			
	1601-17-735-302	VANJIVAKKAM SOMASKANDA KARTHIK			
25	1001 17 755-502	PRAPANNA			
26	1601-17-735-303	GOVINDUGARI SAI KIRAN REDDY			
27	1601-17-735-304	DONTHINENI SAITEJA			
28	1601-17-735-305	DHAVOLLA DIVYA			
29	1601-17-735-306	BAREDDY SHARANYA			
30	1601-17-735-307	DESHOJU RAJESH			

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	VII Sem CSE-2				
SI. No.	Roll Nos	Name of the Student			
1	1601-17-733-093	KHUSHWANTH KUMAR RAGAM			
2	1601-17-733-094	KOUSHIK REDDY PATNAM			
3	1601-17-733-095	MIRZA AKBER NAMAZI			
4	1601-17-733-096	MOAZZAM ZAHURUDDIN MOHAMMED			
5	1601-17-733-099	МОНІТН В			
6	1601-17-733-100	MOUNISH JUVVADI			
7	1601-17-733-101	NAVEEN VAMSHI PEETHALA			
8	1601-17-733-102	NIHAL REDDY VATTI			
9	1601-17-733-103	PAVAN GOPI PRANEETH GIDDA			
10	1601-17-733-104	PRAGNESH B			
11	1601-17-733-105	PREETHAM REDDY GOLLAPALLI			
12	1601-17-733-107	SAI ASHISH REDDY PATLOLLA			
13	1601-17-733-108	SAI SANKEERTH MODINI			
14	1601-17-733-109	SAIF ALI ATHYAAB			
15	1601-17-733-110	SHAIK WASEEM AKRAM			
16	1601-17-733-111	SHARATH CHANDRA SRIRAMULA			
17	1601-17-733-112	SHASHANK KANDAALA			
18	1601-17-733-114	VAIBHAW POKALA			
19	1601-17-733-115	VARUN B			
20	1601-17-733-116	VENKATA KEDARNATH CHATURVEDULA			
21	1601-17-733-117	VENKATA SRIJESH KUMAR Y			
22	1601-17-733-118	VIDYADHAR POGUL			
23	1601-17-733-119	VINEETH SHARMA BUDDARAPU			
24	1601-17-733-120	VISHAL CHANDRA JONGONI			
25	1601-17-733-121	VISHAL REDDY VAKA			
26	1601-17-733-122	ASHISH SHARMA (PMSSS for J&K)			
27	1601-17-733-183	MOHAMMED SULTAN RAHIL			
28	1601-17-733-313	MOHD SAYEED			
29	1601-17-733-314	E HARITHA			
30	1601-17-733-315	CHEKKA PRAVEEN			
31	1601-17-733-316	KUNDANAPALLY VAMSHI			
32	1601-17-733-317	N SHIVA KUMAR			
33	1601-17-733-318	SARIPALLY DHARANI			
34	1601-17-733-319	MUNIPALLY ABHIGNYA			
35	1601-17-733-320	DURGAM BHARATH			

P. noy all

VII Sem ECE-2		
Roll Nos	Name of the Student	
1601-17-735-092	GOVARDHAN KATTA	
1601-17-735-093	HRITHIK ROSHAN PALAMPATLA	
1601-17-735-094	KRISHNA CHAITANYA GOPARAJU	
1601-17-735-095	LAKSHMI SRIKANTH YECHURI	
1601-17-735-096	MAANVIK THODUPUNURI	
1601-17-735-097	MAHIDHARA REDDY KANKARA	
1601-17-735-099	NAVEEN Y	
1601-17-735-100	NIKHIL KANUKUNTLA	
1601-17-735-101	PRAJAY REDDY MINUKA	
1601-17-735-102	PRANITH REDDY MINUMULA	
1601-17-735-103	RAHUL T	
1601-17-735-104	RAKSHITH DEVUNURI	
1601-17-735-105	RUPESH CHANDRA SAYAM	
1601-17-735-106	SAITHARUN BAIRI	
1601-17-735-107	SAKETH REDDY DODDA	
1601-17-735-108	SHIVA DHANUSH DUSSA	
1601-17-735-109	TARUN KALTHI	
1601-17-735-110	TEJA REDDY KOMMIDI	
1601-17-735-111	TEJESHWAR SINGH RAJPUT	
1601-17-735-112	VAMSHI GANNA	
1601-17-735-114	VASHISTA BASAVA	
1601-17-735-116	VINAY REDDY NAVARI	
1601-17-735-117	VINAY REDDY POCHAMPALLY	
1601-17-735-118	VISHNU BHARGAV KOTTE	
1601-17-735-119	VISHWA TEJA BINGI	
1601-17-735-120	VISHWA VIJETHA GUJJULA	
1601-17-735-313	BANSWADA SUMANTH REDDY	
1601-17-735-314	THAMMISHETTY AKHILESH	
1601-17-735-315	NAGILLA PRANEETH REDDY	
1601-17-735-316	CHOWDARY VANI	
	Roll Nos1601-17-735-0921601-17-735-0931601-17-735-0941601-17-735-0951601-17-735-0961601-17-735-0971601-17-735-0971601-17-735-1001601-17-735-1011601-17-735-1021601-17-735-1031601-17-735-1041601-17-735-1051601-17-735-1061601-17-735-1071601-17-735-1081601-17-735-1091601-17-735-1091601-17-735-1101601-17-735-1101601-17-735-1111601-17-735-1121601-17-735-1141601-17-735-1171601-17-735-1181601-17-735-1191601-17-735-3131601-17-735-3141601-17-735-3151601-17-735-316	

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	VII Sem CSE-3		
SI. No.	Roll Nos	Name of the Student	
1	1601-17-733-156	KISHORE KUMAR NAGARAM	
2	1601-17-733-157	KOUSTHUBHA KRISHNA CH	
3	1601-17-733-158	MANIDEEP KUMAR GANDHARI	
4	1601-17-733-159	NIHASH VEERAMACHANENI	
5	1601-17-733-160	PRIYATAM SAI NARAVAJHULA	
6	1601-17-733-161	RAHUL SAI PRATAP	
7	1601-17-733-162	SAI KRISHNA GANTANNAGARI	
8	1601-17-733-163	SAI MEENAN VOOTURI	
9	1601-17-733-164	SAI RAJ YADAV SAANAM	
10	1601-17-733-165	SAI ROHITH KOMMINENI	
11	1601-17-733-166	SAICHARAN CHINTHA	
12	1601-17-733-167	SAIRAAM REDDY K V N	
13	1601-17-733-169	SANTHOSH KANNE	
14	1601-17-733-170	SATHVIK MANSANPALLY	
15	1601-17-733-171	SATYAJIT MOHANTY	
16	1601-17-733-172	SHIVA KUMAR JADA	
17	1601-17-733-173	SIDDHARTH TUMRE	
18	1601-17-733-174	SREEDEEP RAYAVARAPU	
19	1601-17-733-175	SRINATH GARIGANTI	
20	1601-17-733-176	SRINIVAS REDDY CHITUKULA	
21	1601-17-733-178	SUJAN CHITHALURI	
22	1601-17-733-179	SUPREET V	
23	1601-17-733-180	VARUN BAMANDLAPELLY	
24	1601-17-733-181	VISHNU GADAM	
25	1601-17-733-182	VISHNU VARDHAN REDDY P	
26	1601-17-733-184	DYAPA KOWSHIK REDDY	
27	1601-17-733-325	SIRIKONDA RAKESH	
28	1601-17-733-326	MANDALA RADHIKA	
29	1601-17-733-327	T SHIVA SAI	
30	1601-17-733-328	GOPALA ARCHANA	
31	1601-17-733-329	V SAI KEERTHANA	
32	1601-17-733-330	L MADHUSUDHAN	
34	1601-17-733-331	MOHAMMED RASHID AHMED SILLEDAR	
35	1601-17-733-332	GUNDALA MOULIKA 10-08-2020	

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SI. No.     Roll Nos     Name of the Student       1     1601-17-735-151     KAILAS SALAVATH       2     1601-17-735-152     KARTHIK MATHKA       3     1601-17-735-153     MADHUKAR REDDY VARALA       4     1601-17-735-154     MAHESH MANMARI       5     1601-17-735-155     MANEESH KUMAR JERIPOTHULA       6     1601-17-735-156     MOHAMMED ARIF       7     1601-17-735-158     NITESH ALONEY       8     1601-17-735-160     PRANAV K       10     1601-17-735-162     RAHUL GUNDALA       11     1601-17-735-162     RAHUL GUNDALA       12     1601-17-735-163     ROHIT PRASAD VARANASI       13     1601-17-735-164     SAI KIRAN BANDARI       14     1601-17-735-165     SAI KIRAN KONDOJU       15     1601-17-735-171     SAITEJA REDDY PIDUGU       17     1601-17-735-173     SHIVA KUMAR REDDY NAREDDY       18     1601-17-735-174     SRI HARI KORAM       19     1601-17-735-175     SRINIVASA BHARADWAJ CHAKILAM       20     1601-17-735-176     SUDEEP REDDY SABBI REDDY	VII Sem ECE-3		
1     1601-17-735-151     KAILAS SALAVATH       2     1601-17-735-152     KARTHIK MATHKA       3     1601-17-735-153     MADHUKAR REDDY VARALA       4     1601-17-735-154     MAHESH MANMARI       5     1601-17-735-155     MANEESH KUMAR JERIPOTHULA       6     1601-17-735-156     MOHAMMED ARIF       7     1601-17-735-158     NITESH ALONEY       8     1601-17-735-160     PRANAV K       10     1601-17-735-160     PRANAV K       10     1601-17-735-162     RAHUL GUNDALA       11     1601-17-735-163     ROHIT PRASAD VARANASI       12     1601-17-735-164     SAI ABHISHEK KODI       13     1601-17-735-167     SAI KIRAN BANDARI       14     1601-17-735-167     SAI KIRAN KONDOJU       15     1601-17-735-171     SAITEJA REDDY PIDUGU       17     1601-17-735-173     SHIVA KUMAR REDDY NAREDDY       18     1601-17-735-174     SRI HARI KORAM       19     1601-17-735-175     SRINIVASA BHARADWAJ CHAKILAM       20     1601-17-735-176     SUDEEP REDDY SABBI REDDY	SI. No.	Roll Nos	Name of the Student
2     1601-17-735-152     KARTHIK MATHKA       3     1601-17-735-153     MADHUKAR REDDY VARALA       4     1601-17-735-154     MAHESH MANMARI       5     1601-17-735-155     MANEESH KUMAR JERIPOTHULA       6     1601-17-735-156     MOHAMMED ARIF       7     1601-17-735-158     NITESH ALONEY       8     1601-17-735-160     PRANAV K       10     1601-17-735-162     RAHUL GUNDALA       11     1601-17-735-163     ROHIT PRASAD VARANASI       12     1601-17-735-164     SAI ABHISHEK KODI       13     1601-17-735-165     SAI KIRAN BANDARI       14     1601-17-735-167     SAI KIRAN KONDOJU       15     1601-17-735-171     SAITEJA REDDY PIDUGU       16     1601-17-735-173     SHIVA KUMAR REDDY NAREDDY       18     1601-17-735-174     SRI HARI KORAM       19     1601-17-735-175     SRINIVASA BHARADWAJ CHAKILAM       20     1601-17-735-176     SUDEEP REDDY SABBI REDDY       21     1601-17-735-177     SURYA KANKATA       22     1601-17-735-178     TULASI RAM CHOWDARY VEGE	1	1601-17-735-151	KAILAS SALAVATH
3     1601-17-735-153     MADHUKAR REDDY VARALA       4     1601-17-735-154     MAHESH MANMARI       5     1601-17-735-155     MANESH KUMAR JERIPOTHULA       6     1601-17-735-156     MOHAMMED ARIF       7     1601-17-735-158     NITESH ALONEY       8     1601-17-735-160     PRANAV K       10     1601-17-735-161     RAHUL GUNDALA       11     1601-17-735-162     RAHUL GUNDALA       11     1601-17-735-163     ROHIT PRASAD VARANASI       12     1601-17-735-164     SAI ABHISHEK KODI       13     1601-17-735-164     SAI KIRAN BANDARI       14     1601-17-735-167     SAI KIRAN KONDOJU       15     1601-17-735-168     SAI PANINDRA SANTOSH KUMAR MAJJI       16     1601-17-735-171     SAITEJA REDDY PIDUGU       17     1601-17-735-173     SHIVA KUMAR REDDY NAREDDY       18     1601-17-735-174     SRI HARI KORAM       19     1601-17-735-175     SRINIVASA BHARADWAJ CHAKILAM       20     1601-17-735-176     SUDEEP REDDY SABBI REDDY       21     1601-17-735-177     SURYA KANKATA	2	1601-17-735-152	KARTHIK MATHKA
4     1601-17-735-154     MAHESH MANMARI       5     1601-17-735-155     MANESH KUMAR JERIPOTHULA       6     1601-17-735-156     MOHAMMED ARIF       7     1601-17-735-158     NITESH ALONEY       8     1601-17-735-160     PRANAV K       9     1601-17-735-160     PRANAV K       10     1601-17-735-162     RAHUL GUNDALA       11     1601-17-735-163     ROHIT PRASAD VARANASI       12     1601-17-735-164     SAI ABHISHEK KODI       13     1601-17-735-166     SAI KIRAN BANDARI       14     1601-17-735-167     SAI KIRAN BANDARI       15     1601-17-735-168     SAI PANINDRA SANTOSH KUMAR MAJJI       16     1601-17-735-171     SAITEJA REDDY PIDUGU       17     1601-17-735-173     SHIVA KUMAR REDDY NAREDDY       18     1601-17-735-174     SRI IARI KORAM       19     1601-17-735-175     SURYA KANKATA       20     1601-17-735-176     SUDEEP REDDY SABBI REDDY       21     1601-17-735-178     TULASI RAM CHOWDARY VEGE       23     1601-17-735-325     PULLURU KEERTHI	3	1601-17-735-153	MADHUKAR REDDY VARALA
5     1601-17-735-155     MANEESH KUMAR JERIPOTHULA       6     1601-17-735-156     MOHAMMED ARIF       7     1601-17-735-158     NITESH ALONEY       8     1601-17-735-159     NITHISH CHILUKURI       9     1601-17-735-162     RAHUL GUNDALA       10     1601-17-735-162     RAHUL GUNDALA       11     1601-17-735-163     ROHIT PRASAD VARANASI       12     1601-17-735-164     SAI ABHISHEK KODI       13     1601-17-735-166     SAI KIRAN BANDARI       14     1601-17-735-167     SAI KIRAN KONDOJU       15     1601-17-735-168     SAI PANINDRA SANTOSH KUMAR MAJJI       16     1601-17-735-171     SAITEJA REDDY PIDUGU       17     1601-17-735-173     SHIVA KUMAR REDDY NAREDDY       18     1601-17-735-174     SRI HARI KORAM       19     1601-17-735-175     SRINIVASA BHARADWAJ CHAKILAM       20     1601-17-735-176     SUDEEP REDDY SABBI REDDY       21     1601-17-735-177     SURYA KANKATA       22     1601-17-735-178     TULASI RAM CHOWDARY VEGE       23     1601-17-735-326     KOLA JAGA	4	1601-17-735-154	MAHESH MANMARI
6   1601-17-735-156   MOHAMMED ARIF     7   1601-17-735-158   NITESH ALONEY     8   1601-17-735-160   PRANAV K     9   1601-17-735-160   PRANAV K     10   1601-17-735-162   RAHUL GUNDALA     11   1601-17-735-163   ROHIT PRASAD VARANASI     12   1601-17-735-164   SAI ABHISHEK KODI     13   1601-17-735-165   SAI KIRAN BANDARI     14   1601-17-735-167   SAI KIRAN BANDARI     15   1601-17-735-168   SAI PANINDRA SANTOSH KUMAR MAJJI     16   1601-17-735-171   SAITEJA REDDY PIDUGU     17   1601-17-735-173   SHIVA KUMAR REDDY NAREDDY     18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-325   PULLURU KEERTHI     24   1601-17-735-326   KOLA JAGADISHWAR     25   1601-17-735-327   THOTA NAVYA	5	1601-17-735-155	MANEESH KUMAR JERIPOTHULA
7   1601-17-735-158   NITESH ALONEY     8   1601-17-735-159   NITHISH CHILUKURI     9   1601-17-735-160   PRANAV K     10   1601-17-735-162   RAHUL GUNDALA     11   1601-17-735-163   ROHIT PRASAD VARANASI     12   1601-17-735-164   SAI ABHISHEK KODI     13   1601-17-735-166   SAI KIRAN BANDARI     14   1601-17-735-167   SAI KIRAN BANDARI     15   1601-17-735-168   SAI PANINDRA SANTOSH KUMAR MAJJI     16   1601-17-735-173   SHIVA KUMAR REDDY PIDUGU     17   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-325   PULLURU KEERTHI     24   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-30   BATHULA HANUMANSAGAR </td <td>6</td> <td>1601-17-735-156</td> <td>MOHAMMED ARIF</td>	6	1601-17-735-156	MOHAMMED ARIF
8     1601-17-735-159     NITHISH CHILUKURI       9     1601-17-735-160     PRANAV K       10     1601-17-735-162     RAHUL GUNDALA       11     1601-17-735-163     ROHIT PRASAD VARANASI       12     1601-17-735-164     SAI ABHISHEK KODI       13     1601-17-735-166     SAI KIRAN BANDARI       14     1601-17-735-167     SAI KIRAN KONDOJU       15     1601-17-735-168     SAI PANINDRA SANTOSH KUMAR MAJJI       16     1601-17-735-171     SAITEJA REDDY PIDUGU       17     1601-17-735-173     SHIVA KUMAR REDDY NAREDDY       18     1601-17-735-174     SRI HARI KORAM       19     1601-17-735-175     SRINIVASA BHARADWAJ CHAKILAM       20     1601-17-735-176     SUDEEP REDDY SABBI REDDY       21     1601-17-735-178     TULASI RAM CHOWDARY VEGE       23     1601-17-735-178     TULASI RAM CHOWDARY VEGE       23     1601-17-735-325     PULLURU KEERTHI       25     1601-17-735-326     KOLA JAGADISHWAR       26     1601-17-735-327     THOTA NAVYA       27     1601-17-735-328     GOVINDOLL	7	1601-17-735-158	NITESH ALONEY
9   1601-17-735-160   PRANAV K     10   1601-17-735-162   RAHUL GUNDALA     11   1601-17-735-163   ROHIT PRASAD VARANASI     12   1601-17-735-164   SAI ABHISHEK KODI     13   1601-17-735-166   SAI KIRAN BANDARI     14   1601-17-735-167   SAI KIRAN BANDARI     15   1601-17-735-168   SAI PANINDRA SANTOSH KUMAR MAJJI     16   1601-17-735-171   SAITEJA REDDY PIDUGU     17   1601-17-735-173   SHIVA KUMAR REDDY NAREDDY     18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-325   PULLURU KEERTHI     24   1601-17-735-326   KOLA JAGADISHWAR     25   1601-17-735-327   THOTA NAVYA     26   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-330   BATHULA HANUMANSAGA	8	1601-17-735-159	NITHISH CHILUKURI
10   1601-17-735-162   RAHUL GUNDALA     11   1601-17-735-163   ROHIT PRASAD VARANASI     12   1601-17-735-164   SAI ABHISHEK KODI     13   1601-17-735-166   SAI KIRAN BANDARI     14   1601-17-735-167   SAI KIRAN BANDARI     15   1601-17-735-168   SAI PANINDRA SANTOSH KUMAR MAJJI     16   1601-17-735-171   SAITEJA REDDY PIDUGU     17   1601-17-735-173   SHIVA KUMAR REDDY NAREDDY     18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-325   PULLURU KEERTHI     24   1601-17-735-326   KOLA JAGADISHWAR     25   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-30   BATHULA HANUMANSAGAR	9	1601-17-735-160	PRANAV K
111601-17-735-163ROHIT PRASAD VARANASI121601-17-735-164SAI ABHISHEK KODI131601-17-735-164SAI KIRAN BANDARI141601-17-735-167SAI KIRAN KONDOJU151601-17-735-167SAI KIRAN KONDOJU161601-17-735-168SAI PANINDRA SANTOSH KUMAR MAJJI161601-17-735-171SAITEJA REDDY PIDUGU171601-17-735-173SHIVA KUMAR REDDY NAREDDY181601-17-735-174SRI HARI KORAM191601-17-735-175SRINIVASA BHARADWAJ CHAKILAM201601-17-735-176SUDEEP REDDY SABBI REDDY211601-17-735-177SURYA KANKATA221601-17-735-178TULASI RAM CHOWDARY VEGE231601-17-735-325PULLURU KEERTHI241601-17-735-326KOLA JAGADISHWAR261601-17-735-327THOTA NAVYA271601-17-735-328GOVINDOLLA BHAVANI281601-17-735-329NAKKA SAI SIDDARTHA291601-17-735-300BATHULA HANUMANSAGAR	10	1601-17-735-162	RAHUL GUNDALA
12   1601-17-735-164   SAI ABHISHEK KODI     13   1601-17-735-166   SAI KIRAN BANDARI     14   1601-17-735-167   SAI KIRAN KONDOJU     15   1601-17-735-168   SAI PANINDRA SANTOSH KUMAR MAJJI     16   1601-17-735-171   SAITEJA REDDY PIDUGU     17   1601-17-735-173   SHIVA KUMAR REDDY NAREDDY     18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-325   PULLURU KEERTHI     24   1601-17-735-326   KOLA JAGADISHWAR     25   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-330   BATHULA HANUMANSAGAR	11	1601-17-735-163	ROHIT PRASAD VARANASI
13   1601-17-735-166   SAI KIRAN BANDARI     14   1601-17-735-167   SAI KIRAN KONDOJU     15   1601-17-735-168   SAI PANINDRA SANTOSH KUMAR MAJJI     16   1601-17-735-171   SAITEJA REDDY PIDUGU     17   1601-17-735-173   SHIVA KUMAR REDDY NAREDDY     18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-325   PULLURU KEERTHI     24   1601-17-735-326   KOLA JAGADISHWAR     25   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-330   BATHULA HANUMANSAGAR	12	1601-17-735-164	SAI ABHISHEK KODI
141601-17-735-167SAI KIRAN KONDOJU151601-17-735-168SAI PANINDRA SANTOSH KUMAR MAJJI161601-17-735-171SAITEJA REDDY PIDUGU171601-17-735-173SHIVA KUMAR REDDY NAREDDY181601-17-735-174SRI HARI KORAM191601-17-735-175SRINIVASA BHARADWAJ CHAKILAM201601-17-735-176SUDEEP REDDY SABBI REDDY211601-17-735-177SURYA KANKATA221601-17-735-178TULASI RAM CHOWDARY VEGE231601-17-735-325PULLURU KEERTHI241601-17-735-326KOLA JAGADISHWAR261601-17-735-327THOTA NAVYA271601-17-735-328GOVINDOLLA BHAVANI281601-17-735-330BATHULA HANUMANSAGAR	13	1601-17-735-166	SAI KIRAN BANDARI
15   1601-17-735-168   SAI PANINDRA SANTOSH KUMAR MAJJI     16   1601-17-735-171   SAITEJA REDDY PIDUGU     17   1601-17-735-173   SHIVA KUMAR REDDY NAREDDY     18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-325   PULLURU KEERTHI     24   1601-17-735-326   KOLA JAGADISHWAR     25   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-300   BATHULA HANUMANSAGAR	14	1601-17-735-167	SAI KIRAN KONDOJU
161601-17-735-171SAITEJA REDDY PIDUGU171601-17-735-173SHIVA KUMAR REDDY NAREDDY181601-17-735-174SRI HARI KORAM191601-17-735-175SRINIVASA BHARADWAJ CHAKILAM201601-17-735-176SUDEEP REDDY SABBI REDDY211601-17-735-177SURYA KANKATA221601-17-735-178TULASI RAM CHOWDARY VEGE231601-17-735-180VENKATA SAI LAXMAN YADAV GORIPARTHI241601-17-735-325PULLURU KEERTHI251601-17-735-326KOLA JAGADISHWAR261601-17-735-327THOTA NAVYA271601-17-735-328GOVINDOLLA BHAVANI281601-17-735-329NAKKA SAI SIDDARTHA291601-17-735-300BATHULA HANUMANSAGAR	15	1601-17-735-168	SAI PANINDRA SANTOSH KUMAR MAJJI
17   1601-17-735-173   SHIVA KUMAR REDDY NAREDDY     18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-180   VENKATA SAI LAXMAN YADAV GORIPARTHI     24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-300   BATHULA HANUMANSAGAR	16	1601-17-735-171	SAITEJA REDDY PIDUGU
18   1601-17-735-174   SRI HARI KORAM     19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-180   VENKATA SAI LAXMAN YADAV GORIPARTHI     24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-330   BATHULA HANUMANSAGAR	17	1601-17-735-173	SHIVA KUMAR REDDY NAREDDY
19   1601-17-735-175   SRINIVASA BHARADWAJ CHAKILAM     20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-180   VENKATA SAI LAXMAN YADAV GORIPARTHI     24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-300   BATHULA HANUMANSAGAR	18	1601-17-735-174	SRI HARI KORAM
20   1601-17-735-176   SUDEEP REDDY SABBI REDDY     21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-180   VENKATA SAI LAXMAN YADAV GORIPARTHI     24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-300   BATHULA HANUMANSAGAR	19	1601-17-735-175	SRINIVASA BHARADWAJ CHAKILAM
21   1601-17-735-177   SURYA KANKATA     22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-180   VENKATA SAI LAXMAN YADAV GORIPARTHI     24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-300   BATHULA HANUMANSAGAR	20	1601-17-735-176	SUDEEP REDDY SABBI REDDY
22   1601-17-735-178   TULASI RAM CHOWDARY VEGE     23   1601-17-735-180   VENKATA SAI LAXMAN YADAV GORIPARTHI     24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-320   BATHULA HANUMANSAGAR	21	1601-17-735-177	SURYA KANKATA
23   1601-17-735-180   VENKATA SAI LAXMAN YADAV GORIPARTHI     24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-330   BATHULA HANUMANSAGAR	22	1601-17-735-178	TULASI RAM CHOWDARY VEGE
24   1601-17-735-325   PULLURU KEERTHI     25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-330   BATHULA HANUMANSAGAR	23	1601-17-735-180	VENKATA SAI LAXMAN YADAV GORIPARTHI
25   1601-17-735-326   KOLA JAGADISHWAR     26   1601-17-735-327   THOTA NAVYA     27   1601-17-735-328   GOVINDOLLA BHAVANI     28   1601-17-735-329   NAKKA SAI SIDDARTHA     29   1601-17-735-330   BATHULA HANUMANSAGAR	24	1601-17-735-325	PULLURU KEERTHI
26     1601-17-735-327     THOTA NAVYA       27     1601-17-735-328     GOVINDOLLA BHAVANI       28     1601-17-735-329     NAKKA SAI SIDDARTHA       29     1601-17-735-330     BATHULA HANUMANSAGAR	25	1601-17-735-326	KOLA JAGADISHWAR
27     1601-17-735-328     GOVINDOLLA BHAVANI       28     1601-17-735-329     NAKKA SAI SIDDARTHA       29     1601-17-735-330     BATHULA HANUMANSAGAR	26	1601-17-735-327	ΤΗΟΤΑ ΝΑΥΥΑ
28     1601-17-735-329     NAKKA SAI SIDDARTHA       29     1601-17-735-330     BATHULA HANUMANSAGAR	27	1601-17-735-328	GOVINDOLLA BHAVANI
29 1601-17-735-330 BATHULA HANUMANSAGAR	28	1601-17-735-329	NAKKA SAI SIDDARTHA
	29	1601-17-735-330	BATHULA HANUMANSAGAR
30 1601-17-735-331 NANDAMURI SAISHARAN	30	1601-17-735-331	NANDAMURI SAISHARAN

