Appendix 8

Format for Mandatory Disclosure

Mandatory Disclosure update on 17/03/2022

1.

Items	
AICTE File No.	***F. No. 750-80-118(E)/ ET/99***
Date & Period of last approval	***29Th June, 2021***

2.

Items	
Name of the Institution	***Birbhum Institute of Engineering & Technology***
Address of the Institution	***P.O.-Suri, Dist. - Birbhum, Pin Code- 731 101 (W.B.)***
Location map of the Institution	***Mouza, Kamalpur, P.O.- Suri***
City & Pin Code	***Suri & 731 101***
State/ UT	***West Bengal***
Phone number with STD Code	***N.A.***
FAX number with STD code	***N.A.***
Office hours at the Institution	***FROM 10.00 P.M. TO 6.00 P.M.***
Academic hours at the Institution	***FROM 10.00 P.M. TO 5.00 P.M.***
Email	***dir.biet@gmail.com***
Website	***www.bietsuri.ac.in***
Nearest Railway Station (dist in Km)	***Siuri , Towards Railway Station - 5 Kms.***
Nearest Airport (dist in Km)	Kazi Nazrul Islam Airport (IATA: RDP, ICAO: VEDG), 66 KM

3.

Items	
Type of Institution	Govt./ Govt. aided/ University Dept/ Deemed Univ./ ***Private-Self Financed***√
Category (1) of the Institution	***Non Minority***√ / Minority specify minority
Category (2) of the Institution	***C0-ed***√ / Women only

4.

Items	
Name of the organization running the Institution	***Indian Centre for Advancement of Research and Education (ICARE), Birbhum.***
Type of the organization	***Society***√ / Trust/ PPP
Address of the organization	***Birbhum Institute of Engineering & Technology, P.O.-Suri, Dist. - Birbhum, Pin Code- 731 101 (W.B.)***
Registered with	***Registered under No. s/91361 of 1998-1999 under Registration of Societies West Bengal Act XXVI of 1961.***
Registration date	***1998 – 1999***
Website of the organization	***NA***

5.

Items	
Name of the affiliating University	***Maulana Abul Kalam Azad University of Technology, West Bengal***
Address	***BF Block, Sector 1, Bidhannagar, Kolkata, West Bengal 700064***
Website	**www.wbut.net , www.wbutcollegeinfor.org, www.wbut.ac.in & www.wbutcet.org. vcwbut@sify.com.**
Latest affiliation period	***2021 – 2022***

6.

Items	
Name of the Principal/ Director	***Dr. Gorachand Das, Director (Acting)***
Exact Designation	***Asst. Prof.***
Phone number with STD code	***Mobile No.- 06295976280***
FAX number with STD code	***NA***
Email	***dir.biet@gmail.com***
Highest Degree	***Ph. D***
Field of specialization	***Economics & Statistics***

7.

Items	
Governing Board Members	***14 (Fourteen)***
Frequency of meetings & date of last meeting	***2 No., 28th December, 2021.***

8.

Items	
Academic Advisory Body	***ACADEMIC COMMITTEE***
Frequency of meetings & date of last meeting	***2 No., 13rd November, 2021& 16th March, 2022***

9.

CHAIRPERSON
BOARD OF GOVERNORS
DIRECTOR

<table>
<tr><th>ADMINISTRATIVE SECTION</th><th>ACADEMIC SECTION</th><th>TRAINING & PLACEMENT</th><th>EXAMINATION SECTION</th><th>HOSTEL ADMINISTRATION</th></tr>
<tr><td>Registrar (Acting)</td><td>HODs /TICs of Academic Departments</td><td rowspan="3">Teacher-in-Charge</td><td rowspan="3">Teacher-in-Charge</td><td>Officer-in-Charge, Student Affairs</td></tr>
<tr><td>Medical Attendant</td><td rowspan="2">Associate Professor//Assistant Professors of different Academic Departments</td><td>Hostel Superintendent</td></tr>
<tr><td>Head Assistant</td><td>Warden / Attendant</td></tr>
<tr><td>Assistant Librarian</td><td rowspan="2">Technical Assistants of Different Academic Departments</td><td rowspan="8">Attendant</td><td rowspan="2">Assistant Grade-II</td><td>Sweeper</td></tr>
<tr><td>Sub-Assistant Engineer</td><td rowspan="7"></td></tr>
<tr><td>Steno-Typist</td><td rowspan="3">Laboratory Attendants of Different Academic Departments</td><td rowspan="6">Attendant</td></tr>
<tr><td>Cashier</td></tr>
<tr><td>Assistant Grade-I</td></tr>
<tr><td>Caretaker</td><td rowspan="4"></td></tr>
<tr><td>Library Attendant</td></tr>
<tr><td>Attendant</td></tr>
<tr><td>Sweeper</td></tr>
</table>

10.

Items	
Student feedback mechanism on Institutional Governance/ faculty performance	Yes

11.

Items	
Grievance redressal mechanism for faculty, staff and students	Yes

12. A.
Name of the Department: **Computer Science & Engineering (CSE)**
Level : UG√ PG

1st Year of approval : 1999

Item	CAY	CAY-1	CAY-2
Year wise Sanctioned Intake	60+06	60+06	60+06
Year wise Actual Admission	12	05	15
Cut off marks – General quota	45% in PCME (10+2)		
% Students passed with Distinction	Results awaited		
%Students passed with First Class	Results awaited	100%	100%
Students Placed	12	04	18
Average Pay package, Rs./ Year	2.05	2.2	2.1
Students opted for Higher Studies			
Accreditation Status of the course	Not yet Accredited		
Doctoral Courses	Not Applicable		
Foreign Collaborations, if any	Not Applicable		
Professional activities	Nil		
Consultancy activities	Nil		
Grants fetched	Nil		
Departmental Achievements	Nil		
Distinguished Alumni	Results awaited	05	Nil

12. B.
Name of the Department: **Electronics & Communication Engineering (ECE)**
Level : UG√ PG

1st Year of approval : 1999

Item	CAY	CAY-1	CAY-2
Year wise Sanctioned Intake	60+06	60+06	60+06
Year wise Actual Admission	01	01	02
Cut off marks – General quota	45% in PCME (10+2)		
% Students passed with Distinction	Results awaited		
% Students passed with First Class	Results awaited	100%	100%
Students Placed	06	04	16
Average Pay package, Rs./ Year	2.1	2.15	2.3
Students opted for Higher Studies			
Accreditation Status of the course	Not yet Accredited		
Doctoral Courses	Not Applicable		
Foreign Collaborations, if any	Not Applicable		
Professional activities	Webinar on GATE, Job & Higher Education Programme	Nil	Nil
Consultancy activities	Nil		
Grants fetched	Nil		
Departmental Achievements	Nil		
Distinguished Alumni	N.A.	2	2