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	VII Sem Civil-2		
SI. No.	Roll Nos	Name of the Student	
1	1601-17-732-093	T NIPUN REDDY	
2	1601-17-732-096	MUNGI PRASHANTH REDDY	
3	1601-17-732-105	AMMAPURAM SAI SASHIKANTH	
4	1601-17-732-061	JAGRUTHI JANDAGUDEM	
5	1601-17-732-062	JAGRUTI ENDRALA	
6	1601-17-732-063	KAVYA SHREE KALYANAM	
7	1601-17-732-064	NEENA REDDY NANDIKONDA	
8	1601-17-732-065	NIVEDITHA AKULA	
9	1601-17-732-066	PREETHI AKULA	
10	1601-17-732-067	SATHYAVATHI SIRIPANGI	
11	1601-17-732-068	SHANVITHA VASAMSETTI	
12	1601-17-732-069	SHRUTHI GUNNE	
13	1601-17-732-070	SNEHA KURCHEETI	
14	1601-17-732-071	SRI NAYANI GAJJI	
15	1601-17-732-072	SRIVANI LINGAMPALLY	
16	1601-17-732-073	UDAYA SRI BANDI	
17	1601-17-732-074	VAISHNAVI NAGARAM	
18	1601-17-732-075	ABDUL RAFAE SYED	
19	1601-17-732-076	ABHILASH SUDARSHANAM	
20	1601-17-732-077	ABHIRAM MALLEMPATI	
21	1601-17-732-078	AMOGH REDDY DESHMUKH LINGALA	
22	1601-17-732-079	ANANTH PATHLOATH	
23	1601-17-732-080	ARUN VARMA CHITHALURI	
24	1601-17-732-081	ASHISH UPPALANCHI	
25	1601-17-732-082	BHEESHMA DANDUGULA	
26	1601-17-732-084	HRITHIK THAKUR	
27	1601-17-732-085	JAYAKALYAN REDDY	
28	1601-17-732-086	KAMAL NAYAN MUDIGONDA	
29	1601-17-732-087	KARTHIK POLU	
30	1601-17-732-088	MAHENDHAR RADARAPU	
28	1601-17-732-090	NAVEEN BANOTH	
29	1601-17-732-091	NAVEEN KUMAR VANGALA	
30	1601-17-732-092	NIKHIT KUMAR NELLI	
31	1601-17-732-094	PAVAN KUMAR VUPPULA	
32	1601-17-732-095	PRANESH BEESU N	
33	1601-17-732-097	RAJ KUMAR PERMULA	
34	1601-17-732-098	RAJESH PASHAMULA	
35	1601-17-732-099	RAKESH ANNAMANENI	
36	1601-17-732-100	RANEESH KUMAR VELAGAPUDI	

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38	1601-17-732-102	SAI DEEKSHITH M
39	1601-17-732-103	SAI NAVEEN BALLA
40	1601-17-732-106	SAI TEJA GOPU
41	1601-17-732-108	SAIKUMAR KARNATI

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VII Sem Chemical		
SI. No.	Roll Nos	Name of the Student
1	1601-17-802-040	RUSHIKESH PEDDABOMMA
2	1601-17-802-041	SAI AASHRITH THATIPALLI
3	1601-17-802-042	SAI NITHEESH MAGASANI
4	1601-17-802-043	SAI SUMANTH GOUD MOLAGARA
5	1601-17-802-044	SAMARTH SANDHA
6	1601-17-802-046	SUHANTH P
7	1601-17-802-047	THARUNESH PONUKANTI
8	1601-17-802-049	VAMSHI GOUD SUKKALA
9	1601-17-802-051	VIJAYA RAJU KESANAPALLI
10	1601-17-802-052	VINAY RAO VEMULA
11	1601-17-802-054	YUVARAJU JALLI
12	1601-17-802-301	INJARAPU CHAITANYA VAMSI KRISHNA
13	1601-16-802-004	HARSHITHA I
14	1601-16-802-031	MOHAMMED AMINUDDIN
15	1601-16-802-033	NAJABETH ALI KHAN
16	1601-16-802-036	PHANINDRA GUPTA
17	1601-16-802-047	MEKALA SHIVAPRASAD
18	1601-16-802-306	MADESHI AKHIL
19	1601-16-802-308	KANCHAPOGU NAGARAJU
20	1601-16-802-310	PATHLAVATH VENKATESH NAYAK
21	1601-16-802-311	SADAMASTULA VENKATESH
22	1601-15-802-019	D BALA SWAMI

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Dept.oi I. Chaitanya Bharas Gandipet, Hyuerupad 500 075.

#### CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A) HYDERABAD-75 DEPARTMENT OF ENGLISH

#### VALUE ADDED COURSE Subject: Indian Constitutional Values Subject Code: CBIT/20EGV06 AY 2020-21 YEAR IV SEM VIII Total Number of Students: 250

VIII Sem CSE-1		
Sl. No.	Roll Nos	Name of the Student
1	1601-17-733-001	AKSHITHA NANAVALA
2	1601-17-733-002	ALEKHYA THADAGONDA
3	1601-17-733-003	AMRUTHA TIRUVEEDHULA
4	1601-17-733-004	BALA SAI APOORVA MARADAPU
5	1601-17-733-005	CHARITHA P
6	1601-17-733-006	INDIRA PRIYADARSHINI VAGOLU
7	1601-17-733-007	KHAZIELAKHA SANA SIMRAN
8	1601-17-733-008	KINNERA REDDY BASANI
9	1601-17-733-009	KRUTHIKA MAMIDALA
10	1601-17-733-010	LAKSHMI ANUHYA GUNNAM
11	1601-17-733-011	NAMYA REDDY GADDAM
12	1601-17-733-012	NIKITHA BOGALA
13	1601-17-733-013	RISHIKA REDDY PATLOLLA
14	1601-17-733-014	SAI PRERANA MANDALIKA
15	1601-17-733-016	SAI VINITHA YEGGADI
16	1601-17-733-017	SAIRAKSHITHA YALAMANCHILI
17	1601-17-733-019	SHRADDHA SRINIVAS PANGAM
18	1601-17-733-020	SISIRA
19	1601-17-733-021	STELLA RAMOLA ERDANI
20	1601-17-733-022	VAISHNAVI CHITTURI
21	1601-17-733-023	ABDUL QAVI
22	1601-17-733-024	ABHIRAM REDDY C M
23	1601-17-733-025	ABISHEK CHALLA
24	1601-17-733-026	CHAKRADHAR S
25	1601-17-733-028	GOPI KUMAR MAKWANA
26	1601-17-733-029	HITESH PULIVARTHI
27	1601-17-733-030	HRUDAY TEJ AKKALADEVI
28	1601-17-733-031	KANISHKA SUTRAVE
29	1601-17-733-032	MOHAMMED SAFI AMMAR
30	1601-17-733-033	MOHAMMED ZUBAIR AHMED

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VIII Sem ECE-1		
SI. No.	Roll Nos	Name of the Student
1	1601-17-735-001	AKHILA MAARKA
2	1601-17-735-002	ANJALI KANCHARLAPALLY
3	1601-17-735-003	FAROOQUNNISA
4	1601-17-735-004	HASEENA PALLE
5	1601-17-735-005	KHUNDHANA M
6	1601-17-735-006	KRISHNA SAI GEETHIKA SRIPATHI
7	1601-17-735-007	LOHITHA GUNDAGANI
8	1601-17-735-008	MAANSA KROVVIDI
9	1601-17-735-009	NAMITHA KOMMINENI
10	1601-17-735-010	NIKHILA RAJ NITTA
11	1601-17-735-011	ΝΙΚΗΙΤΗΑ Τ
12	1601-17-735-012	NIPUNA VANCHA
13	1601-17-735-013	PRAGNA DASARI
14	1601-17-735-014	PRIYANKA KILARU
15	1601-17-735-015	SAATHVI AVULA
16	1601-17-735-016	SHIVANI JANNAIKODE
17	1601-17-735-017	SHRAVANI REDDY VODDULA
18	1601-17-735-018	SHREYA REDDY NANDIKA
19	1601-17-735-019	SOWJANYA BODDANI
20	1601-17-735-020	SRINIJA LANKALA
21	1601-17-735-022	VYSHNAVI CHEEDEPUDI
22	1601-17-735-023	ABHINAY SURYA
23	1601-17-735-024	ABHISHEK ADIRE
24	1601-17-735-025	ABHISHEK BEGARI
25	1601-17-735-026	ADITYA PAMULAPATI
26	1601-17-735-027	ASHISH ALLAMPALLY
27	1601-17-735-028	BHARGAV KUMAR MAMIDALA
28	1601-17-735-029	BHUVANESH SAMMETA
29	1601-17-735-030	CHANIKYA MAMINDLAPALLI
30	1601-17-735-031	DAMODHAR GADDI
31	1601-17-735-303	GOVINDUGARI SAI KIRAN REDDY
32	1601-17-735-304	DONTHINENI SAITEJA
33	1601-17-735-305	DHAVOLLA DIVYA
34	1601-17-735-306	BAREDDY SHARANYA
35	1601-17-735-307	DESHOJU RAJESH

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VIII Sem CSE-2		
SI. No.	Roll Nos	Name of the Student
1	1601-17-733-062	APOORVA P
2	1601-17-733-063	HARSHINI BORUGADDA
3	1601-17-733-064	INDU BOGALA
4	1601-17-733-065	INDU SALUGU
5	1601-17-733-066	MAANASA GUPTA THATIKONDA
6	1601-17-733-067	MADHAVI DEVI YELLAPU
7	1601-17-733-068	NANDINI PRIYA DEVALLA
8	1601-17-733-069	ΝΕΗΑ ΤΟΟΙΜΑ
9	1601-17-733-070	PRAKASHITHA JALADANKI
10	1601-17-733-071	RISHIKA PABBA
11	1601-17-733-072	ROSHINI JUMMALA
12	1601-17-733-073	SAHAJA SAMUDRALA
13	1601-17-733-074	SAMHITHA KAMMA CHAVALA
14	1601-17-733-075	SNEHITHA NAYAKA
15	1601-17-733-076	SOWMYA BOMMU
16	1601-17-733-077	SPOORTHI BADIKALA
17	1601-17-733-078	SRAVYA GUDIPELLY
18	1601-17-733-079	SRI SWATHI NIMMAGADDA
19	1601-17-733-080	SRUJANA CHERUKURI
20	1601-17-733-081	STHEERTHA SRI SANTOSHI RISHIKA R
21	1601-17-733-082	SUPRIYA PAKALA
22	1601-17-733-083	VAISHNAVI KUBEER
23	1601-17-733-084	ABHILASH DEVINURI
24	1601-17-733-086	ADARSH PATI
25	1601-17-733-087	ANUDEEP KANDULA
26	1601-17-733-088	DINAKAR PARUL KARANAM
27	1601-17-733-089	HARSH RAJ J
28	1601-17-733-090	HARSHAVARDHAN DAMMALAPATI
29	1601-17-733-091	HARSHAVARDHAN POTLA
30	1601-17-733-092	KARTHIK KASUKURTI

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	VIII Sem ECE-2		
Sl. No.	Roll Nos	Name of the Student	
1	1601-17-735-061	AKANKSHA THALLA	
2	1601-17-735-062	AKHILA MARRIKUKKALA	
3	1601-17-735-063	ANUSHA BAMAR	
4	1601-17-735-064	CHANDANA SUNKARA	
5	1601-17-735-065	GAYATHRIDEVI PAPPU	
6	1601-17-735-066	KAVYA MADASU	
7	1601-17-735-067	LIKHITHA ANDE	
8	1601-17-735-068	MALIKA RANI TIRVAJI	
9	1601-17-735-069	MAMATHA ERUGADINLA	
10	1601-17-735-070	MANISHA A	
11	1601-17-735-071	NAVYA CHALAMALASETTY	
12	1601-17-735-072	NIHARIKA HARI	
13	1601-17-735-073	NIHARIKA KAVADI	
14	1601-17-735-074	NIKITHA KOTHARAMULA	
15	1601-17-735-075	RITHIKA GURRAM	
16	1601-17-735-076	SAHITI ARIGELA	
17	1601-17-735-077	SAI HARSHITHA GOLLAPALLI	
18	1601-17-735-078	SAI PRANAVI REDDY P	
19	1601-17-735-079	SANJANA G	
20	1601-17-735-080	SHREYA REDDY G	
21	1601-17-735-081	SOWMYASRI SANGAPU	
22	1601-17-735-082	ABDUL LATEEF MOHD ABDUL KALEEM	
23	1601-17-735-083	ABHIJIT CHANDRA UTPALA	
24	1601-17-735-084	ABHINAV K J	
25	1601-17-735-085	AJAY SRIKAR MEDIDI	
26	1601-17-735-086	AKSHITH ALUGURI	
27	1601-17-735-087	ARUN KUMAR S	
28	1601-17-735-089	BHARADWAJ DANDE V N	
29	1601-17-735-090	CHARANJIT NANDIGAMA	
30	1601-17-735-091	DHEERAJ VAMSI GADDAM	
31	1601-17-735-317	VEESAM DILEEP REDDY	
32	1601-17-735-319	NASREEN SULTHANA	
33	1601-17-735-320	ANDUGULA VASAVI	
34	1601-17-735-321	BUDIDHA VINAY TEJA	
35	1601-17-735-322	PANCHAREDDY HINDUJA	

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HEAD Dept.of Mathematics and Humanities Chaitanya Bharathi Institute of Technology Gandipet, Hyderabad-500 075.

VIII Sem CSE-3		
SI. No.	Roll Nos	Name of the Student
1	1601-17-733-123	ALEKYA KONDEPUDI
2	1601-17-733-124	ANANYA PUPPALA
3	1601-17-733-125	ANMOL JAIN
4	1601-17-733-126	BHARGAVI SUNKIREDDY
5	1601-17-733-127	DEEKSHITHA OBULREDDYGARI
6	1601-17-733-128	JUHITHA DODDOJU
7	1601-17-733-129	JYOTIKA KONERU
8	1601-17-733-130	KEERTHANA GURINDA GUNTA
9	1601-17-733-131	KRANTHI REKHA CHINTHAPALLY
10	1601-17-733-132	NEHA PENDEM
11	1601-17-733-133	PEEYUSHA K
12	1601-17-733-134	PUNYA KEERTHI REDDY PADURI
13	1601-17-733-135	RUCHITHA REDDY P
14	1601-17-733-136	SAI LAKSHMI SPANDANA BULUSU
15	1601-17-733-137	SATWIKA PASHAM
16	1601-17-733-138	SHWETHA YARAMADA
17	1601-17-733-139	SNEHA MIRYALA
18	1601-17-733-140	SRESHTA RUSHYA PUTCHALA
19	1601-17-733-141	SRINIDHI REDDY KONDA
20	1601-17-733-142	SUSMITHA CHINTAREDDY
21	1601-17-733-143	VISHNU PRIYA G
22	1601-17-733-144	VYSHALI CHAVA
23	1601-17-733-145	ANIRUDH V L
24	1601-17-733-146	ASIM AHMED
25	1601-17-733-147	BHANU PRASAD NAYAK RAMAVATH
26	1601-17-733-148	CHANIKYA LADI
27	1601-17-733-149	CHARITHESH PUPPIREDDY
28	1601-17-733-150	DHANUSH PAKANATI
29	1601-17-733-151	DORA SAI VARMA ESKEPALLI
30	1601-17-733-152	GANADEEKSHITH REDDY VASEPALLI

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	VIII Sem ECE-3		
SI. No.	Roll Nos	Name of the Student	
1	1601-17-735-121	ΑΚΗΙLΑ ΚΟΝΑΚΑΝCΗΙ	
2	1601-17-735-122	ANUSHA G	
3	1601-17-735-123	DEEPIKA REDDY BADDAM	
4	1601-17-735-124	DEVEEKA RAVI MESHRAM	
5	1601-17-735-125	DIVYA SREE P V	
6	1601-17-735-126	GAYATRI PEDDI	
7	1601-17-735-127	JYOTHSNAVI KUPPILI	
8	1601-17-735-128	MAANASVI KODLI	
9	1601-17-735-129	MADIHA FATHIMA	
10	1601-17-735-130	NAGA SAI HARSHITA KAZA	
11	1601-17-735-131	NIKHILA MANUPURI	
12	1601-17-735-132	NIKHITHA VALISHETTI	
13	1601-17-735-133	NISHNA VEERANKI	
14	1601-17-735-134	PRAGATHI G	
15	1601-17-735-135	PRAVALIKA CHITLOJU	
16	1601-17-735-136	SARAYU JUPUDI	
17	1601-17-735-137	SHIVANI SAMA	
18	1601-17-735-138	SHRAVANI JALLI	
19	1601-17-735-139	SOWMIKA ANJURU	
20	1601-17-735-140	SREEJA K	
21	1601-17-735-141	SRI SAI MERUGU	
22	1601-17-735-142	SRITEJA GOPALA	
23	1601-17-735-143	TEENA CHOWDARY DHULIPALA	
24	1601-17-735-144	VENKATA SAI SRUTHI CHEBROLU	
25	1601-17-735-145	VINOOTHNA SREE NAYAKANTI	
26	1601-17-735-146	ABHIRAM M S D	
27	1601-17-735-147	AKHIL TEJA JAMPANI	
28	1601-17-735-148	BHAGATH SINGH KHARE	
29	1601-17-735-149	BOB ABISHAI BATHULA	
30	1601-17-735-150	JOSEPH MICHAEL MURRAY	

P. nog very

HEAD Dept.of Mathematics and Humanities Chaitanya Bharathi Institute of Technolog Gandipet, Hyderabad-500 075.

VIII Sem IT-2			
SI. No.	SI. No. Roll Nos Name of the Student		
1	1601-17-737-097	MADHAV JINDAM	
2	1601-17-737-098	MOKSH SAILESH JAIN	
3	1601-17-737-099	NITIN REDDY VATTI	
4	1601-17-737-100	PAVAN KALYAN INUGURTHI	
5	1601-17-737-101	PRASHANTH GOPATHI	
6	1601-17-737-102	PREETHI VARDHAN ANUSRI EGA	
7	1601-17-737-103	RAGHAV MADHAVAPEDDI	
8	1601-17-737-104	ROHITHKUMAR KESHETTI	
9	1601-17-737-105	SAI CHARAN KOPPARAPU	
10	1601-17-737-108	SAMPATH BHUKYA	
11	1601-17-737-109	SANJAY KUMAR KALWA	
12	1601-17-737-110	SATHVIK SURABHI	
13	1601-17-737-112	SUMANTH PARAMKUSAM	
14	1601-17-737-113	SYED HYDER HUSSAIN	
15	1601-17-737-115	VENKATA SRINIVAS KOMPALLY	
16	1601-17-737-116	VIKAS GOLI	
17	1601-17-737-117	VINAY PANNATI	
18	1601-17-737-118	VINEETH UDUMALA	
19	1601-17-737-120	ZOHAIB ABDULLAH AHMED	
20	1601-17-737-313	HAMILPUR SHIVANI	
21	1601-17-737-314	AKHIL BANDARU	
22	1601-17-737-315	RANGASUBE NITEESH BHARGAV	
23	1601-17-737-316	KEERTHI YASHWANTH	
24	1601-17-737-317	BHEMAVARAPU NAGENDER	
25	1601-17-737-320	M.SRIDHAR GOUD	
26	1601-17-737-321	R POOJITHA	
27	1601-17-737-322	M BANU TEJA	
28	1601-17-737-323	MUSHFIQ HUSSAIN	
29	1601-16-737-090	GONE JAYA SIMHA SAI SHIVA REDDY	
30	1601-16-737-093	MD MAHEBUB	

P. noj oeup

VIII Sem EEE-2			
SI. No.	Roll Nos	Name of the Student	
1	1601-17-734-091	MOHIT SRINIVAS MAHAVEER PASUPULETI	
2	1601-17-734-092	PARJANYA PHANI MUDIGONDA	
3	1601-17-734-093	PAVAN LAVUDYA	
4	1601-17-734-095	PAVAN KUMAR DHARMOJU	
5	1601-17-734-096	POOJITH RAMAGIRI	
6	1601-17-734-097	RAKESH GORATI	
7	1601-17-734-098	RAKESH GOUD G	
8	1601-17-734-099	SAGAR TIWARI	
9	1601-17-734-100	SAI DEESKSHITH RAYAPROLU	
10	1601-17-734-101	SAI KRISHNA KAVALI	
11	1601-17-734-102	SAI KRISHNA VOGGU	
12	1601-17-734-103	SAI KUMAR CHINNAM	
13	1601-17-734-104	SAI PRANAY REDDY AARE	
14	1601-17-734-105	SAI ROHIT KAPPALA	
15	1601-17-734-106	SAI TEJA NARAHARI	
16	1601-17-734-109	SHYAM SUNDER REDDY KUNREDDY	
17	1601-17-734-111	SRINIVASA REDDY DUGGAMPUDI	
18	1601-17-734-112	SURYA RAJ K	
19	1601-17-734-113	SURYATEJA REDDY CHITTI	
20	1601-17-734-114	SWAMY DEVENDER VARDHAN BANDARI	
21	1601-17-734-115	VASHIST NULIGONDA	
22	1601-17-734-116	VISHWANATH REDDY VANGATI	
23	1601-17-734-117	YASHWANTH A S N	
24	1601-17-734-118	YASHWANTH BARATAM	
25	1601-17-734-120	YESHWANTH RAYANKULA	
26	1601-17-734-313	D RATHANAKAR REDDY	
27	1601-17-734-314	K MALLESH	
28	1601-17-734-316	P NAGARAJU	
29	1601-17-734-317	YENUGANDULA RANADHEER	
30	1601-17-734-318	KARNATI NAGANJANI	

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#### CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A) HYDERABAD-75 DEPARTMENT OF ENGLISH

VALUE ADDED COURSE Subject: Writing Research Papers Subject Code: CBIT/20EGV08 AY 2020-21 YEAR IV SEM VIII Total number of students: 25

VIII Sem Biotech			
SI. No.	Roll Nos	Name of the Student	
1	1601-17-805-001	AKANKSHA JOSHI	
2	1601-17-805-002	AKSHITHA GUMMADI	
3	1601-17-805-003	DEEPIKA DAMALLA	
4	1601-17-805-004	DIVYA GANGA	
5	1601-17-805-005	DIVYA TEJA GUNDALA	
6	1601-17-805-006	HANITHA REDDY KOKU	
7	1601-17-805-009	МАНІТНА К	
8	1601-17-805-011	NAVYA B	
9	1601-17-805-012	NISHATH NAAZ	
10	1601-17-805-014	NITIKA GIRIDHAR CHINTAMANENI	
11	1601-17-805-015	PADMAVATHI SAI BHAVANA RONGALA	
12	1601-17-805-016	PRAHARSHITA V	
13	1601-17-805-017	RISHIKA KRISHNA PRANAVI AVADHANAM	
14	1601-17-805-018	RISHIKA REDDY PINNAPU REDDY	
15	1601-17-805-019	RISHISREE REDDY GEEDIPALLY	
16	1601-17-805-021	ROSHITHA VEGESANA	
17	1601-17-805-022	ROSHNI RAJ	
18	1601-17-805-023	SAI HARSHITHA DAKOOR	
19	1601-17-805-025	SHALINI RAJ NAMPALLY	
20	1601-17-805-026	SNEHA A	
21	1601-17-805-027	SOUMYA R SARAF	
22	1601-17-805-028	SPHOORTHY NADIMPALLI	
23	1601-17-805-029	SRESHTA GADELA	
24	1601-17-805-030	SRI LALITHA AMRITA GARLAPATI	
25	1601-17-805-032	SRI RUPALI MUKUNDALA	

g. noj olu

HEAD Dept.of Mathematics and Humanities Chaitanya Bharathi Institute of Technolog Gandipet, Hyderabad-500 075.

## TITLE OF THE VALUE-ADDED COURSE: -ANCIENT INDIAN KNOWLEDGE

COURSE CODE: -CBIT/20EEV02



CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY ENVIRONMENTAL IMPACT AND MONITORING - CBIT/20CEV01 LIST OF STUDENTS			
1601-19-732-001	AISHWARYA CHOUDARY		
1601-19-732-002	AKHILA SRIGADDE		
1601-19-732-003	ANUSHA RACHAPAKA		
1601-19-732-004	CHARVI PANYALA		
1601-19-732-005	CHIHNITHA KONTEMUKKULA		
1601-19-732-006	HARIKA MOKKA	HARIKA MOKKA	
1601-19-732-007	KAMALA RAMA SRIKARI BHANDARAM		
1601-19-732-008	KHYATHI VARDHINI VANGALA	KHYATHI VARDHINI VANGALA	
1601-19-732-009	LIKHITA YANDAVA		
1601-19-732-010	1601-19-732-010 MAHEEN SADIQ		
1601-19-732-011	1601-19-732-011 MAHIMA DASARY		
1601-19-732-012	732-012 МАНІТНА КОТТЕ		
1601-19-732-013	32-013 NIKITHA GODISELA		
1601-19-732-014	NIKITHA KARNAM		
1601-19-732-015	PRAGNA KASARLA		
1601-19-732-016	PRAVALIKA BADDAM		
1601-19-732-017	RAMYA BANDI		
1601-19-732-018	SANYUKTA CHENNA		
1601-19-732-019	SHIVANI MAMIDI		
1601-19-732-020	SRAVYA SUTHARI		
1601-19-732-021	VANDANA S VADITHYA		
1601-19-732-022	ADITYA YANAMANDRA		
1601-19-732-023	I-19-732-023 AKHIL RAJESH GOUD PACHIMATLA		
1601-19-732-024	ANIL YADAV G		
1601-19-732-025	BOBBYROHAN DASARI		
1601-19-732-026	DINESH MODEM		
1601-19-732-027	DROVAN REDDY OBILIGOVENDHUGARI		
1601-19-732-028	HARSHAVARDHAN DONGALA	HARSHAVARDHAN DONGALA	
1601-19-732-029	HARSHITH REDDY DAWALGARI		
1601-19-732-030	LAXMI TARUN PADUGUPADU		
1601-19-732-031	MANOJ RAMI REDDY PALLAVALI		
1601-19-732-032	MEGHANATH ANNAPURI	lije_	

PROFESSOR & HEAD Department of Civil Engineering Charavya Bharshi Institute of Technology GANDIPET, HYDERABAD-5000 075

1601-19-732-033	NAVEEN KUMAR K
1601-19-732-034	NIKHIL PATHA
1601-19-732-035	NITHIN VARMA POSHALA
1601-19-732-036	PAVAN KALYAN REDDY ERUVURI
1601-19-732-037	RAHUL GUNDOJU
1601-19-732-038	RAJEEV REDDY P
1601-19-732-039	RAJESH KATTA
1601-19-732-040	RAKESH BOLLE
1601-19-732-041	ROHAN GOGIKARI
1601-19-732-042	ROHAN VIVEK ATMAKURU
1601-19-732-043	ROSHAN BAJJURI
1601-19-732-044	SACHIN MUDIGONDA
1601-19-732-045	SAI CHARAN NAGARAM
1601-19-732-047	SAI DARSHAN MEDISETTY
1601-19-732-048	SAI KAMAL ARUKALA
1601-19-732-049	SAI KIRAN NAIK AMGOTH
1601-19-732-050	SAI VAMSHI RAJU TELLAPURAM
1601-19-732-051	SAI VAMSI VINUKONDA
1601-19-732-052	SREE HARSHA GHANDIKOTA
1601-19-732-053	SRI MANJUNATHA VADDEPALLY
1601-19-732-054	SUHAS DASARI
1601-19-732-055	UMAKANTH DESHMUKH
1601-19-732-056	VAMSHI AMGOTH
1601-19-732-057	VENKAT SAKETH APPAJI
1601-19-732-058	VENKATA VIGNAN DOMALA
1601-19-732-059	VIJAY KUMAR VODDEPALLY
1601-19-732-060	VINAY MUNIGANTI
1601-19-732-301	GUNDEBOINA TULASI
1601-19-732-302	K MANIPAL
1601-19-732-303	PALLA DIVYA
1601-19-732-304	VASALA NITHYA
1601-19-732-305	SHAIK IBRAHIM
1601-19-732-306	BUTHAPALLY NANDINI
1601-19-732-061	ATUFA TANYEEM
1601-19-732-062	DEVI CHANDISHWARI MUSLAPURAM

PROFESSOR & HEAD Department of Civil Engineering Chalarya Bhasishi institute of Technology GANDIPET, HYDERABAD-5000 075

1601-19-732-063	ESHRATH ANJUM
1601-19-732-064	MANASWINI ASA
1601-19-732-065	POOJITHA CHIPPALAPELLY
1601-19-732-066	PRASANNA MUTHINENI
1601-19-732-067	PRATHYUSHA SAIDU
1601-19-732-068	RISHITHA KOMMIDI
1601-19-732-069	SAI KEERTANA K
1601-19-732-070	SOWMYA GUNDUKADI
1601-19-732-071	SOWMYA LALAGARI
1601-19-732-072	SRI HARINI REDDY CHILUKA
1601-19-732-073	SWETHA KESAVARAPU
1601-19-732-074	SWETHA THUMMA
1601-19-732-075	VAISHNAVI DEVI PATNAM
1601-19-732-076	ABHILASH CHALLA
1601-19-732-077	ABHINAY BHONAGANI
1601-19-732-078	ABHISHEK YADAV BADRI
1601-19-732-079	ANJANEYA VARMA KANUMURI
1601-19-732-080	ASHIR JOSHUA TA
1601-19-732-081	CHARAN NAIK BANOTH
1601-19-732-082	CHIRAG D NANKANI
1601-19-732-083	DHANUSH PULI
1601-19-732-084	HARSHA VARDHAN VYAS AMBATI
1601-19-732-085	HRUSHIKESH REDDY G
1601-19-732-086	JAIVANTH KUMAR G
1601-19-732-087	JAYADEEP BATHINI
1601-19-732-088	KOUSHIK KARRA
1601-19-732-089	KRISHNAIAH DONGALA
1601-19-732-090	LOKESH KUMAR GUNTI
1601-19-732-091	LUKESH GAMPA
1601-19-732-092	MALLIKARJUN OSA
1601-19-732-093	MANISH KUMAR
1601-19-732-094	MANOJ KUMAR AMBATI
1601-19-732-095	MOHAMMED ABDUL QUADAR
1601-19-732-096	MOHAMMED AJMAL ALI
1601-19-732-097	MOHAMMED FASI AHMED

PROFESSOR & HEAD Department of Civil Engineering Chararya Bharaibi Institute of Technology GANDIPET, HYDENABAD-5000 075

1601-19-732-098	NAVEEN NAIDU ALLA
1601-19-732-099	NIKHIL KUMAR K
1601-19-732-100	NITHINREDDY BOGIREDDY
1601-19-732-101	PRASHANTH KUMAR REDDY ANANTHA
1601-19-732-102	PRAVEEN KUMAR SANDYAPOGU
1601-19-732-103	RAHUL KARAN K R
1601-19-732-104	RAKESH PEDDINA
1601-19-732-105	RAVI MALLEVOINA
1601-19-732-106	ROHITH ALETI
1601-19-732-107	SAATHVIK CHERIPALLI
1601-19-732-108	SAI KUMAR SIRAMAINA
1601-19-732-109	SAI VINAY BOGA
1601-19-732-110	SATHWIK REDDY PASHYA
1601-19-732-111	SHIVA NARAYANA KONDAMEDI
1601-19-732-112	SREEJAN REDDY KANDI
1601-19-732-113	SUPREETH REDDY SAMPATH
1601-19-732-114	SWAMY NARAPAKA
1601-19-732-115	UDAY KIRAN REDDY PATNAM
1601-19-732-116	UDHAY GOUD D
1601-19-732-117	UTTAM SAI NAKKALA
1601-19-732-118	VENKATA KOWKUNTLA AKSHATH THIRUPATHI
1601-19-732-119	VENKATESH MARYADA
1601-19-732-120	YUVARAJA YALAMANCHILI
1601-19-732-307	VOODARI SATHWIKA
1601-19-732-308	MUDAM SRIKANTH
1601-19-732-309	GOVINDU SHIVANI
1601-19-732-310	LONKA SHIRISHA
1601-19-732-311	P ANVESH
1601-19-732-312	CHINTHAPALLI MANASA

PROFESSOR & HEAD Department of Civil Engineering Chartarya Bharabhilteribilite of Technology GANDIPET, KYDEN4BAD-5000 075

### SUMMARY REPORT OF VALUE-ADDED COURSES-2020-21

Course 1: Ancient Indian knowledge

Code: CBIT/20EEV02

Duration: 30 Hours

SNO	Registered & completed student Name	Total no. of students
		registered & completed
1	A PUJIT PAVAN	
2	ALABOINA SHASHANK	
3	KAPARTHI ANGEL SHEEBA	
4	SANABOYINA DEVIKA RANI	
5	SEGGAM GNANAPRASANNA	
6	MOCHI JAYASREE	
7	PEDDAPALLI LAKSHMI SAHITYA	
8	GADE LIKHITHA	
9	YENUGULA MANASA	
10	VUGGAM MANEESHA	
11	GUNDU NIHARIKA	
12	PATIL SAI VAISHNAVI	
13	MANNE SHINY ROSELEEN	
14	U SMRIDHI	
15	NALLURI SNEHA	
16	M SNEHA SUNDARI	
17	VELPULA SNEHA	
18	MEDAM SOUMYA	
19	KATIKAM VAMSHIKA	
20	VANGAVETI VIJAYA CHANDANA	
21	KUSA YAMINI	124
22	VATHADI ABHINAV VARMA	
23	ANANTHULA ADARSH	
24	D AKSHAY KUMAR	
25	RAMAVATH ARAVIND	
26	ADUVALA ARUN	
27	DOSAPATI CHRISTOPHER STEVEN MOSES	
28	DEVULAPALLY DHANUSH CHANDER	
29	GUNDEBOINA GANESH	
30	ERRABELLY GYAN VIKAS	
31	MUCHERLA HARI PRAVEEN	
32	NALLA JAYANTH	
33	OGIRALA NAGAVENKATASAIVISHWANATH	
34	AYYALASOMAYAJULA NISHANTH	
35	A NITHIN	
36	NUTHAN REDDY VADDI REDDY	
37	KANIKARAPU PAVAN KUMAR	
38	KADAMALLA PRAPUL	
39	C RAJESH	
40	MEESALA RISHI PRANEETH	
41	ROHIT DATTA DIDUGU	

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42	A SALABHEESH	
43	IATAVATH SALKISHORF NAIK	
44	GANDU SALLIKHITH	
45	GINIALA SALRAM REDDY	
46	POGULA SANIAY KUMAR	
40	BUDEVAR SHIVA KUMAR	
48	POLVSETTV SHIVA SAL	
40	USHAKOYALA SHIVA SAL	
50	KAI KURI SHIVA SHANTH	
51	SHIVA TELA DARAM	
52	GODAVARI SRI SALAKHII	
53	BANOTHU SRIKANTH	
54	LANKALA SPISANTH	
55	CAMPA SUHASH	
56	VETHANADALLY SUSENA DEDDV	
57	SWADNIL VAITLA	
58	DAREDDY THULASLHUSEN REDDY	
50	KOLA SDINIVAS	
59	NADADOINA DAVAN KUMAD	
61	NARADUNA PAVAN KUMAR	
61	NANDUKUKI DEEPAK	
62		
64	LANKA AKSHAYA DHANAVATH ASHOV	
04	DHANAVATH ASHUK NACA DUDCA NUDMALA SUDASU KANKATALA V	
65	NAGA DUKGA NIKMALA SUBASH KANKATALA V	
00	VADLAMUDI SAI CHARAN	
6/		
08	FIRDOUS ANJUM DUDDL COWTHAMI	
09		
70	V KRISHINA SKEE	
/1		
72		
/3	MUNNULA POUJA	
/4	NAGAVELLI PRATHYUSHA	
75		
/6	SINGIKEDDY SAI NAGA KEEKTHANA	
70	DEEMANADHUNI SAIMEUHANA	
/8		
/9	CHEKUKU SANDH YA	
80	PASHAM SHAKA I HDEEPIKA	
81		
82		
01		
84	NALE VAISHINAVI	
<u>83</u>		
80		
<u> </u>	Ι ΑΘΑ ΑΝΠΙΣ	
88		
89	AWUDALA AKAVIND KEDDY	
90	VANIIIAKJUN	
91	U DΠΑΚUΑ V	

2 U HEAD Dept. of EEE, CBIT (A) Gandipet, Hyderabad - 75

92	SHAIK HADEEL	
93	THALARI HAREESH	
94	PAIDI HARISH	
95	SAMBARAJU JASHWANTH	
96	MUSHANOLLA KOUSHIK REDDY	
97	N LALU PRASAD	
98	MALLEPALLY MADHUSUDHANREDDY	
99	CHAPALAMADUGU MAHENDAR	
100	MOHAMMAD NIZAMUDDIN AREEF	
101	MOHAMMED AMAAN	
102	Y NIKHIL	
103	ADABALA PAVAN KUMAR	
104	Y PRANEETH	
105	RAHUL DHIR	
106	MANNEM RAVI TEJA	
107	TAKKAN ROHITH	
108	CH RUSHIKESH	
109	PATLOLLA SANDEEP KUMAR	
110	CHETKURI SHIVA	
111	POGULA SHIVAMANI	
112	PUNNA SHIVA TEJA	
113	SUPREETH AUTI	
114	K SURYA PRAKASH	
115	CHINDURALA THARUN TEJA	
116	TOKALA VISHNUVARDHAN	
117	ATIKETI VIVEK CHANDRA	
118	ARIGE YASHWANTH	
119	GOPU BALA JEEVAN REDDY	
120	G S S VARAPRASAD	
121	JAVVAJI THANUSRI	
122	AVISHETTY NAVEENA	
123	DARA AKHIL	
124	N P VENNELA	

#### Syllabus:

- Civilization and Culture : civilization, Culture, and heritage, general characteristics of culture, importance of culture in human life, Cultural diversity, Aesthetics, Women seers, Indus culture, Indian cuisine,
- Evaluation and Education System: Education in ancient, medieval and modern India, , subjects, Languages, Science and Scientists of ancient, medieval and modern India
- Linguistics & Wealth: Indian Languages and Literature: the role of Sanskrit, Paleography, Significance of scriptures to current society, Indian semantics and lexicography, Darsanas
- Engineering Art & Technology: Sculpture, Painting and Handicrafts, Indian Music, Iron and steel technology, Use of metals in medicinal preparations
- Synthesis of Science: Helio-centic system, Sulbasutras, Katapayadi, Hindu calendar, Scientific method applied to therapeutics, Fallacies, Tarka – Induction &Deduction, Ayurvedic biology, Definition of health

HEAD Dept. of EEE, CBIT (A) Gandipet, Hyderabad - 75
# Course 2: Industrial Exposure