12. C.
Name of the Department: **Electrical Engineering (EE)**
Level : UG√ PG

1st Year of approval : 1999

Item	CAY	CAY-1	CAY-2
Year wise Sanctioned Intake	60+06	60+06	60+06
Year wise Actual Admission	01	01	02
Cut off marks – General quota	45% in PCME (10+2)		
% Students passed with Distinction	Results awaited		
% Students passed with First Class	Results awaited	100%	100%
Students Placed	04	09	19
Average Pay package, Rs./ Year	2.2	1.95	2.3
Students opted for Higher Studies	02	11	11
Accreditation Status of the course	Not yet Accredited		
Doctoral Courses	Not Applicable		
Foreign Collaborations, if any	Not Applicable		
Professional activities	Nil		
Consultancy activities	Nil		
Grants fetched	Nil		
Departmental Achievements	Nil		
Distinguished Alumni	N.A.	02	nil

12. D.
Name of the Department: **Mechanical Engineering (ME)**
Level : UG√ PG

1st Year of approval : 2000

Item	CAY	CAY-1	CAY-2
Year wise Sanctioned Intake	120+12	120+12	120+12
Year wise Actual Admission	0	0	0
Cut off marks – General quota	45% in PCME (10+2)		
% Students passed with Distinction	Results awaited		
% Students passed with First Class	Results awaited	100%	100%
Students Placed	11	08	18
Average Pay package, Rs./ Year	1.95	2	2.2
Students opted for Higher Studies			
Accreditation Status of the course	Not yet Accredited		
Doctoral Courses	Not Applicable		
Foreign Collaborations, if any	Not Applicable		
Professional activities	Nil		
Consultancy activities	Nil		
Grants fetched	Nil		
Departmental Achievements	Nil		
Distinguished Alumni	Nil		

12. E.
Name of the Department: **Civil Engineering (CE)**
Level : UG√ PG

1st Year of approval : 2006

Item	CAY	CAY-1	CAY-2
Year wise Sanctioned Intake	120+12	120+12	120+12
Year wise Actual Admission	02	0	01
Cut off marks – General quota	45% in PCME (10+2)		
% Students passed with Distinction	Results awaited		
% Students passed with First Class	Results awaited	100%	100%
Students Placed	12	07	10
Average Pay package, Rs./ Year	2.05	2.1	2.25
Students opted for Higher Studies			
Accreditation Status of the course	Not yet Accredited		
Doctoral Courses	Not Applicable		
Foreign Collaborations, if any	Not Applicable		
Professional activities	Nil		
Consultancy activities	Nil		
Grants fetched	Nil		
Departmental Achievements	Nil		
Distinguished Alumni	Nil		

12. F.
Name of the Department: **Power Engineering (HPE) under Mechanical Engineering.**
Level : UG PG√

1st Year of approval : 2013

Item	CAY	CAY-1	CAY-2
Year wise Sanctioned Intake	18	18	18
Year wise Actual Admission	04	05	10
Cut off marks – General quota	B. Tech with 6.75 CGPA in Mechanical Engineering		
% Students passed with Distinction	Results awaited		
% Students passed with First Class	Results awaited	100%	100%
Students Placed			
Average Pay package, Rs./ Year			
Students opted for Higher Studies			
Accreditation Status of the course	Not yet Accredited		
Doctoral Courses	Not Applicable		
Foreign Collaborations, if any	Not Applicable		
Professional activities	Nil		
Consultancy activities	Nil		
Grants fetched	Nil		
Departmental Achievements	Nil		
Distinguished Alumni	Nil		

12. G.
Name of the Department: **Manufacturing Technology (MMT) under Mechanical Engineering.**
Level : UG PG√

1st Year of approval : 2013

Item	CAY	CAY-1	CAY-2
Year wise Sanctioned Intake	18	18	18
Year wise Actual Admission	10	06	02
Cut off marks – General quota	B. Tech with 6.75 CGPA in Mechanical Engineering		
% Students passed with Distinction	Results awaited		
% Students passed with First Class	Results awaited	100%	100%
Students Placed			
Average Pay package, Rs./ Year			
Students opted for Higher Studies			
Accreditation Status of the course	Not yet Accredited		
Doctoral Courses	Not Applicable		
Foreign Collaborations, if any	Not Applicable		
Professional activities	Nil		
Consultancy activities	Nil		
Grants fetched	Nil		
Departmental Achievements	Nil		
Distinguished Alumni	Nil		

13.
Department of **Computer Science and Engineering (UG)**

Items			
Name of Teaching Staff	*Md. Abu Safi*		
Designation	Associate Professor		
Department	CSE		
Date of joining the Institution	*01/08/2000*		
Qualifications with class/ Grade	UG- 1992-1st	PG- 2005-1st	PhD-
Total Experience in Years	Teaching- 22	Industry- 6	Research-
Papers Published	National		International-
Papers Presented in Conferences	National		International-
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Kazi Md. Arfin		
Designation	Asst. Professor		
Department	C.S.E.		
Date of joining the Institution	17.01.2006		
Qualifications with class/ Grade	UG-2003-1ST	PG- 12-1ST	Ph. D.
Total Experience in Years	Teaching: 16.1 years	Industry: 2 years	Research: NIL
Papers Published	National: 0		International: 0
Papers Presented in Conferences	National: 0		International: 0
PhD Guide? Give field & University	Field: N/A		University: N/A
PhDs/ Projects Guided	PhDs: N/A		Projects at Masters Level: N/A
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Asrofi Khatun		
Designation	Assistant Professor		
Department	CSE		
Date of joining the Institution	14.02.2008		
Qualifications with class/ Grade	UG-2003-1ST	PG-2006-1ST	
Total Experience in Years	Teaching- 14yrs	Industry- 0	Research
Papers Published	International 1		
Papers Presented in Conferences	Nil		
PhD Guide? Give field & University	Nil		
PhDs/ Projects Guided	Nil		
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Munmun Paul		
Designation	Assistant Professor		
Department	CSE		
Date of joining the Institution	14.01.2008		
Qualifications with class/ Grade	UG- 2005	PG- 2008 (1st)	Ph. D
Total Experience in Years	Teaching- 14yrs	Industry- 0	Research
Papers Published	National		International- 01
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Partha De		
Designation	Assistant Professor		
Department	CSE		
Date of joining the Institution	4.11.2008		
Qualifications with class/ Grade	UG - 2004 -1st	PG- 15 1st	Ph. D
Total Experience in Years	Teaching- 13 yrs 3 m	Industry	Research
Papers Published	National- 1		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Dr. Debasri Chakraborty		
Designation	Assistant Professor		
Department	CSE		
Date of joining the Institution	7.08.2010		
Qualifications with class/ Grade	UG- 2005-1ST	PG- 2008-1ST	Ph. D- with 1st class
Total Experience in Years	Teaching- 16yrs	Industry-	Research- 5yrs
Papers Published	National		International- 5+5JR
Papers Presented in Conferences	National 1		International- 5
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Bronze medal in M. Tech		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Department of **Electrical Engineering (UG)**