#### Code: CBIT/19EEV03

### Duration: 30 Hours

SNO	Registered & completed student Name	Total no. of students
		registered & completed
1	K ABHIRAM	
2	G JASWANTH KUMAR YADAV	
3	PULIPATI KAUSHAL	
4	KUMMARI CHANDRAKALA	
5	PUTLA DHARANI	
6	GUJJA INDRANI	
7	KAVYA TAMMALI	
8	CHIMARLA KEERTHANA	
9	SOLIPURAM KEERTHANA REDDY	
10	KHYATI BHAREDWAJ	
11	JAGATHKARI LAXMIPRIYA	
12	KASHA MAHATHI	
13	MYAKA MANIDEEPIKA REDDY	
14	NAZIYA BEGUM	
15	P NEHASREE	
16	PRAVEENA BOBBALA	
17	BAKKAREDDY PRIYANKA	
18	ERPULA RANI	
19	BATTULA RASAGNA	
20	KANDANELLY SAHITHI PRIYA RATHOD	121
21	DARAPU SAI AKSHAYA	131
22	SHIVARATHRI SRAVANI	
23	NARAYANA SRINIDHI REDDY	
24	VATTIKONDA SUSHMITHA	
25	SANIKOMMU VAISHNAVI	
26	BURRA VARSHITHA	
27	THODUPUNURI VASAVI	
28	VINUTHNA REDDY GUTHA	
29	KANTHALA ADITH CHANDRA	
30	KULAKARNI ADITHYA	
31	MOHAMMED AMAAN FAROOQUI	
32	K CHINNA RAMUDU	
33	KOBBAI DILEEP KUMAR	
34	KSHITEISSH BHARADWAJ	
35	AGGADI MANI DEEP	
36	NABEEL KHAN	
37	NAMAN GUPTA	
38	AMANCHI NAVEEN	
39	NAVID PABANI	
40	NARAYANA NITHIN	

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41	GUGGILLA RAGHAVESHWAR	
42	MOTUPALLI RAMA KRISHNA SAI	
43	ARRA RASHMITH REDDY	
44	CHILLAMCHARLA SAI RAGHU	
45	D SAI SIDHARTH KSHYAP	
46	MOTHUKURI SAI SRINIVAS	
47	VANGALA SAI SRUJAN	
48	GUDIMALLA SANJAY	
49	M SHANMUKHESH	
50	BOGE SIDDARTH	
51	SUHAS REDDY M	
52	G TARUN	
53	NUGURI TARUN	
54	VEERAPRADYUN GONUGONDLA	
55	KALVA VENU	
56	KATAKAM VINAY KUMAR	
57	CHENNA VINEETH	
58	VISHWAS P	
59	ZIYAD AHMED MOHAMMED	
60	BIRRU VEDAVYAS	
61	T KARTHIK	
62	MUNJA YAMINI	
63	RAMAVATH SAIKUMAR	
64	AJAY KUMAR SAHANI	
65	KURMA RAVI	
66	SHAIK NEHA GULSHAN	
67	PAPIGARI AKSHAY KUMAR	
68	CHITLA PAVAN	
69	G YASHWANTH KUMAR	
70	BHARGAVI SINGAJOGI	
71	CHELLA MEENAKSHI S	
72	KAVYA PINNEBOINA	
73	LOHITHA REDDY ANNADI	
74	MANASVINI KOTTAPALLY	
75	SURUKANTI NISHITHA	
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77	RACHEL A	
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80	SANDHYA KORRA	
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2  $\square$ HEAD Dept. of EEE, CBIT (A) Gandipet, Hyderabad - 75

89	M ABHISHEK	
90	MUTHYALA ABHISHEKH	
91	AJAY GUNNALA	
92	MORE AKSHAY	
93	CHAKRAVARTHY DANGATLA	
94	CHERUPALLY CHARAN KUMAR	
95	DINESH BUKYA	
96	ESWAR TEJA CHAVA	
97	HARI KIRAN VAGIRI	
98	JAYANTH DARAMALLA	
99	JEEVAN KUMAR G	
100	GULLAPALLI LOKESH	
101	PANDULA MANIDEEP	
102	DONTHULA NAVEEN	
103	PRUDHVI MURUKUTLA	
104	RAKESH ANNAM	
105	SAIILOKESH REDDY NANDAVARAPU	
106	KOTHAKONDA SAI TEJA	
107	SAIKIRAN KOLLOJU	
108	LAKKARSU SAITEJA VARMA	
109	SHERANK DASARATH	
110	CHITTI SHIVA ANIMESH REDDY	
111	SOHAN KUMAR RUSTUMPET	
112	SRI SAI WENKAT NIZAMPATNAM	
113	SRI VAMSI DEEVI	
114	SRINIVAS GAURAV JAMALPUR	
115	MUTHYALA SUJITH REDDY	
116	SUMANTH SETTY	
117	TARUN CH NSNS	
118	DODDI UDAY SHANKAR	
119	VENKATA MANIKANTA SAI AMALAKANTI	
120	VENKATA SAI VARUN P	
121	THADURI VENKATESH BABU	
122	MOVVA VINAY	
123	BODDU YESHWANTH KUMAR	
124	VENKANNAGARI YOGESH	
125	DOKILE UMESH	
126	RAYABARAPU NAVYA	
127	VADDADI VIKAS	
128	VALUPADASU BUDDIK VARARAJ	
129	NENAVATH PRASHANTH	
130	GANASALA HEPSIBA RANI	
131	P CHAKRADHAR	

## Syllabus:

1.1 Introduction

Z  $\mathcal{L}$ HEAD Dept. of EEE, CBIT (A) Gandipet, Hyderabad - 75

- 1.2 Kaleshwaram lift irrigation project
- 1.3 Gravity canals and lift irrigation
- 1.4 Online storage
- 1.5 Linking medigadda project to sripada yellampalli
- 1.6 Lakshmipur pump house
- 1.7 Sundilla pump house
- 1.8 Power
- 1.9 Electro mechanical equipment
- 1.10 Switch gear
- 1.11 Benefits of project

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#### CBIT/20CEV01

## ENVIRONMENTAL IMPACT AND MONITORING

#### Course Objectives: To enable the student

- 1. Identify environmental problems arising due to engineering and technological activities and the science behind those problems.
- 2. Become aware about the importance of eco system and biodiversity for maintaining ecological balance
- 3. To identify the importance of interlinking of food chain
- 4. Learn about various attributes of pollution management and waste management practices.
- 5. To make the students contribute for capacity building of nation for arresting and/or managing environmental disasters.

#### Course Outcomes: At the end of the course, the student should have learnt

- 1. To define environment, identify the natural resources and ecosystems and contribute for the conservation of bio-diversity.
- 2. To suggest suitable remedial measure for the problems of environmental pollution and contribute for the framing of legislation for protection of environment.
- 3. To relate the social issues and the environment and contribute for the sustainable development.
- 4. To follow the environmental ethics.
- 5. To contribute for the mitigation and management of environmental disasters.

#### UNIT – I:

## Environmental Studies: Definition, Scope and importance, need for public awareness.

**Natural resources:** Use and over utilization of Natural Resources - Water resources, Food resources, Forest resources, Mineral resources, Energy resources, Land resources.

#### UNIT – II:

**Ecosystems:** Concept of an ecosystem, structure and function of an ecosystem, role of producers, consumers and decomposers, energy flow in an ecosystem, food chains, food webs, ecological pyramids, Nutrient cycling, Biogeo chemical cycles, Terrestrial and Aquatic ecosystems.

#### UNIT – III:

**Biodiversity:** Genetic, species and ecosystem biodiversity, Bio-geographical classification of India, India as a Mega diversity nation. Values of biodiversity, hot-spots of biodiversity.

#### UNIT – IV:

**Environmental Pollution:** Cause, effects and control measures of air pollution, water pollution, marine pollution, soil pollution, noise pollution and Solid waste management, nuclear hazards

#### UNIT – V:

**Social issues and the environment:** Water conservation methods: Rain water harvesting and watershed management, Environmental ethics, Sustainable development and Climate change: Global warming, Ozone layer depletion, forest fires, and Contemporary issues.

#### **Text Books:**

- 1. Y. Anjaneyulu," Introduction to Environmental Science", B S Publications, 2004.
- 2. Suresh K. Dhameja, "Environmental Studies", S. K. Kataria& Sons, 2009.

#### **Suggested Reading:**

- 1. C. S. Rao," Environmental Pollution Control Engineering", Wiley, 1991.
- 2. S. S. Dara, "A Text Book of Environmental Chemistry & Pollution Control", S. Chand Limited, 2006.

PROFESSOR & HEAD

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY ENVIRONMENTAL IMPACT AND MONITORING - CBIT/20CEV01 LIST OF STUDENTS			
1601-19-732-001	AISHWARYA CHOUDARY		
1601-19-732-002	AKHILA SRIGADDE		
1601-19-732-003	ANUSHA RACHAPAKA		
1601-19-732-004	CHARVI PANYALA		
1601-19-732-005	CHIHNITHA KONTEMUKKULA		
1601-19-732-006	HARIKA MOKKA		
1601-19-732-007	KAMALA RAMA SRIKARI BHANDARAM		
1601-19-732-008	KHYATHI VARDHINI VANGALA		
1601-19-732-009	LIKHITA YANDAVA		
1601-19-732-010	MAHEEN SADIQ		
1601-19-732-011	MAHIMA DASARY		
1601-19-732-012	MAHITHA KOTTE		
1601-19-732-013	NIKITHA GODISELA		
1601-19-732-014	NIKITHA KARNAM		
1601-19-732-015	PRAGNA KASARLA		
1601-19-732-016	PRAVALIKA BADDAM		
1601-19-732-017	RAMYA BANDI		
1601-19-732-018	SANYUKTA CHENNA		
1601-19-732-019	SHIVANI MAMIDI		
1601-19-732-020	SRAVYA SUTHARI		
1601-19-732-021	VANDANA S VADITHYA		
1601-19-732-022	ADITYA YANAMANDRA		
1601-19-732-023	AKHIL RAJESH GOUD PACHIMATLA		
1601-19-732-024	ANIL YADAV G		
1601-19-732-025	BOBBYROHAN DASARI		
1601-19-732-026	DINESH MODEM		
1601-19-732-027	DROVAN REDDY OBILIGOVENDHUGARI		
1601-19-732-028	HARSHAVARDHAN DONGALA		
1601-19-732-029	HARSHITH REDDY DAWALGARI		
1601-19-732-030	LAXMI TARUN PADUGUPADU		
1601-19-732-031	MANOJ RAMI REDDY PALLAVALI		
1601-19-732-032	MEGHANATH ANNAPURI	lije_	

PROFESSOR & HEAD Department of Civil Engineering Charavya Bharshi Institute of Technology GANDIPET, HYDERABAD-5000 075

1601-19-732-033	NAVEEN KUMAR K
1601-19-732-034	NIKHIL PATHA
1601-19-732-035	NITHIN VARMA POSHALA
1601-19-732-036	PAVAN KALYAN REDDY ERUVURI
1601-19-732-037	RAHUL GUNDOJU
1601-19-732-038	RAJEEV REDDY P
1601-19-732-039	RAJESH KATTA
1601-19-732-040	RAKESH BOLLE
1601-19-732-041	ROHAN GOGIKARI
1601-19-732-042	ROHAN VIVEK ATMAKURU
1601-19-732-043	ROSHAN BAJJURI
1601-19-732-044	SACHIN MUDIGONDA
1601-19-732-045	SAI CHARAN NAGARAM
1601-19-732-047	SAI DARSHAN MEDISETTY
1601-19-732-048	SAI KAMAL ARUKALA
1601-19-732-049	SAI KIRAN NAIK AMGOTH
1601-19-732-050	SAI VAMSHI RAJU TELLAPURAM
1601-19-732-051	SAI VAMSI VINUKONDA
1601-19-732-052	SREE HARSHA GHANDIKOTA
1601-19-732-053	SRI MANJUNATHA VADDEPALLY
1601-19-732-054	SUHAS DASARI
1601-19-732-055	UMAKANTH DESHMUKH
1601-19-732-056	VAMSHI AMGOTH
1601-19-732-057	VENKAT SAKETH APPAJI
1601-19-732-058	VENKATA VIGNAN DOMALA
1601-19-732-059	VIJAY KUMAR VODDEPALLY
1601-19-732-060	VINAY MUNIGANTI
1601-19-732-301	GUNDEBOINA TULASI
1601-19-732-302	K MANIPAL
1601-19-732-303	PALLA DIVYA
1601-19-732-304	VASALA NITHYA
1601-19-732-305	SHAIK IBRAHIM
1601-19-732-306	BUTHAPALLY NANDINI
1601-19-732-061	ATUFA TANYEEM
1601-19-732-062	DEVI CHANDISHWARI MUSLAPURAM

PROFESSOR & HEAD Department of Civil Engineering Chalarya Bhasishi institute of Technology GANDIPET, HYDERABAD-5000 075

1601-19-732-063	ESHRATH ANJUM
1601-19-732-064	MANASWINI ASA
1601-19-732-065	POOJITHA CHIPPALAPELLY
1601-19-732-066	PRASANNA MUTHINENI
1601-19-732-067	PRATHYUSHA SAIDU
1601-19-732-068	RISHITHA KOMMIDI
1601-19-732-069	SAI KEERTANA K
1601-19-732-070	SOWMYA GUNDUKADI
1601-19-732-071	SOWMYA LALAGARI
1601-19-732-072	SRI HARINI REDDY CHILUKA
1601-19-732-073	SWETHA KESAVARAPU
1601-19-732-074	SWETHA THUMMA
1601-19-732-075	VAISHNAVI DEVI PATNAM
1601-19-732-076	ABHILASH CHALLA
1601-19-732-077	ABHINAY BHONAGANI
1601-19-732-078	ABHISHEK YADAV BADRI
1601-19-732-079	ANJANEYA VARMA KANUMURI
1601-19-732-080	ASHIR JOSHUA TA
1601-19-732-081	CHARAN NAIK BANOTH
1601-19-732-082	CHIRAG D NANKANI
1601-19-732-083	DHANUSH PULI
1601-19-732-084	HARSHA VARDHAN VYAS AMBATI
1601-19-732-085	HRUSHIKESH REDDY G
1601-19-732-086	JAIVANTH KUMAR G
1601-19-732-087	JAYADEEP BATHINI
1601-19-732-088	KOUSHIK KARRA
1601-19-732-089	KRISHNAIAH DONGALA
1601-19-732-090	LOKESH KUMAR GUNTI
1601-19-732-091	LUKESH GAMPA
1601-19-732-092	MALLIKARJUN OSA
1601-19-732-093	MANISH KUMAR
1601-19-732-094	MANOJ KUMAR AMBATI
1601-19-732-095	MOHAMMED ABDUL QUADAR
1601-19-732-096	MOHAMMED AJMAL ALI
1601-19-732-097	MOHAMMED FASI AHMED

PROFESSOR & HEAD Department of Civil Engineering Chatarya Bharaibi Institute of Technology GANDIPET, HYDENABAD-5000 075

1601-19-732-098	NAVEEN NAIDU ALLA
1601-19-732-099	NIKHIL KUMAR K
1601-19-732-100	NITHINREDDY BOGIREDDY
1601-19-732-101	PRASHANTH KUMAR REDDY ANANTHA
1601-19-732-102	PRAVEEN KUMAR SANDYAPOGU
1601-19-732-103	RAHUL KARAN K R
1601-19-732-104	RAKESH PEDDINA
1601-19-732-105	RAVI MALLEVOINA
1601-19-732-106	ROHITH ALETI
1601-19-732-107	SAATHVIK CHERIPALLI
1601-19-732-108	SAI KUMAR SIRAMAINA
1601-19-732-109	SAI VINAY BOGA
1601-19-732-110	SATHWIK REDDY PASHYA
1601-19-732-111	SHIVA NARAYANA KONDAMEDI
1601-19-732-112	SREEJAN REDDY KANDI
1601-19-732-113	SUPREETH REDDY SAMPATH
1601-19-732-114	SWAMY NARAPAKA
1601-19-732-115	UDAY KIRAN REDDY PATNAM
1601-19-732-116	UDHAY GOUD D
1601-19-732-117	UTTAM SAI NAKKALA
1601-19-732-118	VENKATA KOWKUNTLA AKSHATH THIRUPATHI
1601-19-732-119	VENKATESH MARYADA
1601-19-732-120	YUVARAJA YALAMANCHILI
1601-19-732-307	VOODARI SATHWIKA
1601-19-732-308	MUDAM SRIKANTH
1601-19-732-309	GOVINDU SHIVANI
1601-19-732-310	LONKA SHIRISHA
1601-19-732-311	P ANVESH
1601-19-732-312	CHINTHAPALLI MANASA

PROFESSOR & HEAD Department of Civil Engineering Chartarya Bharabhilteribilite of Technology GANDIPET, KYDEN4BAD-5000 075

# Department of Biotechnology

## 1.3 Curriculum Enrichment 2020-21

List of value added courses completed by BTech Biotechnology students during 2020-21

S.No	Tilte of the course	Code
1	Wild life Ecology	CBIT/20BTV026
2	Bio interface Engineering	CBIT/20BT V073
3	Biomechanics of Joints and Orthopaedic implants	CBIT/20BT V035
4	Biomedical	
	Nanotechnology	CBIT/20BT V007
5	Cell culture technologies	CBIT/20BT V038
6	Computer Aided drug design	CBIT/20BT V032
7	Conservation Economics	CBIT/20BT V016
8	Drug delivery principles and Engineering	CBIT/20BT V033
9	Ecology and Environment	CBIT/20BT V027
10	Forest and their Management	CBIT/20BT V050
11	Human Molecular Genetics	CBIT/20BT V047
12	Introduction to Mechanobiology	CBIT/20BT V006
13	Introduction to Proteogenomics	CBIT/20BT V030
14	Introduction to proteomics	CBIT/20BT V031
15	Legal and regulatory issues in biotechnology	CBIT/20BT V044
16	Neuroscience of Human Movements	CBIT/20BT V024
17	Organic farming for sustainable Agriculture production	CBIT/20BT V005
18	Patent law for engineers and scientists	CBIT/20BT V043
19	Principle and Practices of process Equipment and plant design	CBIT/20BT V042
20	Structural Biology	CBIT/20BT V072
21	Functional Genomics	CBIT/20BT V034

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22	Technologies for clean and	
	Renewable energy	
	production	CBIT/20BT V041

Wild life Ecology

**No.of enrolled Participants-7** 

**Duration of the Course: 12 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Wild life	CBIT/20BTV026	2021	1	12 weeks/90	7	7
Ecology				Hours		

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#### **Syllabus**

#### Wildlife Ecology

Course Duration: 12 Weeks Credits : 3

Week 1: Introduction

- Week 2: Ecological structure
- Week 3: Ecological interactions
- Week 4: Ecological energetic
- Week 5: Population Ecology
- Week 6: Community Ecology
- Week 7: Distribution & abundance
- Week 8: Management of threatened species
- Week 9: Human Ecology
- Week 10: Ecology of change
- Week 11: Applied Ecology

Week 12: Revision

### **Books and references:**

1. Krebs, C. J. The experimental analysis of distribution and abundance. Ecology. New York: Harper and Row.2. Odum, E. P., & Barrett, G. W. Fundamentals of Ecology. Philadelphia: Saunders.3. Selected articles / papers as referred to in the lectures.

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## List of participants

S.No	Name of the	Roll No	
	student		
1	K. Anjana Srija	160118805003	
2	Nalli Deepika	160118805005	
3	M Jahanavi	160118805009	
4	D Niveditha	160118805018	
5	K. Sai Manasa	160118805023	
6	Vishwanutha	160118805031	
7	Malishetty Vijay	160118805043	
	Bhargav		

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**Bio interface Engineering** 

No.of enrolled Participants- 1

**Duration of the Course: 8 Weeks** 

ACADEMIC YEAR: 2020-21

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Dept. of Bio-Technology Chellenya Bharetid Institute of Techno Gandipet, Hyderabed-500 075.

Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Bio interface	CBIT/20BT V073	2021	1	8 weeks/90 Hours	1	1

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### **Syllabus**

### **Bio interface Engineering**

#### **Course Duration** : 8 weeks

Credits : 2

Week 1: Intermolecular Forces

Week 2: Adhesion and Wetting phenomena.

Week 3: Characterization of interfaces

Week 4: Protein-surface Interactions

Week 5: Protein Aggregation

Week 6: Cell-surface interactions

Week 7: Surface modification and characterization

Week 8: Surface modification and characterization

### **Books and References:**

- 1. J. N. Israelachvili, Intermolecular and Surface Forces, 3rd edition, Academic Press, 2011.
- 2. Willem Norde, Colloids and Interfaces in Life Sciences and Bio nanotechnology,2nd edition, CRC Press,2011.
- 3. W. Adamson, and A. P. Gast, Physical Chemistry of Surfaces, John Wiley, NewYork, 1997.

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Dept. of Bio-Technology Challenya Bharathi Inniitute of Techno Gandipet, Hyderabad-500 075.

## List of participants

S.No	Name of the student	Roll No
1	Vishwanutha	160118805031

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Dept. of Bio-Technology Challenya Sharatiki Institute of Techno Gandipet, Hyderabed-500 075.

**Biomechanics of Joints and Orthopaedic implants** 

**No.of enrolled Participants-1** 

**Duration of the Course: 8 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Biomechanics of Joints and Orthopaedic	CBIT/20BT V035	2021	1	8 weeks/90 Hours	1	1
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#### **Syllabus**

#### **Biomechanics of Joints and Orthopedic Implants**

# Course Duration:8 Weeks

Credits : 2

Week 1: Introduction Musculoskeletal system Bone, Muscle, Ligament, Tendon, Cartilage and
Meniscus – structure and function Anatomy of Synovial Joints – Hip, Knee, Shoulder, Elbow
Week 2: Biomechanics of Human Joints: (a) Hip Joint; (b) Knee Joint; (c) Shoulder Joint; (d) Elbow
Joint

**Week 3:** Biomechanics of Gait cycle Gait Analysis Measurement techniques 3-D Motion analysis system – markers, cameras and force platform Lower extremity – hip musculoskeletal forces

**Week 4:** Joint Kinematics Principle of Forward and Inverse Dynamics Calculations on joint forces and moments Calculations on muscle forces Model-based estimation of musculoskeletal forces during movements

**Week 5:** Concepts of Stresses and Strain Bone structure - Cancellous and Cortical Bone Mechanical Behaviour of Bone Adaptation and Viscoelasticity Bone Anisotropy.

**Week 6:** Biomechanics of Joint Replacement – Hip, Knee, Shoulder, Spine Cemented and Cementless fixation Failure mechanisms of implants Implant Design Considerations

**Week 7:** Biomechanical modelling techniques and analysis Finite Element Analysis of bone and implant Bone Remodelling – formulation, algorithm, simulation Experimental validation of numerical models

**Week 8:** Bone Fracture Healing Tissue Differentiation Mechanoregulatory principle Mechanobiology based simulation of bone ingrowth around implants – acetabular and femoral components

### **Books and references**

(1) "Basic Biomechanics of the Musculoskeletal System" by Margareta Nordin and Victor H. Frankel

(2) "Biomechanics and Motor Control of Human Movement" by David A. Winter

(3) "Orthopaedic Biomechanics" by D.L. Bartel, D.T. Davy and T.M. Keaveny

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Dept. of Bio-Technology Challenya Eharatiki Institute of Techno Gandipet, Hyderabad-500 075.

## List of participants

S.No	Name of the student	Roll No
1	K. Sai Manasa	160118805023

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Dept. of Bio-Technology Challenya Sharetill Institute of Techno Gandipet, Hyderabad-500 075.

**Biomedical Nanotechnology** 

**No.of enrolled Participants-2** 

**Duration of the Course: 4 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Biomedical	CBIT/20BT V007	2021	1	4 weeks/90	2	2
Nanotechnology				Hours		

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#### **Syllabus**

### **Biomedical Nanotechnology**

### Course Duration: 4 Week Credits : 1

**Week 1:** Introduction to nano, Nano-biomimicry, Synthesis of nanomaterials by physical and chemical methods, Synthesis of nanomaterials by biological methods, Characterisation of nanomaterials.

**Week 2:** DNA nanotechnology, Protein & glyco nanotechnology, Lipid nanotechnology, Bionanomachines, Carbon nanotube and its bio-applications.

**Week 3:** Nanomaterials for cancer diagnosis, Nanomaterials for cancer therapy, Nanotechnology in tissue engineering, Nano artificial cells, Nanotechnology in organ printing.

**Week 4:** Nanotechnology in point-of-care diagnostics, Nano pharmacology& drug targeting, Cellular uptake mechanisms of nanomaterials, In vitro methods to study antibacterial and anticancer properties of nanomaterials, Nanotoxicology.

### **Books and references:**

- 1. Malsch, N.H., "Biomedical Nanotechnology", CRC Press. (2005).
- 2. Mirkin, C.A. and Niemeyer, C.M., "Nanobiotechnology II: More Concepts and Applications", Wiley-VCH. (2007).
- 3. Kumar, C. S. S. R., Hormes, J. and Leuschner C., "Nanofabrication Towards Biomedical Applications: Techniques, Tools, Applications, and Impact", WILEY -VCH Verlag GmbH & Co. (2005).
- 4. Lamprecht, A., "Nanotherapeutics: Drug Delivery Concepts in Nanoscience", Pan Stanford Publishing Pte. Ltd. (2009).
- 5. Jain, K.K., "The Handbook of Nanomedicine", Humana press. (2008).

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Dept. of Bio-Technology Challenya Bharathi Inniitute of Techno Gandipet, Hyderabed-500 075.

## List of participants

S.No	Name of the	Roll No
	student	
1	K. Anjana Srija	160118805003
2	Mohith Arikatla	160118805037

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Dept. of Bio-Technology Challenya Ebaratiki Institute of Techno Gandipet, Hyderabad-500 075.

# Introduction to Cell Culture Technologies

No.of enrolled Participants- 5 Duration of the Course: 8 Weeks

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Cell culture	CBIT/20BT V038	2021	1	8 weeks/90	5	5
technologies				Hours		

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#### **Syllabus**

### Introduction to cell culture Technology

### Course Duration: 8 Weeks Credits : 2

Week 1: Introduction & biology of cultured cells

Week 2: Equipment's, aseptic techniques, safety protocols

Week 3: Culture vessels & media development

Week 4: Serum-free medium development & sterilization

Week 5: Primary culture, secondary culture, cloning & selection

Week 6: Cell separation, characterization, differentiation & transformation

Week 7: Contamination, cryo-preservation & cyto-toxicity

Week 8: Organo-typic culture & specialized cell culture techniques

Books and References: Nil

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## List of participants

S.No	Name of the student	Roll No
1	K. Anjana Srija	160118805003
2	M Jahanavi	160118805009
3	D Niveditha	160118805018
4	Mohith Arikatla	160118805037
5	Sucheta Rajaraman	160118805026

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# **Computer Aided Drug Design**

No.of enrolled Participants- 1 Duration of the Course: 8 Weeks

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Computer	CBIT/20BT V032	2021	1	8weeks/90	1	1
Aided drug				Hours		
design						

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### **Syllabus**

## **Computer Aided Drug Design**

#### Course Duration: 8 Weeks Credits : 2

- Week 1: Introduction to drug discovery
- Week 2 : Structure and property
- Week 3: ADME-rules
- Week 4 : Force field/MM/QM
- Week 5 : Boundary conditions/Conformation
- Week 6 : QSAR/Pharmacophore
- Week 7 : Enzymes/proteins structures/docking
- Week 8 : PK/PD

#### **Books and references:**

1. Voit E (2012) A First Course in Systems Biology. Garland Science, 1/e. ISBN 0815344678 • Klipp E (2009) Systems biology: a textbook. Wiley-VCH, 1/e. ISBN 9783527318742 • Newman MEJ (2011) Networks: an introduction. Oxford Univ. Press. ISBN 9780199206650

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Dept. of Bio-Technology Chellenya Bhareiki Inniituta of Techno Gandipet, Hyderabad-500 075.

## List of participants

S.No	Name of the student	Roll No
1	Vishwanutha	160118805031

YLajasi 45.0 ĝ.

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## **Conservation Economics**

**No.of enrolled Participants- 11** 

**Duration of the Course: 12 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Conservation Economics	CBIT/20BT V016	2021	1	12 weeks/90 Hours	11	11

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## **Conservation Economics**

# **Course Duration: 12 weeks**

Credits : 3

Week 1: What is Economics?

Week 2: What is Conservation?

Week 3: Modern impacts necessitating conservation

Week 4: Threats to wildlife

Week 5: How can Economics help?

Week 6: Markets: Places where Economics works

Week 7: Markets, welfare and conservation

Week 8: Public sector and conservation

Week 9: Industrial organization and conservation

Week 10: Labour market economics and conservation

Week 11: Practical issues in Economics and Conservation

Week 12: Case Studies

#### **Books and references:**

- 1. Economics, Krugman and Wells
- 2. Economics, Hubbard & O'Brien
- 3. Principles of Economics, N. Gregory Mankiw
- 4.Basic Economics, Thomas Sowell

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S.No	Name of the	Roll No
	student	
1	Nalli Deepika	160118805005
2	M Jahanavi	160118805009
3	A. Jahnavi	160118805010
4	Krishna Priya V	160118805014
5	D Niveditha	160118805018
6	K. Sai Manasa	160118805023
7	Sucheta Rajaraman	160118805026
8	S.Vishwanutha	160118805031
9	S Deepak Mohan	160118805034
	Reddy	
10	Mohith Arikatla	160118805037
11	Malishetty Vijay	160118805043
	Bhargav	

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**Drug Delivery Principles and Engineering** 

No.of enrolled Participants- 1 Duration of the Course: 12 Weeks

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Drug delivery principles and Engineering	CBIT/20BT V033	2021	1	12 weeks/90 Hours	1	1

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#### **Drug Delivery: Principles and Engineering**

Course Duration: 12 Weeks Credits : 3

Week 1: Pharmacokinetics: Bioavailability, Elimination, Therapeutic index.

Week 2: Prodrugs, Controlled release

Week 3: Polymers: Synthesis, properties, characterization, crystallinity and amorphousness

Week 4: Biopolymers: Natural and Synthetic, biocompatibility, Biodegradation, commonly used biopolymers

Week 5: Polymer-Drug conjugates, PEGylation

Week 6: Diffusion controlled systems, Ficks laws, Reservoir systems, non-erodible matrix systems, Bioerodible Systems

Week 7: Hydrogels: Physical or chemical, pore-size calculation, in-situ crosslinking

Week 8: Nano and Micro-particles: Dendrimers, Liposomes, Micelles

Week 9: Metal and polymeric particles, effect of particle shape, charge and elasticity

Week 10: Protein Adsorption and tissue engineering, Drug delivery in tissue engineering

**Week 11:** Implant associated infections, Route specific delivery: Oral, Subcutaneous, Intramuscular, transdermal, inhalation, intravenous.

**Week 12:** Vaccines, Cancer vaccines, Cell and gene delivery, Smart responsive rug delivery, Targeted drug delivery, Nanotoxicology and market translation.

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S.No	Name of the student	Roll No
1	Vishwanutha	160118805031

YLajasui 1=-0

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**Ecology and Environment** 

No.of enrolled Participants- 2

**Duration of the Course: 8 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Ecology and Environment	CBIT/20BT V027	2021	1	8 weeks/90 Hours	2	2

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### **Ecology and Environment**

Course Duration: 8 Weeks Credits : 2

**Week 1**: Dr. B.S. Murty -Introduction (1), Sustainability Definition / Goals, Climate Change (2), Case Studies (3) (Eg: Dams, Chemicals, e-waste, IOT, Landfill siting etc)

Week 2: Dr. Sudhir Chella Rajan-Sustainability and Economics (3), Sustainability and Ethics (3)

**Week 3:** Dr. Ligy Philip-(Water Quality/ Waste Management), Water Quality and Treatment (3), Waste Management and Treatment (3)

**Week 4**: Dr. B. S. Murty (Water Management/ Resources), UrbanDrainage, Water Resource Management, Impact of Climate Change

**Week 5**: Dr. Srinivas Jayanti (Energy)-Energy Demand / Resources (1), Pollution from Energy generation (1), Energy and Climate Change (Global Warming) (1), Energy and Sustainability (1), Long Range and Short Range Solutions (1)(Global vs. India)

**Week 6**: Dr. R. Ravi Krishna-Risk Assessment Definition (1), Pollutant Pathways / Safety/ Exposure (1), Liability /Examples (1), Life Cycle Assessment (2), Environmental Management and LCA (1)

**Week 7:** Dr. Sudhir Chella Rajan-Urban Planning / Sprawl (1), Challenges in Urban Planning, Transport (1), Energy (Smart Grid) (1), Waste (1), Governance (1)

**Week 8**: Dr. Susy Varughese / Dr. Parag Ravindran-Ecology – definitions / Systems (1), Biodiversity (1), Examples of Historical Impact of economy on Ecology, Restoration / Ecological Engineering

Week 9: Dr. Ligy Philip / Dr. Ravi Krishna -Solid Waste Management, Hazardous Waste Management.

### **Books and references:**

1. Wrap up Emphasis on Climate Change and Adaptation

jasi

Dept. of Bio-Technology Chellenya Eharetid Institute of Techno Gandipet, Hyderabed-500 075.

S.No	Name of the	Roll No
	student	
1	Nalli Deepika	160118805005
2	S.Vishwanutha	160118805031

YLajasi 45.0 ĝ.

Dept. of Bio-Technology Challenya Bharatid Inniituta of Techno Gandipet, Hydorabad-500 075.

# **Forest and Their Management**

**No.of enrolled Participants-10** 

**Duration of the Course: 12 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Forest and their Management	CBIT/20BT V050	2021	1	12weeks/90 Hours	10	10

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## **Forests and Their Management**

## **Course Duration: 12 weeks**

Credits : 3

- Week 1: Introduction
- Week 2: Basics of silviculture
- Week 3: Forest soils
- Week 4: Forest mensuration
- Week 5: Forest surveying
- Week 6: Forest protection
- Week 7: Silvicultural management I
- Week 8: Silvicultural management II
- Week 9: Logging and yield
- Week 10: Silvicultural practices
- Week 11: Newer trends in forestry

Week 12: Revision

### **Books and references:**

- 1. Principles and practices of Silviculture by S. S. Bist
- 2. Forest soils by Wilde

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Dept. of Bio-Technology Chellenya Sharetili Institute of Techno Gandipet, Hyderabad-500 075.

S.No	Name of the	Roll No
	student	
1	M Jahanavi	160118805009
2	A. Jahnavi	160118805010
3	Krishna Priya V	160118805014
4	D Niveditha	160118805018
5	K. Sai Manasa	160118805023
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7	S.Vishwanutha	160118805031
8	S Deepak Mohan	160118805034
	Reddy	
9	Malishetty Vijay	160118805043
	Bhargav	
10	Mohith Arikatla	160118805037

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# **Human Molecular Genetics**

No.of enrolled Participants- 4 Duration of the Course: 4 Weeks

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Human Molecular	CBIT/20BT V047	2021	1	4 weeks/90 Hours	4	4
Genetics						

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# **Human Molecular Genetics**

# **Course Duration: 4 Weeks Credits: 1**

**Week 1:** Fundamentals of central dogma (DNA, RNA and proteins; mutations), Chromosome structure and function (organization; structure-function relationship; chromosome abnormalities).

**Week 2:** Genes in pedigree (Mendelian pedigree patterns, complications to pedigree patterns), DNA cloning and hybridizationtechniques (vector-based cloning; nuclei acid hybridizations; PCR-based DNA analyses)

**Week 3:** Mutation and instability of human DNA (mutation and polymorphism; pathogenic mutations, repeat expansions), Molecularpathology (types of mutations; animal models for human disease)

**Week 4:** Identifying human disease genes (functional cloning versus positional cloning; mutation screening), Complex diseases; The Human Genome and HapMap projects

## **Books and references:**

1. Human Molecular Genetics 4 Tom Strachan, Andrew P. Read Garland Science/Taylor & Francis Group, 2011

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Dept. of Bio-Technology Challenya Bizaretili Institute of Techno Gandipet, Hyderabed-500 075.

S.No	Name of the	Roll No
	student	
1	A. Jahnavi	160118805010
2	S Deepak Mohan	160118805034
	Reddy	
3	Mohith Arikatla	160118805037
4	Malishetty Vijay	160118805043
	Bhargav	

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# Introduction to Mechanobiology

No.of enrolled Participants- 1 Duration of the Course: 8 Weeks

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Introduction to	CBIT/20BT V006	2021	1	8 weeks/90	1	1
Introduction to Mechanobiology	CBIT/20BT V006	2021	1	8 weeks/90 Hours	1	1

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#### **Introduction to Mechanobiology**

#### **Course Duration: 8 Weeks** :3

Credits

# Week 1

Lecture 1: Need to study Mechanobiology

- Lecture 2: Cell as a Tent, individual components
- Lecture 3: Cell-ECM crosstalk
- Lecture 4: ECM proteins: Collagen
- Lecture 5: Measuring properties of collagen networks

## Week 2

- Lecture 6: Properties of collagen networks
- Lecture 7: Rheology
- Lecture 8: Rheology of biopolymer networks
- Lecture 9: Atomic Force Microscopy (AFM)
- Lecture 10: Design of protein constructs for AFM

### Week 3

- Lecture 11: Protein unfolding using AFM
- Lecture 12: Protein unfolding using AFM
- Lecture 13: Focal adhesions: focal adhesion proteins
- Lecture 14: Focal adhesion organization
- Lecture 15: Focal adhesions: role of forces

## Week 4

- Lecture 16: Cytoskeleton: Actin
- Lecture 17: Force-velocity relationships of actin networks
- Lecture 18: Mesenchymal cell migration
- Lecture 19: Actin dynamics during mesenchymal migration
- Lecture 20: Actin dynamics during mesenchymal migration

## Week 5

- Lecture 21: Adhesion Independent Migration
- Lecture 22: Adhesion Independent & Collective Cell Migration
- Lecture 23: Collective Cell Migration
- Lecture 24: Mechanobiology of Stem Cell Fate I
- Lecture 25: Mechanobiology of Stem Cell Fate II

#### Week 6

- Lecture 26: Mechanobiology of Stem Cell Fate III
- Lecture 27: Mechanobiology of Diseases: Cancer I
- Lecture 28: Mechanobiology of Diseases: Cancer II

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Lecture 29: Mechanobiology of Diseases: Cancer III

Lecture 30: Mechanobiology of Diseases: Atherosclerosis & Hypertension

#### Week 7

Lecture 31: Mechanobiology of Diseases: Muscular Dystrophy

Lecture 32: Nuclear Mechanotransduction: LINC complex

Lecture 33: Nuclear Mechanotransduction: LINC complex in cell migration

Lecture 34: Nuclear Mechanotransduction: Gene regulation

Lecture 35: Mechanical Forces & DNA damage

## Week 8

Lecture 36: Techniques in Mechanobiology: Hydrogels

Lecture 37: Techniques in Mechanobiology: AFM

Lecture 38: Techniques in Mechanobiology: Traction Force Microscopy, Trypson Deadhesion & Laser Ablation

Lecture 39: Techniques in Mechanobiology: Microfabrication

Lecture 40: Techniques in Mechanobiology: FRE

#### **Books and references:**

- 1. 1. Introduction to Cell mechanics and Mechanobiology, Christopher. R. Jacobs (Garland Science)
- 2. 2. Cellular and biomolecular mechanics and mechanobiology, Editors: Gefen, Amit (Springer)

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S.No	Name of the student	Roll No
1	K. Sai Manasa	160118805023

YLajasi 45.0 ĝ.

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# **Introduction to Proteogenomics**

**No.of enrolled Participants- 4** 

**Duration of the Course: 12 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Introduction to	CBIT/20BT V030	2021	1	12	4	4
Proteogenomics				weeks/90		
				Hours		

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## **Introduction to Proteogenomics**

# Course Duration: 12 Weeks Credits: 3

**Week 1:** Proteogenomics overview- Part I, Proteogenomics overview- Part II, Introduction to Genomics- Part I: Gene sequencing and mutations Introduction to Genomics-Part II: Sequence Part III: Transcriptome, SL1: Advancement in Cancer Genomics, SL2: Advancement in Cancer Genomics.

**Week 2:** Introduction to Genomics IV: Epigenome, Introduction to Genomics: cBioPortal, Genotype, Gene expression & Phenotype - Part l&ll, An overview of NGS technology, SH1: NGS-Sequencing by synthesis, SH2: NGS- Sequencing by synthesis.

**Week 3:** Introduction to Proteomics, Proteomics: Sample Prep & Protein Quantification, Proteomics: Sample Prep & Protein Quantification (Hands-on), Introduction to MS-based Proteomics- Part 17 ll, SL 3: Applications of NGS – Ion Torrent, SL4: Applications of NGS – Ion Torrent.

**Week 4:** Introduction to MS-based Proteomics- Part I&ll (Hands-on), I Data analysis: Normalization, Data analysis: Batch Correction and Missing values, Data analysis: Statistical Tests, SH3: NGS- Ion Torrent, SH4: NGS- Ion Torrent.

**Week 5:**Machine learning and Clustering, Hypothesis testing, ProTIGY- Part I & II, Proteogenomics approach to unravel proteoforms, SL5 &SL6 : Genomic Analysis using Droplet PCR,

**Week 6:** Workflow to Automated Data Processing, Introduction to Fire Cloud, Fire Cloud and Data Model, Bioinformatics solutions for 'Big Data' Analysis- Part I & II, SH5: Genomic Analysis using Droplet PCR, SH6: Genomic Analysis using Droplet PCR

Week 7: Data Science infrastructure management- Part I,ll & III, DIA-SWATH Atlas-Part I&II, SL7: Introduction to Targeted Proteomics, SH7: Data Analysis using Skyline.

Week 8: Human Protein Atlas-Part I Clinical, Human Protein Atlas-Part II, Affinity based proteomics & HPA, Clinical Considerations for OMICS-

Part I, Considerations for OMICS- Part II, SL8: Proteomics: PTMs, SL9: Clinical Proteomics.

**Week 9:** Introduction to Proteogenomics-Part I &ll Sequence centric proteogenomics, Gene Variant Analysis, Proteomics in Clinical studies, SH8: ProTIGY.

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Dept. of Bio-Technology Cheffenya Sharafili Institute of Techno Gandipet, Hyderabed-500 075. **Week 10:** Supervised Machine learning- Predictive Analysis Part I, Supervised Machine learning- Predictive Analysis Part II, Supervised Machine learning- Marker Selection, Gene Set Analysis using Web Gestalt-Part I, Gene Set Analysis using Web Gestalt- Part II, SH9: Supervised Machine Learning.

**Week 11:** Biological Network Analysis- Part I, Biological Network Analysis- Part II, Mutation and Signaling - Part I, Mutation and Signaling- Part II, Pathway Enrichment, SH10: Pathway Enrichment and Network Analysis.

**Week 12:** Gene Set Enrichment Analysis (GSEA), Pathway enrichment: GSEA, Linked Omics, Linked Omics (Hindson), Proteogenomics Conclusions, SL10: Topics in Proteogenomics- Malaria and Cancer case study

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S.No	Name of the	Roll No	
	student		
1	K. Anjana Srija	160118805003	
2	K. Sai Manasa	160118805023	
3	S Deepak Mohan	160118805034	
	Reddy		
4	Mohith Arikatla	160118805037	

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# Introduction to proteomics

**No.of enrolled Participants-1** 

**Duration of the Course: 8 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Introduction to proteomics	CBIT/20BT V031	2021	1	8 weeks/90 Hours	1	1

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## **Introduction to Proteogenomics**

# Course Duration: 12 Weeks Credits: 3

**Week 1:** Proteogenomics overview- Part I, Proteogenomics overview- Part II, Introduction to Genomics- Part I: Gene sequencing and mutations Introduction to Genomics-Part II: Sequence Part III: Transcriptome, SL1: Advancement in Cancer Genomics, SL2: Advancement in Cancer Genomics.

**Week 2:** Introduction to Genomics IV: Epigenome, Introduction to Genomics: cBioPortal, Genotype, Gene expression & Phenotype - Part l&ll, An overview of NGS technology, SH1: NGS-Sequencing by synthesis, SH2: NGS- Sequencing by synthesis.

**Week 3:** Introduction to Proteomics, Proteomics: Sample Prep & Protein Quantification, Proteomics: Sample Prep & Protein Quantification (Hands-on), Introduction to MS-based Proteomics- Part 17 ll, SL 3: Applications of NGS – Ion Torrent, SL4: Applications of NGS – Ion Torrent.

**Week 4:** Introduction to MS-based Proteomics- Part I&ll (Hands-on), I Data analysis: Normalization, Data analysis: Batch Correction and Missing values, Data analysis: Statistical Tests, SH3: NGS- Ion Torrent, SH4: NGS- Ion Torrent.

**Week 5:**Machine learning and Clustering, Hypothesis testing, ProTIGY- Part I & II, Proteogenomics approach to unravel proteoforms, SL5 &SL6 : Genomic Analysis using Droplet PCR,

**Week 6:** Workflow to Automated Data Processing, Introduction to Fire Cloud, Fire Cloud and Data Model, Bioinformatics solutions for 'Big Data' Analysis- Part I & II, SH5: Genomic Analysis using Droplet PCR, SH6: Genomic Analysis using Droplet PCR

Week 7: Data Science infrastructure management- Part I,ll & III, DIA-SWATH Atlas-Part I&II, SL7: Introduction to Targeted Proteomics, SH7: Data Analysis using Skyline.