Items			
Name of Teaching Staff	Pralay Majumder		
Designation	Assistant Professor		
Department	EE		
Date of joining the Institution	*13/8/2004*		
Qualifications with class/ Grade	UG- 2004	PG- 2012	PhD-
Total Experience in Years	Teaching- 14 yrs	Industry-	Research-
Papers Published	National		International- 03
Papers Presented in Conferences	National		International-
PhD Guide? Give field & University	Field-		University-
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents			
Professional Memberships			
Consultancy Activities			
Awards			
Grants fetched			
Interaction with Professional Institutions			

Items			
Name of Teaching Staff	Sujay Sarkar		
Designation	Assistant Professor		
Department	Electrical Engineering		
Date of joining the Institution	03-01-2022		
Qualifications with class/ Grade	UG- 2011	PG- 2013	Ph. D
Total Experience in Years	Teaching: 9 Years	Industry: 0	Research:
Papers Published	National: 0		International: 5
Papers Presented in Conferences	National: 0		International: 0
PhD Guide? Give field & University	NA		University
PhDs/ Projects Guided	NA		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Chandan Datta		
Designation	Asst. Prof. (Ad-hoc, part time)		
Department	Electrical Engineering		
Date of joining the Institution	11.01.2022		
Qualifications with class/ Grade	UG- 2004	PG- 2010 ME 1st	Ph. D
Total Experience in Years	Teaching: 17 Yrs	Industry: 0	Research
Papers Published	National: 3		International: 1
Papers Presented in Conferences	National: 3		International: 0
PhD Guide? Give field & University	NA		University
PhDs/ Projects Guided	NA		Projects at Masters Level
Books Published/ IP Rs./ Patents	NA		
Professional Memberships	NA		
Consultancy Activities	NA		
Awards	NA		
Grants fetched	NA		
Interaction with Professional Institutions	NA		

Department of *Electronics and Communication Engineering (UG)*

Items			
Name of Teaching Staff	Uttam Kumar Ghosh		
Designation	Associate Professor		
Department	ECE		
Date of joining the Institution	*01.09.01*		
Qualifications with class/ Grade	UG- 1981	PG- 1986	Ph. D
Total Experience in Years	Teaching- 21	Industry- 15yrs 5 m	Research- 7 yrs
Papers Published	National		International- 2
Papers Presented in Conferences	National- 2		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Anjumanara Begam		
Designation	Assistant Professor		
Department	ECE		
Date of joining the Institution	28-01-2008		
Qualifications with class/ Grade	UG- 2007 (1st)	PG- 2009 (1ST)	Ph. D
Total Experience in Years	Teaching- 14 years	Industry	Research-3 years
Papers Published	National -2		International-8
Papers Presented in Conferences	National -2		International-0
PhD Guide? Give field & University	Field Optical Communication & Networks		University-Aliah University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	NA		
Professional Memberships	OSA		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Biswajit Ghosh		
Designation	Assistant Professor		
Department	ECE		
Date of joining the Institution	03.11.2008		
Qualifications with class/ Grade	UG: 2006 (ECE)-1st Class	PG: 2008 (ECE)(Microwave)-1st Class	Ph.D.: Pursuing at IIT Dhanbad
Total Experience in Years	Teaching-13 years 4 months	Industry	Research-6 years
Papers Published	National		International-15
Papers Presented in Conferences	National-2		International-1
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level-01
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	IEEE-Institute of Electrical and Electronics Engineers, OSA-Optical Society of America, IETE-Institution of Electronics and Telecommunication Engineers, ISTE-Indian Society for Technical Education.		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Asish Debnath		
Designation	Assistant Professor		
Department	ECE		
Date of joining the Institution	13.01.2012		
Qualifications with class/ Grade	UG- 2002 (1st)	PG- 2007 (1st)	Ph D- Research
Total Experience in Years	Teaching- 13+	Industry- 3+	
Papers Published	National		International- 1
Papers Presented in Conferences	National		International- 1
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Best employee of the month, June 2009, TCS		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Nirmalya Chandra		
Designation	Assistant Professor		
Department	ECE		
Date of joining the Institution	01.02.2012		
Qualifications with class/ Grade	UG – 2007-1ST	PG- 2010-1ST	PhD
Total Experience in Years	Teaching - 12	Industry – N.A	Research – 07 YEARS
Papers Published	National - 01		International - 10
Papers Presented in Conferences	National – N.A		International -3
PhD Guide? Give field & University	Field – N.A		University
PhDs/ Projects Guided	PhDs – THESIS SUBMITTED		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Reviewer of Journal : 1 (* UGC CARE : International Journal of Intelligent Systems)		

Items			
Name of Teaching Staff	Samiran Maiti		
Designation	Assistant Professor		
Department	ECE		
Date of joining the Institution	14.02.2012		
Qualifications with class/ Grade	UG- 2008-1st	M. Tech-2010-1st	Ph D (pursuing)
Total Experience in Years	Teaching- 13 year	Industry	Research- 5 Year
Papers Published	National 2		International 9
Papers Presented in Conferences	National 1		International 5
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Three Book Chapter		
Professional Memberships	•Associate Member in IEI (Membership number: 'AM153011-1') •Life Member of Indian Society for Technical Education		
Consultancy Activities	Nil		
Awards	Received BHARAT VIKAS AWARD in the year 2019 Received Best Paper Award in International Conference on Application of Robotics in Industry using Advanced Mechanisms (ARIAM), India in 2019.		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Department of **Mechanical Engineering (UG) & PG**