**Week 8:** Human Protein Atlas-Part I Clinical, Human Protein Atlas-Part II, Affinity based proteomics & HPA, Clinical Considerations for OMICS-Part I, Considerations for OMICS- Part II, SL8: Proteomics: PTMs, SL9: Clinical Proteomics.

**Week 9:** Introduction to Proteogenomics-Part I &ll Sequence centric proteogenomics, Gene Variant Analysis, Proteomics in Clinical studies, SH8: ProTIGY.

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Dept. of Bio-Technology Chellenya Shareliki Inniituta of Techno Gandipet, Hyderabed-500 075. Week 10: Supervised Machine learning- Predictive Analysis Part I, Supervised Machine learning- Predictive Analysis Part II, Supervised Machine learning- Marker Selection, Gene Set Analysis using Web Gestalt-Part I, Gene Set Analysis using Web Gestalt- Part II, SH9: Supervised Machine Learning.

**Week 11:** Biological Network Analysis- Part I, Biological Network Analysis- Part II, Mutation and Signaling - Part I, Mutation and Signaling- Part II, Pathway Enrichment, SH10: Pathway Enrichment and Network Analysis.

Week 12: Gene Set Enrichment Analysis (GSEA), Pathway enrichment: GSEA, Linked Omics, Linked Omics (Hindson), Proteogenomics Conclusions, SL10: Topics in Proteogenomics- Malaria and Cancer case study

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Dept. of Bio-Technology Chellenya Eheretiki Institute of Techno Gandipet, Hyderabed-500 075.

S.No	Name of the	Roll No
	student	
1	S Deepak Mohan	160118805034
	Reddy	

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Legal and Regulatory Issues in Biotechnology

**No.of enrolled Participants-1** 

**Duration of the Course: 4 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Legal and regulatory issues in biotechnology	CBIT/20BT V044	2021	1	4 weeks/90 Hours	1	1

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### Legal and Regulatory Issues in Biotechnology

Course Duration: 4 Weeks Credits : 1

Week-1: Regulation of Biotechnology Research.

Week-2: Intellectual Property Rights and Life sciences (Agriculture, Pharma, Biotech)

Week-3: Biotech Product commercialization: Regulatory Approval Process

Week-4: Understanding technology transfer in biotech sector

### **Books and references:**

- 1. Bucknell Duncan (ed.), I Pharmaceutical, Biotechnology and Chemical Inventions (Oxford University Press, 2011).
- 2. Cook M. Trevor, Pharmaceutical Biotechnology and the Law (Lexis Nexis, 2d ed. 2009).
- 3. Cook M.Trevor, The Protection of Regulatory Data In Pharmaceutical And Other Sectors (Sweet and Maxwell, 2000).
- 4. Hardcastle Rohan, Law and The Human Body; Property Rights, Ownership and Control (Hart Publishing, 2007).
- 5. Valverde J.L. (ed.), Key Issues in Pharmaceutical Law (IOS Press, Vol. 9 2009).
- 6. Drexl Josef, Nari Lee (ed.), Pharmaceutical Innovation, Competition and Patent Law; A Trilateral Perspective (Edward Elgar, 2013),
- 7. Verkey Elizabeth, Law of Plant Varieties Protection, 30-32 (Eastern Book Company, 1st ed. 2007).
- 8. Herring Jonathan, Medical Law & Ethics (Oxford University Press, 5th Ed., 2014).
- 9. Ventose Eddy, Medical Patent law- The Challenges of Medical Treatment (Edward Elgar, 2011).
- Krattiger Anatole, Mahoney T. Richard, et.al., II Intellectual Property Management in Health and Agricultural Innovation; A handbook of best practices (MIHR, Oxford Center for Innovation, 2007). 11. Emily Jackson, Medical Law, text, cases and Materials, (Oxford University Press, 4th ed. 2013)
- 11. Holy F Lynch, Effy Vayena and Urs Gasser, Big data, Health Law and Bioethics, Edited by I. G. Cohen, (Cambridge University Press, 2018)

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Dept. of Bio-Technology Challenya Ebarathi Inniitute of Techno Gandipet, Hyderabad-500 075.
S.No	Name of the	Roll No
	student	
1	Sucheta Rajaraman	160118805026

y Lipsui

Dept. of Bio-Technology Challenya Ebaratiki Institute of Techno Gandipet, Hyderabad-500 075.

## **Neuroscience of Human Movements**

**No.of enrolled Participants-1** 

**Duration of the Course: 12 Weeks** 

ACADEMIC YEAR: 2020-21

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Dept. of Bio-Technology Chellenya Sharetid Institute of Techno Gandipet, Hyderabed-500 075.

Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Neuroscience of Human Movements	CBIT/20BT V024	2021	1	12 weeks/90 Hours	1	1

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#### **Neuroscience of Human Movements**

#### **Course Duration: 12 Weeks**

#### Credits: 3

- Week 1: Introduction, Membrane Physiology, Nernst Equation, GHK Equation, Action potential
- Week 2: Neuromuscular Junction, Skeletal Muscles
- Week 3: Skeletal muscles, Motor Units
- Week 4: Receptors, Muscle Spindles, Golgi Tendon Organs, Spinal control
- Week 5: Monosynaptic, Oligosynaptic & Polysynaptic reflexes,
- Week 6: Pre-programmed reactions, Spinal control, Overview of motor control system, Primary Motor cortex- Part 1
- Week 7 : Primary Motor cortex Part 2, Lesions, Brain Machine interfaces
- Week 8: Primary Motor Cortex Part 3, Role of Cerebellum in movement control
- Week 9: Role of Cerebellum in movement control
- Week 10: Parietal & Pre-motor cortex
- Week 11: Role of Basal Ganglia in movement control
- Week 12: Role of Basal Ganglia in movement control

#### **Books and references:**

1. Kandel & Schwartz, Principles of Neural Science, 2012, McGraw-Hill.

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Dept. of Bio-Technology Challenya Bharathi Inniitute of Techno Gandipet, Hyderabad-500 075.

S.No	Name of the student	Roll No
1	Sucheta Rajaraman	160118805026

y Lojasui

Dept. of Bio-Technology Challenya Sharetiki Institute of Techno Gandipet, Hyderabed-500 075.

# **Organic Farming for Sustainable Agriculture Production**

No.of enrolled Participants- 1

**Duration of the Course: 8 Weeks** 

ACADEMIC YEAR: 2020-21

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Dept. of Bio-Technology Challenya Bharathi Institute of Techno Gandipet, Hyderabad-500 075.

Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Organic farming for sustainable Agriculture production	CBIT/20BT V005	2021	1	8 weeks/90 Hours	1	1

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#### **Organic farming for Sustainable AgriculturalProduction**

**Course Duration: 8Weeks** 

Credits : 2

- Week 1: Organic Farming: Concepts and principles of organic farming
- Week 2: Key indicators of sustainable agriculture, organic farming and climate change
- Week 3: Input management; compost production, vermicomposting, Compost quality, Compost utilization and marketing
- Week 4: Organic crop management: field crops, horticulture and plantation crops
- Week 5: Plant protection measures, biopesticides, natural predators, cultural practice
- Week 6: Rotation design for organic system, Transition to organic agriculture, farming system
- Week 7: Quality analysis of organic foods, Antioxidants and their natural source, organic food and human health
- Week 8: Standards of organic food and marketing

Books and references: Nil

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Dept. of Bio-Technology Chellenya Sharetili Institute of Techno Gandipet, Hyderabad-500 075.

S.No	Name of the student	Roll No
1	K. Anjana Srija	160118805003

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Patent Law for Engineers and Scientists

No.of enrolled Participants- 3 Duration of the Course: 12 Weeks

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Patent law for engineers and scientists	CBIT/20BT V043	2021	1	12 weeks/90 Hours	3	3

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#### Patent Law for Engineers and Scientists

Course Duration: 12 Weeks Credits : 3

**Week 1**: Introduction to the Indian Patent System Patent Laws as Concepts; Understanding the Patents Act, 1970; Understanding the Patents Rules, 2003; Preliminary Sections; Preliminary Rules; What's New in the Patents (Amendment) Rules, 2016; Easy way to read the Patents Act and Rules

**Week 2**:Patentability of Inventions Statutory Exceptions to Patentability; Novelty and Anticipation; Inventive Step; Capable of Industrial Application; Person Skilled in the Art

**Week 3**:Patent Specification Provisional and Complete Specifications; Structure of a Patent Specification—Title, Abstract, Description, Claims, etc.; Reading a Patent Specification—Fair basis, Enabling Disclosure, Definiteness, Priority; Introduction to Patent Drafting.

**Week 4**:Patent Prosecution: Patent Applications Patent Application—Who Can Apply, True and First Inventor, How to Make a Patent Application, what to include in a Patent Application, Types of Patent Applications, Patents of Addition, Dating of Application;

**Week 5**:Patent Prosecution: Publication and Examination - I Publication of Application; Request for Examination; Examination of Application—First Examination Report.

**Week 6**:Patent Prosecution: Publication and Examination – II Expedited Examination of Application; Search for Anticipation—Procedure, withdrawal of Application; Consideration of Report of Examiner.

**Week 7**:Patent Prosecution: Powers of Controller Powers of Controller—Examination Stage, Consideration of report by examiner, Refuse or Amend Applications, Division of Applications, Dating of Application, Anticipation, Potential Infringement; Putting Applications in Order; Amendments during Prosecution

**Week 8**:Patent Prosecution: Opposition Pre-grant opposition; post-grant opposition; Wrongful obtaining of invention; Mention of Inventor; Opposition in General.

**Week 9**:Patent Prosecution: Practice at the Patent Office- I Secrecy Provisions; Grant of Patents; Rights Conferred by Grant; Rights of Co-Owners; Term of Patent; Restoration of Lapsed Patents;

**Week 10**:Patent Office and Patent Prosecution, Surrender; Revocation—Grounds for Revocation; Register of Patents, Patent Office and its Establishment; Patent Agents; Use and Acquisition by Government; Penalties.

Week 11:Compulsory Licensing Compulsory Licensing—Working of Patents, Grounds for Grant of Compulsory License, Revocation; Patent Licensing;

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Dept. of Bio-Technology Challenya Ebarathi Institute of Techno Gandipet, Hyderabad-500 075. **Week 12**:Patent Enforcement, International Arrangements and Other Miscellaneous Provisions Intellectual Property Appellate Board; Declaratory Suits, Infringement Suits; International Application—Convention Application, PCT Application, Application Designating India, Multiple Priorities; PCT Timeline; Fees— Application, In Relation to Grant of Patents; Timelines, Application, Examination, Publication etc.

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Dept. of Bio-Technology Cheffanya Sharatihi Institute of Techno Gandipet, Hyderabad-500 075.

#### **Books and references**

- Feroz Ali, The Law of Patents, LexisNexis
- Ronald D. Slusky, Invention Analysis and Claiming A Patent Lawyer's Guide, Second Edition, American Bar Association, 2012.
- Feroz Ali, The Touchstone Effect The Impact of Pre-grant Opposition on Patents, LexisNexis, 2009.

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Dept. of Bio-Technology Cheffenya Sharatiki Institute of Techno Gandipet, Hyderabed-500 075.

S.No	Name of the	Roll No
	student	
1	Sucheta Rajaraman	160118805026
2	S Deepak Mohan	160118805034
	Reddy	
3	Malishetty Vijay	160118805043
	Bhargav	

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Dept. of Bio-Technology Challenya Bharatid Inniituta of Techno Gandipet, Hydorabad-500 075.

# **Principle and Practices of Process Equipment and Plant Design**

No.of enrolled Participants- 2

**Duration of the Course: 12 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Principle and Practices of process Equipment and plant design	CBIT/20BT V042	2021	1	12weeks/90 Hours	2	2

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#### Principles and Practices of Process Equipment and Plant design

#### **Course Duration: 12 Weeks**

:3

Credits

Week-1: Introduction to Plant Design (2); Introduction to Mass transfer Equipment 1); PhaseEquilibrium

Week-2: Distillation – Fractionation (4); Design Problem (1)

Week-3: Flash Distillation (1); Batch Distillation (3); Design Problem

Week-4: Absorption (2); Adsorption (2); Design Problem

Week-5: Liquid-Liquid Extraction - 3; Column Internals - 2 [Sieve (1), Valve (1)]

Week-6:Column Internals contd. - Bubble Cap (2); Packed column (1); Design Problem (2)

Week-7:Heat Exchanger: Introduction (1); Double Pipe HE (2); S&T HE (2)

Week-8: S&T HE contd. (1); Design Problem (1+2); Heat Exchanger Network (1)

Week-9: Heat Exchanger Network (3); Design Problem (2)

Week-10: Plant hydraulics: Pumps (2) Compressors (2), Pipeline (1)

Week-11: Pressure Vessels (2); Design Problem (2); Process Utilities (1)

Week-12: Safety (2), Process Design Package (3)

#### **Books and references:**

- 1. Process Equipment and Plant Design Principles and Practices", Ray. Subhabrata and Das, Gargi; ISBN: 9780128148853; 1st Edn., May 2020, Elsevier Inc.
- 2. Smith BD. Design of equilibrium stage processes. McGraw-Hill Companies; 1963.
- 3. Sinnott, R.K. and Towler, G., 2013. Chemical Engineering Design, Chemical Engineering Design.
- 4. Shah RK, Sekulic DP. Fundamentals of heat exchanger design. John Wiley & Sons; 2003 Aug 11.
- 5. Lestina, T. and Serth, R.W., 2007. Process heat transfer: Principles, applications and rules of thumb., Elsevier Ltd.

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Dept. of Bio-Technology Challenya Bizaretili Institute of Techno Gandipet, Hyderabed-500 075.

S.No	Name of the	Roll No
	student	
1	M Jahanavi	160118805009
2	D Niveditha	160118805018

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Dept. of Bio-Technology Challenya Bharatil Institute of Techno Gandipet, Hyderabad-500 075.

Structural Biology

**No.of enrolled Participants- 8** 

**Duration of the Course: 12 Weeks** 

ACADEMIC YEAR: 2020-21

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Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Structural Biology	CBIT/20BT V072	2021	1	12weeks/90 Hours	8	8

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## **Structural Biology**

## **Course Duration** : 12 weeks

: 3

Credits

**Week 1**: Introduction: Flow of the history of biological inventions, basic Biological Macromolecules of life, i.e., Protein, Nucleic Acid, Carbohydrates & Lipid/Fat, and a comparison between polymers and "3C"ecrets of covalent bond, nucleic acid, DNA sequencing, PCR innovation, gene sequencing to genome sequencing, introduction to NGS and its different platforms, arrival of Post Genomic Era, the effect of HGP, and experimental three-dimensional structure determination techniques.

**Week 2:** Protein: Amino acids and their properties, Protein Chemistry, Chirality, Peptide bond, and Levels of protein structures, Dihedral angles, Peptide bond, and Ramachandran Plot, Super Secondary Structures, Motif, Domains, Non-covalent interactions, Folding of Protein, Thermodynamics, and Kinetics of protein folding, Characterization of Proteins.

**Week 3**: Introduction to Structural Biology Techniques: cellular organization, resolution structure determining technique with their ranges of the resolution, the success of X-ray crystallography from single molecule to a crystal, X-ray Crystallography, Crystallization in X-ray Crystallography, Crystallography.

**Week 4**: X-ray Crystallography: Production of X-ray and its properties, unit cell, symmetry, and lattice, the geometry of the crystal system, Crystal Symmetry, Instrumentation in X-ray Crystallography, Data collection, and processing

**Week 5**: X-ray Crystallography: Data Analysis of X-ray Crystallography - Diffraction Patterns, Indexing, Bragg's Law, Laue equation, Relation between "Laue equation and Bragg's Law", Lattice Transformation, Ewald Sphere, Laue Condition for Diffraction and Ewald Sphere, Structure Factors and Diffraction Pattern, Atomic Scattering Factor, Anomalous Dispersion, Analytical expression of the phase, Fourier Transformation, introduction to Phase Problem. Phase problem - Phase Problem, Patterson Function, How to solve phase problem, Heavy atom replacement methods, Isomorphous replacement, Anomalous dispersion, phase problem associated with crystal diffraction and common techniques to recover phase resolving different phase improvement methods. Refinement and Structure deposition to PDB - aspects of structure refinement, motivation, application, the procedure of simulated annealing, PDB repository, atomic model deposition as well as different PDB validation suites.

**Week 6**: NMR: Introduction to NMR, basic Principles of NMR and Instrumentation, NMR Sample Preparation and Chemical Shift related concepts, Factors effecting NMR Spectra (1D & 2D), 2D & 3D NMR Spectroscopy focusing on protein structure.

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**Week 8**: Microscopy: Introduction to Microscopy, Functioning details of Cryo-Electron Microscopy (Cryo-EM), Cryo-Electron Microscopy: Data Collection and Analysis, A concise story of advancement Cryo-EM, Protein Data Bank.

**Week 9**: Molecular Visualizations: History of Molecular Visualizations of Biological Macromolecules, Description of structure-related files (.pdb, .mmcif, .mtz, etc.), Demonstration of COOT, 3D visualization using Pymol, Demonstration of Pymol.

**Week 10:** Molecular Dynamic Simulation: Why we need MD Simulation, Molecular Dynamic Simulation Process, Build a realistic atomistic model of the system, the algorithm behind simulation process, Concept of Topology and Parameter files, Major components in a force field, the concept of solvation, solvent models, Periodic Boundary Condition, Concept of Central Simulation Box, Phase Space, Concept of Ensembles, Energy Minimization (EM), potential energy surface (PES), Determination of EM, types of EM methods and their algorithms, Steps in MD Simulation, Application of Molecular Dynamic Simulation.

**Week 11**: Protein Engineering: What, How & Which of Protein Engineering, How to make logical Protein Engineering: Process of Rational design, a success story of Rational Protein designing: Focusing on De Novo Process, Designing Protein by mimicking nature: Process of Directed Evolution, Achievement, Challenges, and Future direction in the field of Protein Engineering.

**Week 12**: Structure-Based Drug Discovery: Introduction to Structure-Based Drug Discovery (SBDD), Rational Drug Discovery, Docking Based Virtual Screening: Progress, Challenges and Future perspective, what makes a small molecule an ideal drug: Developing in silico ADMETox Model, Structure-Based Drug Discovery: Case study and Conclusion

#### **Books and references:**

- 1. Carl Ivar Branden and John Tooze., "Introduction to Protein Structure" 2nd 2001 Edition, Taylor and Francis
- 2. Voet, D. and Voet, J. G., "Biochemistry" 3rd edition, John Wiley and Sons.
- 3. Introduction to Protein Architecture: The Structural Biology of Proteins, 2001 Arthur M. Lesk, Oxford University Press; 1st edition
- 4. LubertStryer, Biochemistry, 4th Edition, WH Freeman & Co
- Creighton. T.E., Proteins, Structure and Molecular Properties, 2nd Edition, 1993 W.H. Freeman and Co
- 6. McPherson, A. "Introduction to Macromolecular Crystallography", 2nd 2009 edition, Wiley-Blackwell.
- 7. Drenth, J., "Principles of Protein X-Ray Crystallography", 3rd edition, 2007 Springer.
- 8. Rhodes, G., "Crystallography Made Crystal Clear", 3rd edition, Academic Pres

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Dept. of Bio-Technology Challenya Bharatiki Institute of Techno Gandipet, Hyderabed-500 075.

S.No	Name of the	Roll No
	student	
1	Nalli Deepika	160118805005
2	M Jahanavi	160118805009
3	A. Jahnavi	160118805010
4	D Niveditha	160118805018
5	K. Sai Manasa	160118805023
6	S Deepak Mohan	160118805034
	Reddy	
7	Mohith Arikatla	160118805037
8	Malishetty Vijay	160118805043
	Bhargav	

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Dept. of Bio-Technology Challenya Sharatiki Instituta of Techno Gandipet, Hyderabad-500 075.

## **Functional Genomics**

**No.of enrolled Participants-1** 

**Duration of the Course: 4 Weeks** 

ACADEMIC YEAR: 2020-21

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Dept. of Bio-Technology Chellenya Eharatiki Inniitute of Techno Gandipet, Hyderabed-500 075.

Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Functional Genomics	CBIT/20BT V034	2021	1	4 weeks/90 Hours	1	1

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Dept. of Bio-Technology Challenya Sharatiki Instituta of Techno Gandipet, Hyderabad-500 075.

#### **Functional Genomics**

#### **Course Duration: 4 Weeks Credits: 1**

**Week 1:** [2.5 hrs; 4 lectures] Introduction to Functional Genomics: Pre- and post-genomic era; major advancements in genomic approaches; epigenetics and etagenomics; forward versus reverse genetics

**Week 2**: [2.5 hrs; 4 lectures] Genome Analyses - Part 1 Genome editing approaches and their applications; gene expression analyses and applications

**Week 3:** [3 hrs: 4 lectures and 2 tutorial sessions] Genome Analyses - Part 2 Methods for DNA/RNA sequencing, sequence analysis and their applications

**Week 4:** [2.5 hrs: 3 lectures and 2 laboratory sessions] Comparative Genomics Genomic insight into evolution; power of comparative genomic analysis

#### **Books and references**

Mostly publically available literature. Will be shared with the participants during the launch of the course.

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Dept. of Bio-Technology Challenya Bharathi Inniitute of Techno Gandipet, Hyderabad-500 075.

S.No	Name of the student	Roll No
1	Mohith Arikatla	160118805037

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Dept. of Bio-Technology Challenya Ebaratiki Inniituta of Techno Gandipet, Hyderabad-500 075.

# **Technologies for Clean and Renewable Energy Production**

No.of enrolled Participants- 1

**Duration of the Course: 8 Weeks** 

ACADEMIC YEAR: 2020-21

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Dept. of Bio-Technology Chellenya Bharetill Institute of Techno Gandipet, Hyderabed-500 075.

Name of the value added courses (with 30 or more contact hours) offered	Course code(if any)	Year of offering	No. of times offered during the same year	Duration of course in Hours	Number of students enrolled in the year	Number of Students completing the course in the year
Technologies for clean and Renewable energy production	CBIT/20BT V041	2021	1	8 weeks/90 Hours	1	1

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#### **Technologies for Clean and Renewable Energy Production**

#### **Course Duration: 8 Weeks**

Credits : 2

Week 1: Introduction, characterization of coal and conventional routes for energy production from coal.