Items			
Name of Teaching Staff	Titov Banerjee		
Designation	Assistant Professor		
Department	ME		
Date of joining the Institution	11/09/2000		
Qualifications with class/ Grade	UG- 1991	PG- 2006-1ST	PhD-
Total Experience in Years	Teaching- 21YRS	Industry-9yrs	Research
Papers Published	National		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	*Satyabrata Saha*		
Designation	Assistant Professor		
Department	ME		
Date of joining the Institution	03/08/10		
Qualifications with class/ Grade	UG- 2006-1ST	PG-2010-1ST	PhD-
Total Experience in Years	Teaching- 11YRS	Industry- 6M	Research- 7YRS
Papers Published	National		International- 4(2SCI)
Papers Presented in Conferences	National		International- 2
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level- 8
Books Published/ IP Rs./ Patents	1 Chapter		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Sudipta Basak		
Designation	Assistant Professor		
Department	ME		
Date of joining the Institution	**02/06/2014**		
Qualifications with class/ Grade	UG- 2008-1st	PG- 2013-1st	PhD-
Total Experience in Years	Teaching- 8yrs 6m	Industry- 3yrs 2m	Research- 1yrs
Papers Published	National		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level- 08
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Dr. Abhishek Rudra Pal		
Designation	Assistant Professor		
Department	ME		
Date of joining the Institution	05/01/2022		
Qualifications with class/ Grade	UG- 2008-1ST	PG- 2011-1ST	PhD- Rehabilitation Robotics
Total Experience in Years	Teaching- 1YR	Industry-	Research- 11YRS
Papers Published	National- 11JR		International- 4 CONF.
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	UTSAB MAJUMDAR		
Designation	ASSISTANT PROFESSOR (ad-hoc)		
Department	ME		
Date of joining the Institution	02/03/2022		
Qualifications with class/ Grade	UG -2017-A	PG -2021-A	
Total Experience in Years	Teaching	Industry	Research
Papers Published	National		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Department of **Information Technology (UG)**

Items			
Name of Teaching Staff	Nilim Sarkar		
Designation	Assistant Professor		
Department	IT		
Date of joining the Institution	02/02/2005		
Qualifications with class/ Grade	UG-	PG-	PhD-
Total Experience in Years	Teaching- 17 years	Industry	Research
Papers Published(Journal)	National		International- 1
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Nil		
PhDs/ Projects Guided	Nil		
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	International Association of Computer Science & Information Technology(IACSIT		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Himanshu Sarkar		
Designation	Assistant Professor		
Department	IT		
Date of joining the Institution	01/04/2006		
Qualifications with class/ Grade	UG- 2004-1st	PG- 2013-2nd	PhD-
Total Experience in Years	Teaching- 16yrs 5m	Industry	Research
Papers Published	National		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Suman Kumar Bhattacharyya		
Designation	Assistant Professor		
Department	IT		
Date of joining the Institution	17-01-2008		
Qualifications with class/ Grade	1st Class B. Tech. in Information Technology (From BIET, WBUT, West Bengal)	1st Class M. Tech. in Computer Science &Engineering (From IIT Dhanbad)	PhD (Pursuing) in Computer Science &Engineering (From National Institute of Technical Teachers' Training & Research, Kolkata)
Total Experience in Years	Teaching: **14.2** Yrs	Industry	Research: **05** Years
Papers Published	National: 0		International: **03**
Papers Presented in Conferences	National: **03**		International:**01**
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	**01**		
Professional Memberships	**02**		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Satyajit Mondal		
Designation	Assistant Professor		
Department	IT		
Date of joining the Institution	03/11/2008		
Qualifications with class/ Grade	UG- 2004-1st	PG- 2015-1st	Ph. D-
Total Experience in Years	Teaching- 13yrs 3 m	N/A	N/A
Papers Published(Journal)	N/A		International
Papers Presented in Conferences	Nil		
PhD Guide? Give field & University	Nil		
PhDs/ Projects Guided	Nil		
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Saikat Chakraborty		
Designation	Assistant Professor		
Department	IT		
Date of joining the Institution	27/07/2009		
Qualifications with class/ Grade	UG- 2008-1st	PG- 2015-1st	PhD-
Total Experience in Years	Teaching- 12.7 yrs	N/A	N/A
Papers Published(Journal)	Nil		
Papers Presented in Conferences	Nil		
PhD Guide? Give field & University	Nil		
PhDs/ Projects Guided	Nil		
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Department of **Civil Engineering (UG)**

Items			
Name of Teaching Staff	Raktim Biswas		
Designation	Assistant Professor		
Department	CE		
Date of joining the Institution	03/11/2008		
Qualifications with class/ Grade	UG- 2008-1st	PG- 2011-1st	PhD-
Total Experience in Years	Teaching: 13	Industry: 0	Research: 8
Papers Published	National: 0		International: 3
Papers Presented in Conferences	National: 2		International: 4
PhD Guide? Give field & University	Field: NA		University: NA
PhDs/ Projects Guided	PhDs: 0	B. Tech Level: 10	Projects at Masters Level: 0
Books Published/ IP Rs./ Patents	NA		
Professional Memberships	6 Nos.		
Consultancy Activities	NA		
Awards	NA		
Grants fetched	NA		
Interaction with Professional Institutions	4 Nos.		

Items			
Name of Teaching Staff	Susovan Sinha		
Designation	Assistant Professor.		
Department	CE		
Date of joining the Institution	12/07/2012.		
Qualifications with class/ Grade	B. Tech.: 1st Class.	M.E.: 1st Class	PhD: NA.
Total Experience in Years	Teaching: 10 Yrs.	Industry: NA.	Research: NA.
Papers Published	National		International: 1
Papers Presented in Conferences	National		International: 1
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs: NA.	Projects at B. Tech Level: 12 Nos.	Projects at Masters Level: NA.
Books Published/ IP Rs./ Patents	NA.		
Professional Memberships	NA.		
Consultancy Activities	Departmental Laboratory Consultancy Activities.		
Awards	1st Class First GOLD Medalist in M.E. from Jadavpur University, Kolkata, WB.		
Grants fetched	NA.		
Interaction with Professional Institutions	NA.		