- Week 2: Cleaner routes for energy production form coal.
- Week 3: Characterization of crude oil and conventional routes for crude oil utilization.
- Week 4: Cleaner routes for energy production form petroleum crude.
- Week 5: Cleaner energy production from gaseous fuels.
- Week 6: Solar and wind energy production.
- Week 7: Production of hydro and geothermal energy.
- Week 8: Energy production from biomass and wastes and energy conservation.

#### **Books and references:**

- 1. 1.Miller Bruce G., Coal Energy Systems, Elsevier Academic Press, Paris 2005
- 2. 2.. Twidel, J. and Tony W., Renewable Energy Resources, Second Edition, Taylor & amp; Francis 2006
- 3. 3.Kreith F., Goswami D.Y., Energy Management and Conservation, CRC Press 2008
- 4. 4.Sukhatme S., J Nayak J., Solar Energy: Principles of thermal Collection and Storage, 3 rd Ed., Tata McGrow-Hill Publishing Company Ltd. 2008
- 5. 5. Mondal P and Dalai A., Sustainable utilization of natural resources, CRC Press 2017.

List of participants

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Dept. of Bio-Technology Chellenya Ebaratiki Instituta of Techno Gandipet, Hyderabad-500 075.

S.No	Name of the student	Roll No
1	Nalli Deepika	160118805005

Y Lipsui

Dept. of Bio-Technology Challenya Bharatid Inniituta of Techno Gandipet, Hydorabad-500 075.

## 1.3 Curriculum Enrichment 2020-21

## List of value added courses completed by B.E (IT) students during 2020-21

Name of the value added courses offered	Code
Web development	CBIT/20ITV001
Algorithmic toolbox	CBIT/20ITV002
Android app development	CBIT/20ITV003
Python Bootcamp	CBIT/20ITV004
Basics of Machine Learning	CBIT/20ITV005
C & C++	CBIT/20ITV006
Functions in Python	CBIT/20ITV007
Cyber security	CBIT/20ITV008
Responsive web design	CBIT/20ITV009
Programming for Everybody (Getting Started with Python)	CBIT/20ITV010
Crash course on python	CBIT/20ITV011
Introduction to software product management	CBIT/20ITV012
AI for every one	CBIT/20ITV013
Getting started in google analytics	CBIT/20ITV014
Using python access the web data	CBIT/20ITV015
Python for data structures	CBIT/20ITV016
Deep Learning using python	CBIT/20ITV017
Google IT support	CBIT/20ITV018
The fundamentals of digital marketing	CBIT/20ITV019
Introduction to Cybersecurity Tools & Cyber Attacks	CBIT/20ITV020
IT Fundamentals for Cybersecurity	CBIT/20ITV021
Artificial Intelligence	CBIT/20ITV022
Machine Learning	CBIT/20ITV023
The Joy of Computing using Python	CBIT/20ITV024
Programming in java	CBIT/20ITV025
Programming with python	CBIT/20ITV026
Full Stack with Django and React	CBIT/20ITV027
Introduction to machine learning	CBIT/20ITV028
The bits and bytes of computer networking	CBIT/20ITV029
Operating systems and you	CBIT/20ITV030
System adminstration and IT infratructue services	CBIT/20ITV031
IT Security	CBIT/20ITV032



Advanced Styling with Responsive Design	CBIT/20ITV033
Introduction to HTML5	CBIT/20ITV034
Interactivity with javascript	CBIT/20ITV035
Java and python	CBIT/20ITV036
Introduction to C# programming and unity	CBIT/20ITV037
Full Stack Development	CBIT/20ITV038
Using python to interact with operating system	CBIT/20ITV039
Introduction to game development	CBIT/20ITV040
Getting started with AWS and machine learning	CBIT/20ITV041
Introduction to CSS3	CBIT/20ITV042
Front-End development with react	CBIT/20ITV043
Essential Mathematics for Machine Learning	NA



#### SUMMARY REPORT OF VALUE-ADDED COURSES - 2020 - 21

Course 1: Web development Code: CBIT/20ITV001

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
0	Name	registered & completed
1	S. Juhiya Afreen	01
	-	

#### Syllabus:

Week 1: Introduction to the Internet

Week 2: Building your webapp

Week 3 & Week 4 : Databases

Week 5 : Introduction to security for webapps

Week 6 & Week 7 : Mobile Application Development

Week 8 : Concluding Lectures

**Course 2:** Algorithmic toolbox **Code:** CBIT/20ITV002

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Gagan Kumar Kaira	01

#### Syllabus:

Week 1 : Programming Challenges

Week 2: Algorithmic Warm-up

Week 3: Greedy Algorithms

Week 4: Divide-and-Conquer

Head Dept. of IT CBTT, Hyderabad

# **Course 3:** Android App Development **Code:** CBIT/20ITV003

## **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Sinde Abhimanyu	01

# Syllabus:

Week-1	Android Software Development, building a sample Android application using Android Studio.
Week-2	Android Project Structure, Android Manifest File and its common settings.
Week-3	Activities, Services, Intents.
Week-4	Permissions, Application resources.
Week-5	Basic User Interface Screen elements, Designing User Interfaces with Layouts.
Week-6	Using Content Providers, Handling Persisting Data.
Week-7	JSON Web Service.
Week-8	Gallery, drawing 2D and 3D Graphics and Multimedia, Drawing and Working with Animation.
Week-9	Networking, Telephony and Location, Android Networking, Web and Telephony API.
Week-10	Search, Location and Mapping, Communication, Identity, Sync and social media.
Week-11	Sensor and Hardware Programming.
Week-12	Publishing Android Application.


#### **Textbooks & References**

- PGDMAD-103: Android Mobile Application Development, ISBN-978-81-940577-2-7 June 2019 by Dr. Babasaheb Ambedkar Open University.
- PGDMAD-105: Software Lab for Android Mobile Application Development, ISBN-978-81-940577-4-7 June 2019 by Dr. Babasaheb Ambedkar Open University.
- 3. PGDMAD-201: Advanced Android Mobile Application, ISBN-978-81-940577-5-8 by Dr. Babasaheb Ambedkar Open University.
- 4. PGDMAD-203: Software Lab for Advanced Android Mobile Application, ISBN-978-81-940577-7-2 by Dr. Babasaheb Ambedkar Open University.
- 5. Wireless Communications & Networks, Second Edition, William Stallings by Pearson.
- 6. Mobile Computing Technology, Applications and service creation, Asoke K Telukder, Roopa R Yavagal by TMH.
- 7. Android Application Development Black Book, Pradeep Kothari, dreamtech press.
- 8. Wireless and mobile networks, Dr. Sunilkumar S. Manvi, Dr. Mahabaleshwar S.Kakkasageri by WILEY.
- 9. Wireless networks, P. Nicopolitidis, M. S. Obaidat, G.I. Papadimitriou, A.S. Pomportsis by WILEY.
- 10. Mobile Computing, Raj Kamal by Oxford.
- 11. Mobile Computing Theory and Practice-Kumkum Garg- Pearson.

Course 4: Python Bootcamp Code: CBIT/20ITV004

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Balerao Supraja	01

# Syllabus:

Week 1:

•BASICS OF PYTHON SPYDER (TOOL)

- Introduction Spyder
- Setting working Directory
- Creating and saving a script file
- File execution, clearing console, removing variables from environment,



- Commenting script files
- Variable creation
- Arithmetic and logical operators
- Data types and associated operations

#### Week 2:

Sequence data types and associated operations

- Strings
- Lists
- Arrays
- Tuples
- Dictionary
- Sets
- Range

#### NumPy

• ndArray

Week 3:

•Pandas dataframe and dataframe related operations on Toyota Corolla dataset

- 1. Reading files
- 2. Exploratory data analysis
- 3. Data preparation and preprocessing

 $\bullet \mbox{Data}$  visualization on Toyoto Corolla dataset using matplotlib and seaborn libraries

- 1. Scatter plot
- 2. Line plot
- 3. Bar plot
- 4. Histogram
- 5. Box plot
- 6. Pair plot

•Control structures using Toyota Corolla dataset

- 1. if-else family
- 2. for loop
- 3. for loop with if break
- 4. while loop

•Functions

Week 4: CASE STUDY

•Regression

1. Predicting price of pre-owned cars

- Classification
  - 1. Classifying personal income



#### **Textbooks & References**

1. Introduction to linear algebra - by Gilbert Strang

2. Applied statistics and probability for engineers – by Douglas Montgomery 3. Mastering python for data science, Samir Madhavan

# **Course 5:** Basics of Machine Learning **Code:** CBIT/20ITV005

#### **Duration: 30 Hours**

1   Shiva Kumar Chakali	SN O	Registered & completed student Name	Total no. of students registered & completed
	1	Shiva Kumar Chakali	01

#### Syllabus:

Week 1: Introduction to Machine Learning

Week 2: Regression with multiple input variables

Week 3: Classification

**Course 6:** C & C++ **Code:** CBIT/20ITV006

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Bolli Srujana	00
2	Manchikanti Pravalika	02
~ 11	-	

#### Syllabus:

WEEK 1: Programming in C++ is Fun : Build and execute a C program in C++, Write equivalent programs in C++

WEEK 2: C++ as Better C : Procedural Extensions of C

WEEK 3: Overview of OOP in C++ : Classes and basic Object-Oriented features (encapsulation)

WEEK 4: Overview of OOP in C++ : More OO features, overloading, namespace and using struct and union

WEEK 5: Inheritance : Generalization / Specialization of Object Modeling in C++

WEEK 6: Polymorphism : Static and Dynamic Binding

WEEK 7: Type Casting & Exceptions : C++ cast operators; C++ Exceptions & standard exception classes

WEEK 8: Templates & STL – Function and Class templates and using STL like containers, algorithms



#### **Textbooks & References**

1. The C++ Programming Language by Bjarne Stroustrup, 2013. Or, Programming: Principles and Practice Using C++ by Bjarne Stroustrup, 2014 – These books will be followed in the course

2. The C Programming Language (Ansi C Version) by Brian W. Kernighan and Dennis M. Ritchie, 1990. Or, The C Programming Language by Brian W. Kernighan and Dennis M. Ritchie, 2015

3. C++ reference (C++98 and C++03). http://en.cppreference.com/w/

4. Presentations used in the Course

**Course 7:** Functions in Python **Code:** CBIT/20ITV007

# **Duration: 30 Hours**

SN O	Registered & completed student	Total no. of students
1	R Srija	01

# Syllabus:

Week 1:

•BASICS OF PYTHON SPYDER (TOOL)

- Introduction Spyder
- Setting working Directory
- Creating and saving a script file
- File execution, clearing console, removing variables from environment, clearing

environment

- Commenting script files
- Variable creation
- Arithmetic and logical operators
- Data types and associated operations

Week 2:

Sequence data types and associated operations

- Strings
- Lists
- Arrays
- Tuples
- Dictionary
- Sets

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NumPy

• ndArray

Week 3:

•Pandas dataframe and dataframe related operations on Toyota Corolla dataset

- 1. Reading files
- 2. Exploratory data analysis
- 3. Data preparation and preprocessing

•Data visualization on Toyoto Corolla dataset using matplotlib and seaborn libraries

- 1. Scatter plot
- 2. Line plot
- 3. Bar plot
- 4. Histogram
- 5. Box plot
- 6. Pair plot

•Control structures using Toyota Corolla dataset

- 1. if-else family
- 2. for loop
- 3. for loop with if break
- 4. while loop

•Functions

Week 4: CASE STUDY

•Regression

Predicting price of pre-owned cars

•Classification

1. Classifying personal income

# **Textbooks & References**

1. Introduction to linear algebra - by Gilbert Strang

2. Applied statistics and probability for engineers – by Douglas Montgomery

3. Mastering python for data science, Samir Madhavan

# Course 8: Cyber security

Code: CBIT/20ITV008

SN	Registered & completed student	Total no. of students
0	Name	registered & completed
1	Krishna Gupta Yanduri	01



# Syllabus:

Week 1: Introduction to cryptography, Classical Cryptosystem, Block Cipher.

Week 2: Data Encryption Standard (DES), Triple DES, Modes of Operation, Stream Cipher.

Week 3: LFSR based Stream Cipher, Mathematical background, Abstract algebra, Number Theory.

Week 4: Modular Inverse, Extended Euclid Algorithm, Fermat's Little Theorem, Euler Phi-Function, Euler's theorem.

Week 5: Advanced Encryption Standard (AES), Introduction to Public Key Cryptosystem, Diffie-Hellman Key Exchange, Knapsack Cryptosystem, RSA Cryptosystem.

Week 6: Primarily Testing, ElGamal Cryptosystem, Elliptic Curve over the Reals, Elliptic curve Modulo a Prime.

Week 7: Generalized ElGamal Public Key Cryptosystem, Rabin Cryptosystem.

Week 8 : Message Authentication, Digital Signature, Key Management, Key Exchange, Hash Function.

Week 9 : Cryptographic Hash Function, Secure Hash Algorithm (SHA), Digital Signature Standard (DSS).

Week 10: Cryptanalysis, Time-Memory Trade-off Attack, Differential and Linear Cryptanalysis. Week 11: Cryptanalysis on Stream Cipher, Modern Stream Ciphers, Shamir's secret sharing and BE, Identity-based Encryption (IBE), Attribute-based Encryption (ABE).

Week 12: Side-channel attack, The Secure Sockets Layer (SSL), Pretty Good Privacy (PGP), Introduction to Quantum Cryptography, Blockchain, Bitcoin and Cryptocurrency.

Course 9: Responsive web design

Code: CBIT/20ITV009

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Thota Ivan	01

# Syllabus:

Week 1: Web design principles

Week 2: Realising design principles in code

Week 3: Adding content to websites

Week 4: Building a full gallery app

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**Course 10:** Programming for Everybody (Getting Started with Python) **Code:** CBIT/20ITV010

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
0	Name	registered & completed
1	Jhansi Sreya Jagarapu	
2	Gayathri Vavilala	
3	Supraja Balerao	
4	Aditi Indoori	
5	Ameya s Pedgaonkar	10
6	Usha Goud Gourigari	10
7	Sathwika Shakkara	
8	Poornima Siddineni	
9	Swetha Singireddy	
10	Ishika Gupta	

Syllabus:

Week 1: Chapter One - Why we Program?

Week 2: Installing and Using Python

Week 3: Chapter One: Why We Program (continued)

Week 4: Chapter Two: Variables and Expressions

# Course 11: Crash course on python

Code: CBIT/20ITV011

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
0	Name	registerea & completea
1	Keerthi Aluvala	02
2	Vivek reddy pokala	02

#### Syllabus:

Week 1: Hello Python

Week 2: Basic Python Syntax

Week 3: Loops

Week 4: Strings, Lists and Dictionaries

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**Course 12:** Introduction to software product management **Code:** CBIT/20ITV012

# **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Vaishnavi Vemuri	01

#### Syllabus:

Week 1: Module 1: Software Product Management - The Discipline

Week 2: Module 2: Foundations of Software Product Management

**Course 13:** AI for every one **Code:** CBIT/20ITV013

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
0	Name	registered & completed
1	Ishika Gupta	01
2		01

#### Syllabus:

Week 1: What is AI?

Week 2: Building AI Projects

Week 3: Building AI In Your Company

Week 4: AI and Society

#### Course 14: Getting started in google analytics

**Code:** CBIT/20ITV014

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	MANOJ KUMAR PAL IVIR	01

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# Syllabus:

- 1. Create a Google Analytics account and connect your website.
- 2. Add a View to eliminate internal traffic.
- 3. Understand 'The Funnel' and how it is used in Google Analytics.
- 4. Explore the various user-defined parameters in the Audience Overview report.
- 5. Interpret the data from various Audience reports to make effective decisions.
- 6. Interpret the data from Acquisition and Behavior reports to make effective decisions.

# Course 15: Using python access the web data

Code: CBIT/20ITV015

# **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Ishika Gupta	02
2	Swetha Valakonda	

# Syllabus:

- Week 1: Getting Started
- Week 2: Regular Expressions
- Week 3: Networks and Sockets
- Week 4: Programs that Surf the Web

#### **Course 16:** Python for data structures

Code: CBIT/20ITV016

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Aditi Indoori	
2	Swetha Valakonda	02



# Syllabus:

# Week 1

Informal introduction to programmin, algorithms and data structures viaged Downloading and installing Python gcd in Python: variables, operations, control flow - assignments, condition-als, loops, functions

# Week 2

Python: types, expressions, strings, lists, tuples Python memory model: names, mutable and immutable values List operations: slices etc Binary search Inductive function denitions: numerical and structural induction Elementary inductive sorting: selection and insertion sort In-place sorting

# Week 3

Basic algorithmic analysis: input size, asymptotic complexity, O() notation Arrays vs lists Merge sort Quicksort Stable sorting

# Week 4

Dictionaries More on Python functions: optional arguments, default values Passing functions as arguments Higher order functions on lists: map, lter, list comprehension

# Week 5

Exception handling Basic input/output Handling files String processing

# Week 6

Backtracking: N Queens, recording all solutions Scope in Python: local, global, nonlocal names Nested functions Data structures: stack, queue Heaps



# Week 7

Abstract datatypes Classes and objects in Python "Linked" lists: find, insert, delete Binary search trees: find, insert, delete Height-balanced binary search trees

# Week 8

Effcient evaluation of recursive denitions: memoization Dynamic programming: examples Other programming languages: C and manual memory management

Other programming paradigms: functional programming

# Course 17: Deep Learning using python

**Code:** CBIT/20ITV017

# **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	S.Juhiya Afreen	01

# Syllabus:

Week 1: Introduction to Deep Learning, Bayesian Learning, Decision Surfaces

Week 2: Linear Classifiers, Linear Machines with Hinge Loss

Week 3: Optimization Techniques, Gradient Descent, Batch Optimization

- Week 4: Introduction to Neural Network, Multilayer Perceptron, Back Propagation Learning
- Week 5: Unsupervised Learning with Deep Network, Autoencoders
- Week 6: Convolutional Neural Network, Building blocks of CNN, Transfer Learning

Week 7: Revisiting Gradient Descent, Momentum Optimizer, RMSProp, Adam

**Week 8:** Effective training in Deep Net- early stopping, Dropout, Batch Normalization, Instance Normalization, Group Normalization

**Week 9:** Recent Trends in Deep Learning Architectures, Residual Network, Skip Connection Network, Fully Connected CNN etc.

Week 10: Classical Supervised Tasks with Deep Learning, Image Denoising, Semanticd Segmentation, Object Detection etc.

Week 11: LSTM Networks

**Week 12:** Generative Modeling with DL, Variational Autoencoder, Generative Adversarial Network Revisiting Gradient Descent, Momentum Optimizer, RMSProp, Adam



#### Textbooks & References Using python access the web data

1.Deep Learning- Ian Goodfelllow, Yoshua Benjio, Aaron Courville, The MIT Press 2.Pattern Classification- Richard O. Duda, Peter E. Hart, David G. Stork, John Wiley & Sons Inc.

#### Course 18: Google IT support Code: CBIT/20ITV018

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Bangari Meghana	01

#### Syllabus:

Course 1: Technical Support Fundamentals

- Offered by Google. This course is the first of a series that aims to prepare you for a role as an entry-level IT Support Specialist. In this ... Enroll for free.

Course 2: The Bits and Bytes of Computer Networking

- Offered by Google. This course is designed to provide a full overview of computer networking. We'll cover everything from the fundamentals ... Enroll for free.

Course 3: Operating Systems and You: Becoming a Power User

- Offered by Google. In this course -- through a combination of video lectures, demonstrations, and hands-on practice -- you'll learn about ... Enroll for free.

Course 4: System Administration and IT Infrastructure Services

- Offered by Google. This course will transition you from working on a single computer to an entire fleet. Systems administration is the field ... Enroll for free.

Course 5: IT Security: Defense against the digital dark arts

- Offered by Google. This course covers a wide variety of IT security concepts, tools, and best practices. It introduces threats and attacks ... Enroll for free.

# **Course 20:** Introduction to Cybersecurity Tools & Cyber Attacks Code: CBIT/20ITV020



SN O	Registered & completed student Name	Total no. of students registered & completed
1	Ranveer Reddy Deshmukh Pingili	01

#### Syllabus:

Week 1: History of Cybersecurity

Week 2: A brief overview of types of actors and their motives

Week 3: An overview of key security concepts

Week 4: An overview of key security concepts

# Course 21: IT Fundamentals for Cybersecurity

Code: CBIT/20ITV021

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	MOHAMMED TOUHEED PATEL	01
	-	

#### Syllabus:

Week 1: Compliance Frameworks and Industry Standards

Week 2: Client System Administration, Endpoint Protection and Patching

Week 3: Server and User Administration

Week 4: Cryptography and Compliance Pitfalls

#### Course 22: Artificial Intelligence

Code: CBIT/20ITV022

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Bangari Meghana	01



# Syllabus:

Week 1 :Introduction: Philosophy of AI, Definitions

- Week 2 : Modeling a Problem as Search Problem, Uninformed Search
- Week 3 :Heuristic Search, Domain Relaxations
- Week 4 :Local Search, Genetic Algorithms
- Week 5 : Adversarial Search
- Week 6 : Constraint Satisfaction
- Week 7 : Propositional Logic & Satisfiability
- Week 8 : Uncertainty in AI, Bayesian Networks
- Week 9 :Bayesian Networks Learning & Inference, Decision Theory
- Week 10: Markov Decision Processes
- Week 11:Reinforcement Learning
- Week 12:Introduction to Deep Learning & Deep RL

#### **Textbooks & References**

Stuart Russell & Peter Norvig, Artificial Intelligence: A Modern Approach, Prentice-Hall, Third Edition (2009) (required).

Ian GoodFellow, Yoshua Bengio & Aaron Courville, Deep Learning, MIT Press (2016).