Items			
Name of Teaching Staff	Debashis Bhattacharya		
Designation	Assistant Professor		
Department	CE		
Date of joining the Institution	16/01/2018		
Qualifications with class/ Grade	B.E: 1st	M. Tech: 1st	Ph. D
Total Experience in Years	Teaching: 14.5	Industry: 0	Research: 5
Papers Published	National : 0		International: 0
Papers Presented in Conferences	National: 0		International: 0
PhD Guide? Give field & University	Field: NA		University
PhDs/ Projects Guided	PhDs: 0	Projects at B. Tech Level: 15	Projects at Masters Level: 0
Books Published/ IP Rs./ Patents	NA		
Professional Memberships	NA		
Consultancy Activities	NA		
Awards	NA		
Grants fetched	NA		
Interaction with Professional Institutions	4 Nos.		

Items			
Name of Teaching Staff	Saikat Datta		
Designation	Assistant Professor		
Department	CE		
Date of joining the Institution	08/02/2018		
Qualifications with class/ Grade	B.E.: 1st	M.E: 1st	Ph. D
Total Experience in Years	Teaching: 7.5	Industry: 0	Research: 1
Papers Published	National: 1		International: 0
Papers Presented in Conferences	National: 1		International: 0
PhD Guide? Give field & University	Field: NA		University: NA
PhDs/ Projects Guided	PhDs: 0	Projects at B. Tech Level: 15	Projects at Masters Level: 0
Books Published/ IP Rs./ Patents	NA		
Professional Memberships	NA		
Consultancy Activities	NA		
Awards	NA		
Grants fetched	NA		
Interaction with Professional Institutions	NA		

Items			
Name of Teaching Staff	Pankaj Kumar Sarkar		
Designation	Lecturer		
Department	CE		
Date of joining the Institution	02/04/2016		
Qualifications with class/ Grade	B. Tech: 1st	M. Tech: 1st	PhD
Total Experience in Years	Teaching: 6	Industry: 0	Research: 1
Papers Published	National: 0		International: 0
Papers Presented in Conferences	National: 0		International: 0
PhD Guide? Give field & University	Field: NA		University: NA
PhDs/ Projects Guided	PhDs: 0	Projects at B. Tech Level: 6	Projects at Masters Level: 0
Books Published/ IP Rs./ Patents	NA		
Professional Memberships	NA		
Consultancy Activities	NA		
Awards	NA		
Grants fetched	NA		
Interaction with Professional Institutions	NA		

Department of **Mathematics**

Items			
Name of Teaching Staff	Asim Kumar Garai		
Designation	Assistant Professor		
Department	Mathematics		
Date of joining the Institution	20/07/2002		
Qualifications with class/ Grade	UG- B. Sc (Hons) - 2nd B.Ed-1st	PG- M.Sc-2nd M.Phil-1st	PhD- Nil
Total Experience in Years	Teaching- 20 yrs	Industry Nil	Research- Nil
Papers Published	National- Nil		International- Nil
Papers Presented in Conferences	National- 01		International-Nil
PhD Guide? Give field & University	Field- Nil		University- Nil
PhDs/ Projects Guided	PhDs- Nil		Projects at Masters Level- Nil
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	*Sudin Mandal*		
Designation	Assistant Professor		
Department	Mathematics		
Date of joining the Institution	08/09/2000		
Qualifications with class/ Grade	UG- B.SC.(H), 1998,B.U.	PG- M.SC,2000, B.U.M.TECH,NIT, *DGP/R.A &OR*	Ph. D.
Total Experience in Years	Teaching- 21 yrs	Industry Nil	Research – 2 yrs
Papers Published	National- Nil		International- Nil
Papers Presented in Conferences	National- 01		International- 1
PhD Guide? Give field & University	Field- Nil		University- Nil
PhDs/ Projects Guided	PhDs- Nil		Projects at Masters Level- Nil
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Hiya Mondal		
Designation	Assistant Professor (ad-hoc)		
Department	Mathematics		
Date of joining the Institution	11/01/2022		
Qualifications with class/ Grade	UG- B. Sc(H)-1st B.Ed-1st Class	PG- M.Sc-1st	Ph. D Pursing (Thesis submitted)
Total Experience in Years	Teaching - 1year	Industry Nil	Research- 5years
Papers Published	National- Nil		International- 03
Papers Presented in Conferences	National- 01		International- 02
PhD Guide? Give field & University	Field- Nil		University Nil
PhDs/ Projects Guided	PhDs Nil		Projects at Masters Level- Nil
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Best paper award, Calcutta Mathematical Society		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Soumen Garai		
Designation	Assistant Professor (ad-hoc)		
Department	Mathematics		
Date of joining the Institution	04/01/2022		
Qualifications with class/ Grade	UG- B. Sc (H)-1st , B.Ed-1st	PG- M.Sc-1st	Ph. D Nil
Total Experience in Years	Teaching – 1m	Industry Nil	Research Nil
Papers Published	National Nil		International Nil
Papers Presented in Conferences	National Nil		International
PhD Guide? Give field & University	Field Nil		University Nil
PhDs/ Projects Guided	PhDs Nil		Projects at Masters Level Nil
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Department of **Physics:**

Items			
Name of Teaching Staff	Dr Prosenjit Chatterjee		
Designation	Assistant Professor		
Department	Physics		
Date of joining the Institution	25/07/2007		
Qualifications with class/ Grade	B.Sc (H) , 1st class	M. Sc-Physics	Ph.D.- Science
Total Experience in Years	Teaching- 14 yrs	Industry- Nil	Research- 15
Papers Published	National- 2		International- 3
Papers Presented in Conferences	National- 8		International- 2
PhD Guide? Give field & University	Nil		University
PhDs/ Projects Guided	Nil		Projects at Masters Level- Nil
Books Published/ IP Rs./ Patents	1		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	NET, GATE		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	*Rudra Prasad Bose*		
Designation	Assistant Professor		
Department	Physics		
Date of joining the Institution	*01/08/12*		
Qualifications with class/ Grade	B. Sc (H) , 1st	M. Sc-Physics	PhD-
Total Experience in Years	Teaching- 13	Industry	Research- 5YRS
Papers Published	National 1		International 1
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field- Nano Science		University- Visva Bharati
PhDs/ Projects Guided	PhDs		Projects at Masters Level- Condensed matter physics & Nano Science.
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Department of **Chemistry & Environmental Science:**

Items			
Name of Teaching Staff	Sandip Mandal		
Designation	Assistant Professor		
Department	Chemistry & Environmental Science		
Date of joining the Institution	15/01/2014		
Qualifications with class/ Grade	UG- B. Sc, 2001	*MSc.2006.BHU. M.Phil.2010.*	PhD-
Total Experience in Years	Teaching- 8yrs	Industry	Research
Papers Published	National		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Rahul Kumar Singha		
Designation	Lecturer		
Department	Chemistry & Environmental Science		
Date of joining the Institution	01/01/2022		
Qualifications with class/ Grade	B. Sc	M. Sc	Ph. D-
Total Experience in Years	Teaching- 13 yrs	Industry- 2 yrs	Research
Papers Published	National		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	One Book published		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Department of *Humanities:*

Items			
Name of Teaching Staff	Dr. Rajdoot Mukhopadhyay		
Designation	Assistant Professor		
Department	Humanities		
Date of joining the Institution	*01/09/99*		
Qualifications with class/ Grade	BA- 1995- 2nd	MA-1998- 2nd, M. Phil	PhD- 2017
Total Experience in Years	Teaching- 22 yrs	Industry	Research
Papers Published	National 2		International 0
Papers Presented in Conferences	National 3		International 0
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	1		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Faculty of the Year 2014, BIET.		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Dr. Gorachand Das		
Designation	Assistant Professor		
Department	Humanities		
Date of joining the Institution	04/09/2002		
Qualifications with class/ Grade	UG : *B.A.(H), Econ- 1994- 2nd*	PG : M.A (*Econ.& Statistics*) - 2nd M. Phil. 2009	Ph. D : 2017
Total Experience in Years	Teaching : 20 yrs	Industry :	Research : 07 yrs
Papers Published	National : 01		International : 01
Papers Presented in Conferences	National :		International :
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Moumita Sarkar Banerjee		
Designation			
Department			
Date of joining the Institution	05/09/2002		
Qualifications with class/ Grade	B.A(H)- 2nd	M.A.- 2nd M. Phil	
Total Experience in Years	Teaching 19Yrs	Industry	Research 2Yrs
Papers Published	National		International
Papers Presented in Conferences	National		International
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Dr. Swarup Roy		
Designation	Assistant Professor		
Department	Humanities		
Date of joining the Institution	03.11.2008		
Qualifications with class/ Grade	UG : 1991Eng(H) - 2nd Class	PG : 1995 M.A (Eng) - 2nd M. Phil. 1999 (Eng.)-(1st Class)	Ph. D : 2009-10
Total Experience in Years	Teaching : 18 yrs. 2 Months	Industry : 6 Months	Research : 5 yrs
Papers Published	National : Nil		International : Nil
Papers Presented in Conferences	National : Nil		International : Nil
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

Items			
Name of Teaching Staff	Quazi Md. Sarowar Alam		
Designation	Lecturer		
Department	Humanities		
Date of joining the Institution	01/01/2022		
Qualifications with class/ Grade	UG : B. Com	PG : M.com, 2nd	Ph. D :
Total Experience in Years	Teaching : 18 yrs. 2 Months	Industry : 6 Months	Research : 5 yrs
Papers Published	National : Nil		International : Nil
Papers Presented in Conferences	National : Nil		International : Nil
PhD Guide? Give field & University	Field		University
PhDs/ Projects Guided	PhDs		Projects at Masters Level
Books Published/ IP Rs./ Patents	Nil		
Professional Memberships	Nil		
Consultancy Activities	Nil		
Awards	Nil		
Grants fetched	Nil		
Interaction with Professional Institutions	Nil		

14.

Items	
Admission Quota #	As per Government Admission Roles
Entrance test/ admission criteria	**Through WBJEE, AIEEE, 45% in P.C.M.E.**
Cut off/ last candidate admitted	**45% in P.C.M.E.**
Fees in rupees	As per rules.
Number of fee Waivers offered	As per rules.
Admission Calendar	**July every year**
PIO quota	Yes/ No √

15.

Items		
Infrastructural Information^		
Classroom/ Tutorial Room facilities	***Classroom – 35*** ***Tutorial Room – 13***	 
Laboratory details	***67***	

Availability of Laboratories requirements (for Engg./Pharmacy/HMCT/MBA/MCA/ARCH) taking into account the aforesaid MAKAUT, WB norms :

Department of COMPUTER SCIENCE & ENGINEERING

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ COMPUTER SCIENCE & ENGINEERING	**2nd Sem**	1. Basic Computation & Principles of Comp. Programming. Lab (CS291)	**Lab-I/65 ACD – I 2nd Floor CL-I**	YES P4/1.8GHz/40GB/640MB (17) P4/1.8GHz/40GB/768MB (3) P4/1.8GHz/40GB/632MB (1) Core-I3/3.19GHz/500GB/2GB (6) Dual-Core/3GHz/500GB/2GB (3) **Software** :Windows XP Professional, Turbo C2.			
	3rd Semester	1.Data Structure Lab(CS392) 2. Numerical methods and programming Lab(MCS391)					
		1. Numerical methods and programming Lab(MCS391)	**Lab-II/65 ACD – 1 2ND Floor CL-II**	YES P4/2.93GHz/40GB/1.24GB (9 nos.) CORE II DUOS /2.93GHz/320GB/2GB (18 nos.) P4/3.20 GHz/80GB/1.5GB (2nos.) P4/1.70GHz/40GB/384MB (1no.) **Software**: Windows 8, Windows XP Professional, Ms Office Professional 2003, Turbo C2, Oracle 9i database, Xilinx,			
		1. Numerical methods and programming Lab(MCS391)	**Lab-IV/65 ACD – 1 2ND Floor IT- IV**	YES Dual Core /2.6GHz/40GB/2GB (9 nos.) AMD Athlon/3.2GHz/250GB/2GB (20nos.) **Software**: Windows XP Professional, Turbo C2.			
		1.Computer Organization Lab (CS393)	**CoLab/ 60 ACD – II Ground Floor COL**	YES Hardware:- IC, Wire, Bread-Board, Multimeter, Power supply. Software:- **NA**			