# Course 23: Machine Learning

Code: CBIT/20ITV023

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Ishika Gupta	01

#### Syllabus:

Week 0: Probability Theory, Linear Algebra, Convex Optimization - (Recap)

Week 1: Introduction: Statistical Decision Theory - Regression, Classification, Bias Variance

**Week 2**: Linear Regression, Multivariate Regression, Subset Selection, Shrinkage Methods, Principal Component Regression, Partial Least squares

Week 3: Linear Classification, Logistic Regression, Linear Discriminant Analysis

Week 4: Perceptron, Support Vector Machines

**Week 5:** Neural Networks - Introduction, Early Models, Perceptron Learning, Backpropagation, Initialization, Training & Validation, Parameter Estimation - MLE, MAP, Bayesian Estimation **Week 6:** Decision Trees, Regression Trees, Stopping Criterion & Pruning loss functions, Categorical Attributes, Multiway Splits, Missing Values, Decision Trees -Instability Evaluation Measures

**Week 7:** Bootstrapping & Cross Validation, Class Evaluation Measures, ROC curve, MDL, Ensemble Methods - Bagging, Committee Machines and Stacking, Boosting

**Week 8**: Gradient Boosting, Random Forests, Multi-class Classification, Naive Bayes, Bayesian Networks



Week 9: Undirected Graphical Models, HMM, Variable Elimination, Belief PropagationWeek 10: Partitional Clustering, Hierarchical Clustering, Birch Algorithm, CURE Algorithm, Density-based Clustering

Week 11: Gaussian Mixture Models, Expectation Maximization

**Week 12**: Learning Theory, Introduction to Reinforcement Learning, Optional videos (RL framework, TD learning, Solution Methods, Applications)

# Textbooks & References Using python access the web data

- 1. The Elements of Statistical Learning, by Trevor Hastie, Robert Tibshirani, Jerome H. Friedman (freely available online)
- 2. Pattern Recognition and Machine Learning, by Christopher Bishop (optional)

# Course 24: The Joy of Computing using Python

Code: CBIT/20ITV024

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Bangari Meghana	01

#### Syllabus:

- Motivation for Computing
- Welcome to Programming!!
- Variables and Expressions : Design your own calculator
- Loops and Conditionals : Hopscotch once again
- Lists, Tuples and Conditionals : Lets go on a trip
- Abstraction Everywhere : Apps in your phone
- Counting Candies : Crowd to the rescue
- Birthday Paradox : Find your twin
- Google Translate : Speak in any Language
- Currency Converter : Count your foreign trip expenses
- Monte Hall : 3 doors and a twist
- Sorting : Arrange the books
- Searching : Find in seconds
- Substitution Cipher : What's the secret !!
- Sentiment Analysis : Analyse your Facebook data
- 20 questions game : I can read your mind
- Permutations : Jumbled Words



- Spot the similarities : Dobble game
- Count the words : Hundreds, Thousands or Millions.
- Rock, Paper and Scissor : Cheating not allowed !!
- Lie detector : No lies, only TRUTH
- Calculation of the Area : Don't measure.
- Six degrees of separation : Meet your favourites
- Image Processing : Fun with images
- Tic tac toe : Let's play
- Snakes and Ladders : Down the memory lane.
- Recursion : Tower of Hanoi
- Page Rank : How Google Works !!

# Course 25: Programming in java

Code: CBIT/20ITV025

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Ishika Gupta	01

#### Syllabus:

- Week 1 : Overview of Object-Oriented Programming and Java
- Week 2 : Java Programming Elements
- Week 3 : Input-Output Handling in Java
- Week 4 : Encapsulation
- Week 5 : Inheritance
- Week 6 : Exception Handling
- Week 7 : Multithreaded Programming
- Week 8 : Java Applets and Servlets
- Week 9 : Java Swing and Abstract Windowing Toolkit (AWT)
- Week 10 : Networking with Java
- Week 11: Java Object Database Connectivity (ODBC)
- Week 12: Interface and Packages for Software Development

#### **Textbooks & References**

1.Java: The Complete Reference Hebert Schildt, Mc Graw Hill

2. Object-Oriented Programming with C++ and Java Debasis Samanta, Prentice Hall India.



#### Course 26: Programming with python

Code: CBIT/20ITV026

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Misbah Uddin	01

# Syllabus:

#### Week 1:

# **•BASICS OF PYTHON SPYDER (TOOL)**

- Introduction Spyder
- Setting working Directory
- Creating and saving a script file
- File execution, clearing console, removing variables from environment, clearing environment
- Commenting script files
- Variable creation
- Arithmetic and logical operators
- Data types and associated operations

#### Week 2:

#### Sequence data types and associated operations

- Strings
- Lists
- Arrays
- Tuples
- Dictionary
- Sets
- Range

#### NumPy

• ndArray

Week 3:

•Pandas dataframe and dataframe related operations on Toyota Corolla dataset

- 1. Reading files
- 2. Exploratory data analysis
- 3. Data preparation and preprocessing



#### •Data visualization on Toyoto Corolla dataset using matplotlib and seaborn libraries

- 1. Scatter plot
- 2. Line plot
- 3. Bar plot
- 4. Histogram
- 5. Box plot
- 6. Pair plot

#### •Control structures using Toyota Corolla dataset

- 1. if-else family
- 2. for loop
- 3. for loop with if break
- 4. while loop

#### • Functions

# Week 4: CASE STUDY

- Regression
  - 1. Predicting price of pre-owned cars
- Classification
  - 1. Classifying personal income

# Textbooks & References Using python access the web data

- 1. Introduction to linear algebra by Gilbert Strang
- 2. Applied statistics and probability for engineers by Douglas Montgomery
- 3. Mastering python for data science, Samir Madhavan

#### Course 27: Full Stack with Django and React

Code: CBIT/20ITV027

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Dharani Kumar Reddy Gowra	01



# **Course 28: Introduction to machine learning**

Code: CBIT/20ITV028

# **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Poornima Siddineni	01

# Syllabus:

Week 0: Probability Theory, Linear Algebra, Convex Optimization - (Recap)

**Week 1**: Introduction: Statistical Decision Theory - Regression, Classification, Bias Variance

**Week 2**: Linear Regression, Multivariate Regression, Subset Selection, Shrinkage Methods, Principal Component

Regression, Partial Least squares

**Week 3**: Linear Classification, Logistic Regression, Linear Discriminant Analysis

**Week 4:** Perceptron, Support Vector Machines

**Week 5:** Neural Networks - Introduction, Early Models, Perceptron Learning, Backpropagation, Initialization,

Training & Validation, Parameter Estimation - MLE, MAP, Bayesian Estimation

**Week 6:** Decision Trees, Regression Trees, Stopping Criterion & Pruning loss functions, Categorical Attributes, Multiway Splits, Missing Values, Decision Trees - Instability Evaluation Measures

**Week 7:** Bootstrapping & Cross Validation, Class Evaluation Measures, ROC curve, MDL, Ensemble Methods - Bagging, Committee Machines and Stacking, Boosting

**Week 8**: Gradient Boosting, Random Forests, Multi-class Classification, Naive Bayes, Bayesian Networks

**Week 9**: Undirected Graphical Models, HMM, Variable Elimination, Belief Propagation

**Week 10**: Partitional Clustering, Hierarchical Clustering, Birch Algorithm, CURE Algorithm, Density-based Clustering

Week 11: Gaussian Mixture Models, Expectation Maximization

**Week 12**: Learning Theory, Introduction to Reinforcement Learning, Optional videos (RL framework, TD learning, Solution Methods, Applications)



# **Textbooks & References**

- 1. The Elements of Statistical Learning, by Trevor Hastie, Robert Tibshirani, Jerome H. Friedman (freely available online)
- 2. Pattern Recognition and Machine Learning, by Christopher Bishop (optional)

#### Course 29: The bits and bytes of computer networking

Code: CBIT/20ITV029

# **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	MOHAMMED FAWWAZUDDIN	01
	-	

#### Syllabus:

Week 1: Introduction to Networking

Week 2: The Network Layer

Week 3: The Transport and Application Layers

Week 4: Networking Services

# Course 29: Operating systems and you

Code: CBIT/20ITV029

# **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	MOHAMMED FAWWAZUDDIN	01

# Syllabus:

- Week 1: Introduction
- Week 2: Processes and Threads Part I
- Week 3: Processes and Threads Part II
- Week 4: Interprocess Communication
- Week 5: Concurrency and Synchronization Part I
- Week 6: Concurrency and Synchronization Part II
- Week 7: Deadlock
- Week 8: CPU Scheduling
- Week 9: Memory Management

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Week 10: Virtual Memory – Part I Week 11: Virtual Memory – Part II Week 12: File System Processes and Threads – Part I

**Course 30: System administration and IT infrastructure services Code:** CBIT/20ITV030

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	MOHAMMED FAWWAZUDDIN	01

#### Syllabus:

Week 1: What is System Administration?

Week 2: Network and Infrastructure Services

Week 3: Software and Platform Services

Week 4: Directory Services

#### **Course 31: IT Security**

Code: CBIT/20ITV031

#### **Duration: 30 Hours**

SNO	Registered & completed student Name	Total no. of students registered & completed
1	MOHAMMED FAWWAZUDDIN	01

#### **Course 32: Advanced Styling with Responsive Design**

**Code:** CBIT/20ITV032

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Ishika Gupta	01

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Week One: Style with Responsive Design Week Two: Basic Concepts Week Three: Use Existing Frameworks Week Four: Experiment! **Course 33: Introduction to HTML5 Code:** CBIT/20ITV033

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Ishika Gupta	63
2	Rajendar Meti	02

#### Week One

This week we will uncover the "mystery" behind the Internet. What happens when you type a URL into your browser so that a webpage magically appears? What is HTML5 and what happened to HTML 1 - 4? We will also cover some practical concepts that you need to master before you begin coding your own pages.

#### Week Two

This week you will need to take a deep breath and jump into coding. I will cover a large number of HTML tags, but it is important that you do more than just listen to these video and read the text book material. You need to practice (and fail!) in order to learn. Believe it or not, once you master the basic idea of using tags and attributes you will know everything you need to use any HTML5 tag. The page may not look the way you want it to look yet, but you will be able to use text, links, images, tables, and even music and videos! If you want to refer to a textbook this week for reinforcement of concepts, we will be using the Shay Howe online textbook as a reference. I will include links after the lectures, but some students prefer to read before the videos. (My preferred approach is to read/watch/read again.)

#### Week Three

Okay, you created a file...what now? This week we will begin by covering the important but often overlooked concepts of validation and accessibility. Did you follow the DOM structure when you created your page? Did you use semantic tags to make sure that page viewers can access all of the information, even if they have physical or cognitive disabilities? This is knowledge you can use if you would like to pursue a career as a web accessibility specialist. Finally I will briefly cover the steps needed to post your site to the web. There are many free and paid services that you can use to get your work off your computer and on to the Internet.



# Course 34: Interactivity with javascript

Code: CBIT/20ITV034

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Ishika Gupta	01

Week One: Introduction to JavaScript Week Two: Reacting to Your Audience Week Three: Arrays and Looping Week Four: Validating Form Data

#### Course 35 : Java and python

Code: CBIT/20ITV035

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Shreya Oruganti	01

Module 1 : Introduction to Java, Classes, & Eclipse

Module 2 : Unit Testing, Arrays, & ArrayLists

Module 3 : Static Variables, Methods, & Polymorphism Using Overloading

# Course 36: Introduction to C# programming and unity

Code: CBIT/20ITV036

SN O	Registered & completed student Name	Total no. of students registered & completed
1	MUSTAFA AHMED MOHAMMED	01

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Week 1: Starting to Program

Week 2: Data Types, Variables, and Constants

Week 3: Classes and Objects

Week 4: Unity 2D Basics

# Course 37: Full Stack Development Code: CBIT/20ITV037

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Dharani Kumar Reddy Gowra	01

Week 1: Introduction to the full stack

Week 2: Front-end technologies

Week 3: The full stack using Django

Week 4: Production environments

# Course 38: Using python to interact with operating system

Code: CBIT/20ITV038

#### **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Keerthi Aluvala	01

Week 1: Getting Your Python On

Week 2: Managing Files with Python

- Week 3: Regular Expressions
- Week 4: Managing Data and Processes

Head Dept. of IT CBIT, Hyderola

# Course 39: Introduction to game development

Code: CBIT/20ITV039

# **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	MUSTAFA AHMED MOHAMMED	01

Week 1 From Game Player to Game Developer

Week 2: Understanding Core Unity Concepts

Week 3: Building Your First Game

Week 4: Coding Gameplay Systems and Finishing Up

#### **Course 40: Getting started with AWS and machine learning Code:** CBIT/20ITV040

# Duration: 30 Hours

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	MANOJ KUMAR PALIVIRI	01

Week 1 Introduction to Machine Learning Week 2: Machine Learning Pipeline Week 3: Amazon AI Services: Computer Vision Week 4: Amazon AI Services: NLP

#### **Course 41: Introduction to CSS3**

**Code:** CBIT/20ITV041

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Rajendar Meti	01

Head Dept. of IT CBIT, Hyderabad

#### Week One: Getting Started with Simple Styling

Welcome to Introduction to CSS3! In this course you will learn how to style your pages by taking advantage of the power of CSS3. We will focus on both proper syntax (how to write your styling rules) and the importance of accessibility design (making sure that your style enhances your site, not make it harder to navigate). It is so important that you jump in ready to make mistakes and typos in this course. The only way you will really understand the material is to practice typing it in on your own as often as possible.

#### Week Two: Advanced Styling

Colors and fonts are just the start to styling your page. The nice thing about starting with these properties is that they are usually very straightforward to implement. You pick a color and boom - instant, expected results. This week we move on to new properties that tend to require a little bit of tweaking to get the desired results. In particular we will talk about the Box Model, background images, opacity, float, columns, visibility, and designing for different browsers.

#### Week Three: Psuedo-classes, Pseudo-elements, Transitions, and Positioning

Have you ever noticed on a web page that some links are blue and others are purple, depending upon if you have clicked on the links? How is it possible to style some anchor tags and not others? This week you will learn how to style pseudo-classes (e.g. a link that has been visiting, an element that has the mouse hovering over it) and pseudo-elements (e.g. the first-letter of a heading, the first line of a paragraph). These elements are not difficult to style, but do require careful coding. It is also the first step to adding simple animation to your site. We end this week with the subject of positioning -- how to get elements to stick to a certain part of your page. Think about annoying pop-up ads. How do the programmers get them to stay RIGHT IN THE MIDDLE OF THE SCREEN despite the fact that you keep trying to scroll them away.

#### Week Four: Putting It All Together

This week I am going to do some code review. I will show you how I used pseudo-classes and pseudo-elements to style a table. Then I give you a demonstration of three different navigation bars that utilize different styling options. We will want to step back and talk about how these different options may affect the accessibility of our site. The final step to completing this course is the completion of the peer-graded project. You will have the chance to demonstrate the ability to follow styling guidelines while still putting your own personal touch on the project. Just remember, you need to validate your work for proper syntax and accessibility.



# Course 42: Front-End development with react

Code: CBIT/20ITV042

# **Duration: 30 Hours**

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	Meghana Vishwanathula	01

Week 1 Introduction to React

Week 2: React Router and Single Page Applications

Week 3: React Forms, Flow Architecture and Introduction to Redux

Week 4: More Redux and Client-Server Communication

# Course 43: Crash course on python

Code: CBIT/20ITV043

#### **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Keerthi Aluvala	
2	sree keerthi meghana Bhurugubanda	03
3	vivek reddy pokala	

Week 1 Hello Python!

Week 2: Basic Python Syntax

Week 3: Loops

Week 4: Strings, Lists and Dictionaries

In this module you'll dive into more advanced ways to manipulate strings using indexing, slicing, and advanced formatting. You'll also explore the more advanced data types: lists, tuples, and dictionaries. You'll learn to store, reference, and manipulate data in these structures, as well as combine them to store complex data structures.



# **Course 44: Essential Mathematics for Machine Learning**

Code: CBIT/20ITV044

# **Duration: 30 Hours**

SN O	Registered & completed student Name	Total no. of students registered & completed
1	Keerthi Aluvala	
2	sree keerthi meghana Bhurugubanda	03
3	vivek reddy pokala	

#### Introduction to Linear Algebra and to Mathematics for Machine Learning

In this first module we look at how linear algebra is relevant to machine learning and data science. Then we'll wind up the module with an initial introduction to vectors. Throughout, we're focussing on developing your mathematical intuition, not of crunching through algebra or doing long pen-and-paper examples. For many of these operations, there are callable functions in Python that can do the adding up - the point is to appreciate what they do and how they work so that, when things go wrong or there are special cases, you can understand why and what to do.

#### Vectors are objects that move around space

In this module, we look at operations we can do with vectors - finding the modulus (size), angle between vectors (dot or inner product) and projections of one vector onto another. We can then examine how the entries describing a vector will depend on what vectors we use to define the axes - the basis. That will then let us determine whether a proposed set of basis vectors are what's called 'linearly independent.' This will complete our examination of vectors, allowing us to move on to matrices in module 3 and then start to solve linear algebra problems.

#### Matrices in Linear Algebra: Objects that operate on Vectors

Now that we've looked at vectors, we can turn to matrices. First we look at how to use matrices as tools to solve linear algebra problems, and as objects that transform vectors. Then we look at how to solve systems of linear equations using matrices, which will then take us on to look at inverse matrices and determinants, and to think about what the determinant really is, intuitively speaking. Finally, we'll look at cases of special matrices that mean that the determinant is zero or where the matrix isn't invertible - cases where algorithms that need to invert a matrix will fail.



#### Matrices make linear mappings

In Module 4, we continue our discussion of matrices; first we think about how to code up matrix multiplication and matrix operations using the Einstein Summation Convention, which is a widely used notation in more advanced linear algebra courses. Then, we look at how matrices can transform a description of a vector from one basis (set of axes) to another. This will allow us to, for example, figure out how to apply a reflection to an image and manipulate images. We'll also look at how to construct a convenient basis vector set in order to do such transformations. Then, we'll write some code to do these transformations and apply this work computationally.



# Course 73: Essential Data Science with R software – 2:Sampling Theory and Linear Regression Analysis

Code: CBIT/20ITV046 Duration: 30 Hours (Jan – Apr 2021)

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	SKM AQEEL	01

# <u>Syllabus</u>

Week 1: Introduction to data science and Calculations with R Software

Week 2: Basic Fundamentals of Sampling

Week 3: Simple Random Sampling

Week 4: Simple Random Sampling with R

Week 5: Stratified Random Sampling

**Week 6:** Stratified Random Sampling with R

**Week 7:** Bootstrap Methodology with R

**Week 8:** Introduction to Linear Models and Regression and Simple linear regression Analysis

Week 9: Simple Linear Regression Analysis with R

Week 10: Multiple Linear Regression Analysis

Week 11: Multiple Linear Regression Analysis with R

Week 12: Variable Selection using LASSO Regression

# **Books and references**

1. Sampling Techniques: W.G. Cochran, Wiley (Low price edition available) 2. Sampling Methodologies and Applications: P.S.R.S. Rao, Chapman and Hall/ CRC

3. An introduction to the bootstrap, Bradley Efron, R.J. Tibshirani, Chapman and Hall/CRC 1994.

4. Introduction to Linear Regression Analysis by Douglas C. Montgomery, Elizabeth A. Peck, G. Geoffrey Vining (Wiley), Low price Indian edition is available.

5. Applied Regression Analysis by Norman R. Draper, Harry Smith (Wiley), and Low price Indian edition is available.

6. Linear Models and Generalizations - Least Squares and Alternatives by C.R. Rao, H. Toutenburg, Shalabh, and C. Heumann (Springer, 2008)
7. Introduction to Statistics and Data Analysis With Exercises, Solutions and Applications in R Authors: Heumann, Christian, Schomaker, Michael, Shalabh, Publisher" Springer 2016

8. The R Software-Fundamentals of Programming and Statistical Analysis -Pierre Lafaye de Micheaux, Rémy Drouilhet, Benoit Liquet, Springer 2013 9. A Beginner's Guide to R (Use R) By Alain F. Zuur, Elena N. Ieno, Erik H.W.G. Meesters, Springer 2009



# Course 74: Advanced Graph Theory Code: CBIT/20ITV048

**Duration:** 30 Hours (Feb – Apr 2021)

SN	Registered & completed student	Total no. of students
O	Name	registered & completed
1	SKM AQEEL	01

# <u>Syllabus</u>

**Week 1** : Introduction to Graphs & its Applications, Basics of Paths, Cycles, and Trails, Connection, Bipartite Graphs, Eulerian Circuits, Vertex Degrees and Counting, Degree-sum formula, The Chinese Postman Problem and Graphic Sequences.

**Week 2**: Trees and Distance, Properties of Trees, Spanning Trees and Enumeration, Matrix-tree computation, Cayley's Formula, Prufer code.

**Week 3** : Matchings and Covers, Hall's Condition, Min-Max Theorem, Independent Sets, Covers and Maximum Bipartite Matching, Augmenting Path Algorithm, Weighted Bipartite Matching, Hungarian Algorithm.

**Week 4**: Stable Matchings and Faster Bipartite Matching, Factors & Perfect Matching in General Graphs, Matching in General Graphs: Edmonds' Blossom Algorithm

**Week 5**: Connectivity and Paths: Cuts and Connectivity, k-Connected Graphs, Network Flow Ford-Fulkerson Labeling Algorithm, Max-Flow Min-cut Theorem, Menger's Proof using Max-Flow Min-Cut Theorem.

**Week 6**: Vertex Coloring and Upper Bounds, Brooks' Theorem and Color-Critical Graphs, Counting Proper Colorings.

**Week 7**: Planar Graphs, Characterization of Planar Graphs, Kuratowski's Theorem, Wagner's Theorem.

**Week 8**: Line Graphs and Edge-coloring, Hamiltonian Graph, Traveling Salesman Problem and NP-Completeness, Dominating Sets.

# **Books and references**

- 1. D.B. West, Introduction to Graph Theory, Prentice Hall, 2001
- 2. Jon Kleinberg and Eva Tardos, Algorithm Design, Addison-Wesley, 2005
- 3. J.A.Bondy and U.S.R.Murty: Graph Theory, Springer, 2008.
- 4. R.Diestel: Graph Theory, Springer( low price edition) 2000.
- 5. F.Harary: Graph Theory, Narosa, (1988)
- 6. C. Berge: Graphs and Hypergraphs, North Holland/Elsevier, (1973)



# Course 75: Privacy and security in online social media

**Code:** CBIT/20ITV049 **Duration:** 30 Hours (Jan - Apr 2021)

SN O	Registered & completed student Name	Total no. of students registered & completed
1	SKM AQEEL	01

# <u>Syllabus</u>

**Week 1:** What is Online Social Networks, data collection from social networks, challenges, opportunities, and pitfalls in online social networks, APIs

Week 2: Collecting data from Online Social Media.

Week 3: Trust, credibility, and reputations in social systems

Week 4: Trust, credibility, and reputations in social systems

Week 5: Online social Media and Policing

**Week 6:** Information privacy disclosure, revelation and its effects in OSM and online social networks

**Week 7:** Phishing in OSM & Identifying fraudulent entities in online social networks

Week 8: Refresher for all topics