Course / Branch [To be filled by the College]	Semester [To be filled by the College]	Name of the Laboratory with MAKAUT,WB Paper Code [To be filled by the College]	Room No. / Area (Sq.ft.) [To be filled by the College]	Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set) [To be filled by the College]		Observations of the Inspection Team [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ COMPUTER SCIENCE & ENGINEERING	**4th Semester**	1.Numerical Methods Lab (CS)-491	**Lab-1/65 ACD-1 2ND Floor CL-1**	YES P4/1.8GHz/40GB/640MB (17nos.), P4/1.8GHz/40GB/768MB (3nos.), P4/1.8GHz/40GB/632MB (1no.) Core-I3/3.19GHz/500GB/2GB (6nos.) Dual-Core/3GHz/500GB/2GB (3nos) **Software**: Windows XP Professional, Turbo C2			
		1.Numerical Methods Lab (CS)-491	**Lab-V/65 ACD-1 1st Floor ITL-5**	YES Core-2 Duo/2.67GHz/160GB/1GB (31nos.) Core-I3/3.19GHz/500GB/10GB (1no.) **Software**: Windows 7, Oracle 9i database, JDK-6, Linux.			
		1.Numerical Methods Lab (CS)-491	**Lab-II/65 ACD – I 2nd Floor CL-II**	YES P4/2.93GHz/40GB/1.24GB (7nos.), CORE II DUOS/2.93GHz/320GB/2GB (20nos.) P4/3.20 GHz/80GB/1.5GB (2nos), P4/1.70GHz/40GB/ 384MB(1 No) **Software** :Windows XP Professional, Ms Office Professional 2003, Turbo C2, Oracle 9i database, Xilinx			
		1. Computer Architecture (CS-493)					
		1. Software Tools (CS492)	**Lab-III/65 ACD – I 2nd Floor ITL-3**	YES P4/2.0GHz/40GB/640MB (21nos.) Core-2 Duo/2.67GHz/160GB/1GB (1nos.) P4/1.8GHz/40GB/256MB (2nos.) Core-I3/3.19GHz/500GB/2GB (5nos.) Dual-Core/3GHz/500GB/2GB (2nos) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2			
	5th Semester	1.Design and Analysis of Algorithm (CS-591)	**Lab-I /65 ACD – I 2nd Floor CL-I**	YES P4/1.8GHz/40GB/640MB (17 nos.) P4/1.8GHz/40GB/768MB (1no.) P4/1.8GHz/40GB/632MB (1no.) P4/1.8GHz/40GB/256MB (2nos.) Core-I3/3.19GHz/500GB/2GB (6nos.) Dual-Core/3GHz/500GB/2GB (3nos.) **Software** windows XP Professional, Turbo C2,Linux			
		2.Programming Practice Using C++(CS-593)	**Lab-V/65 ACD-1 1st Floor ITL-5**	YES Dual Core/2.6GHz/40GB/2GB (9nos.) AMD Athlon/3.2GHz/250GB/2GB (20nos.) P4/1.8GHz/40GB/256MB (2nos.) **Software** :Windows 7, Ms Office Professional 2003, Turbo C2			
		1. Object Oriented Programming(CS 594D)	**Lab-III/65 ACD – I 2nd Floor ITL-3**	YES P4/2.0GHz/40GB/640MB (21 nos.) Core-2 Duo/2.67 GHz/160GB/1GB (1no.) P4/1.8GHz/40GB/256MB (2nos.) Core-I3/3.19GHz/500GB/2GB (5nos.) Dual-Core/3GHz/500GB/2GB (2nos.) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2			

Course / Branch [To be filled by the College]	Semester [To be filled by the College]	Name of the Laboratory with MAKAUT,WB Paper Code [To be filled by the College]	Room No. / Area (Sq.ft.) [To be filled by the College]	Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set) [To be filled by the College]		Observations of the Inspection Team [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available => Yes	Deficiencies =>Please enumerate		
B. TECH/ COMPUTER SCIENCE & ENGINEERING	5th Semester	1. Data structure and Algorithm Lab (EC-594B)	**Project Lab /57, ACD – I, 3rd Floor PL-CS**	YES Core i3/3.40GHz/500GB/4GB (30 nos.), P4/2.93GHz/40GB/ 1.24GB (1no.) P4/1.50GHz/40GB/1.00GB (1no.) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5,0, Turbo C2, Flush 5, Adobe Photoshop 6.0, Dreamweaver			
		2.Computer Architecture (IT 592)					
	6th Semester	1. DBMS Lab(EE-694B)-EE dept.	**Lab-II/65 ACD-1 2nd Floor CL-II**	YES P4/2.93GHz/40GB/1.24GB (9 nos.), CORE II DUOS /2.93GHz/320GB/2GB (18 nos.), P4/3.20 GHz/80GB/1.5GB (2nos), P4/1.70GHz/40GB/384MB (1no.) **Software**: Windows XP, Windows 8 Professional, MS Office Professional 2003, Turbo C2, Oracle 9i database, Xilinx.			
		1. Operating System Lab (CS693)	**Lab-V/65 ACD-1 2nd Floor ITL-5**	YES Core-2 Duo/2.67GHz/160GB/1GB (31nos.), Core-I3/3.19GHz/ 500GB/10GB (1nos.) **Software**: Windows 7, Oracle 9i database, Linux, JDK-6			
		2.Network Lab (CS-692)					
		1.Database Management System lab (CS-691)	**Project Lab /57, ACD – I, 1st Floor PL-CS**	YES Core i3/3.40GHz/500GB/4GB (30 nos.), P4/2.93GHz/40GB/ 1.24GB (1no.) P4/1.50GHz/40GB/1.00GB (1no.) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5,0, Turbo C2, Flush 5, Adobe Photoshop 6.0,Dreamweaver			
	7th Semester	1.AI Lab(CS 792) Soft computing lab (CS 793B)	**Lab-II/65 ACD-1 2nd Floor CL-II**	YES P4/2.93GHz/40GB/1.24GB (9 nos.), CORE II DUOS/2.93GHz/ 320GB/2GB (18 nos.) P4/3.20 GHz/80GB/1.5GB (2nos.), P4/1.70GHz/ 40GB/384MB (1no.) **Software**: Windows 8, Windows XP Professional, Ms Office Professional 2003, Turbo C2, Oracle 9i database, Xilinx.			
		1.Visual Programming and Web Technology Lab (CS 793) 2. Software Engg. Lab (CS 791)	**Lab-III/65 ACD-1 2nd Floor ITL-3**	YES P4/2.0GHz/40GB/640MB (21nos.), Core-2 Duo/2.67GHz/ 160GB/ 1GB (1nos.) P4/1.8GHz/40GB/256MB (2nos.), Core-I3/3.19GHz/500GB/2GB (5nos.) Dual-Core/3GHz/500GB/2GB (2nos) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2			
		1.Web Technology (IT 792) 2. Assigned Project (CS 795)	**Project Lab /57, ACD – I, 3rd Floor PL-CS**	YES Core i3/3.40GHz/500GB/4GB (30 nos.), P4/2.93GHz/40GB/ 1.24GB (1nos.) P4/1.50GHz/40GB/1.00GB (1nos.) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2, Flush 5, Adobe Photoshop 6.0,Dreamweaver			
	8th Semester	1.Assigned Project(CS 893)	**Project Lab /57, ACD – I, 3rd Floor PL-CS,**	YES Core i3/3.40GHz/500GB/4GB (30 nos.) P4/2.93GHz/40GB/ 1.24GB (1nos.) P4/1.50GHz/40GB/1.00GB (1nos.) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2, Flush 5, Adobe Photoshop 6.0,Dreamweaver			

Department of ELECTRICAL ENGINEERING

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available => Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRICAL ENGINEERING	**1st**	**Basic Electrical & Electronics Lab (ES-191)**	**BEL/75 ACD-I (Ground Floor)**	Yes 1. Characteristic of Fluorescent lamps. 2. Characteristic of Tungsten &Carbon filament lamps. 3. a) Thevenin's theorems' trainer kit 4. b) Norton's theorems' trainer kit 5. Trainer kit for Maximum power transfer theorem. 6. Verification of Superposition theorems. 7. R-L-C Series circuit. 8. R-L-C parallel circuit.			
	2nd	**Basic Electrical & Electronics Lab (ES-291)**	**EM1/60 ACD-I (Ground Floor)**	Yes 1. Calibration of ammeter and voltmeter. 2. Open circuit and Short circuit test of a single phase Transformer. 3. No load characteristics of D.C shunt Generators. 4. Starting and reversing of speed of a D.C shunt motor. 5. Speed control of DC shunt motor. 6. Three phase power measurement by two wattmeter method.			
	3rd	**Circuit Theory Lab (EE-391)**	**ESL1/55 ADM (Ground Floor)**	Yes List of experiments: 1. Transient response of R-L and R-C Network 2. Transient response of R-L-C series and parallel circuits 3. Determination of Impedance (Z) and Admittance (Y) parameters of two port network. 4. Frequency response of LP and HP filters. 5. Frequency response of BP and BR filters. 6. Generation of Periodic, Exponential, Sinusoidal, Damped sinusoidal, Step, Impulse, Ramp signal 7. Determination of Laplace transform and Inverse Laplace transform using MATLAB. 8. Amplitude and Phase spectrum analysis of different signals using MATLAB. 9. Verification of Network theorems using SPICE Facilities: All experiments are performed using software (MATLAB & PSPICE)			

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				All available => Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRICAL ENGINEERING	**4th**	**Electrical & Electronic Measurement Lab (EE-492)**	**EML/75 ACD-I (Ground Floor)**	Yes 1. Calibration of a.c energy meter. 2. Measurement of the resistivity of a material using Kelvin Double Bridge. 3. Measurement of power using instrument transformer. 4. Measurement of power in polyphase circuits. 5. Measurement of inductance by Anderson's Bridge. 6. Measurement of capacitance of De Sauty Bridge. 7. Observation of the construction of PMMC dynamometer, Oscilloscope and digital multimeter. 8. Measurement of capacitance by Schering Bridge 9. Measurement of frequency by Wien Bridge. 10. Calibrate moving iron and electrodynamometer type ammeter/voltmeter by potentiometer 11. Calibrate dynamometer type wattmeter by potentiometer.			
		Electrical Machine Lab-I (EE-491)	**EM2/60 ACD-I (Ground Floor)**	Yes 1. Study of the characteristics of a separately excited D.C generator. 2. Studies of the characteristics of a D.C shunt motor. 3. Speed control of a D.C motor. 4. Study of the characteristics of a compound D.C generator (short shunt) 5. Measurement of the speed of a D.C series motor as a function of load torque. 6. Study of the equivalent circuit of a single-phase transformer. 7. Polarity test on single phase transformers and study of the different connections of three-phase transformer. 8. Study of the equivalent circuit of three-phase induction motor by No-Load & Blocked-Rotor tests. 9. Study of the performance of wound Rotor induction motor under load. 10. Study of the performance of three-phase Squirrel-Cage induction Motor-Determination of Iron-Loss, Friction & Windage Losses.			
	5th	**Electrical Machine Lab-II (EE-591)**	**EM3/60 ACD-I (Ground Floor)**	Yes 1. Different method of starting of 3 phase squirrel cage Induction motor & their comparison [D.O.L, Auto transformer & Star-Delta] 2. Determination of regulation of an Alternator by Synchronous Impedance method. 3. Determination of equivalent circuit parameters of a single phase Induction motor. 4. Load test on single phase Induction motor to obtain the performance characteristics. 5. To determine the direct axis reactance [Xd] & quadrature axis reactance [Xq] of three phase synchronous machine by slip test. 6. Load test on wound rotor Induction motor to obtain the performance characteristics. 7. To make connection diagram of full pitch & fractional slot winding of 18 slot squirrel cage Induction motor for 6 pole & 4 pole operation. 8. Speed control of 3 phase squirrel cage induction motor by different methods & their comparison [voltage control & frequency control] 9. Speed control of 3 phase slip ring Induction motor by rotor resistance control. 10. Parallel operation of 3-phase synchronous generator. 11. V-Curve of synchronous motor. 12. Induction Generator Performance Test.			

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				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRICAL ENGINEERING	**5th**	**Power system Lab-I (EE-592).**	**PSL/75 ACD-I (Ground Floor)**	Yes 1. Determination of the generalized constants A, B, C, D of a long transmission line. 2. Simulation of DC distribution by network analyzer. 3. Measurement of earth resistance by earth tester. 4. Di-electric strength test of insulating oil. 5. Determination of break down strength of solid insulating material. 6. Different parameter calculation by power circle diagram. 7. Study of different types of insulators. 8. Active & reactive power control of an alternator. 9. Study and analysis of an electrical transmission line circuit with the help of PSPICE. 10. Dielectric constant , tan delta , resistivity test of transformer oil 11. Micom Relay			
		Control system Lab-I (EE-593)	**CS & CT/75 ESL1/55 ACD-I (Ground Floor) & ADM (Ground Floor)**	Yes List of experiments: 1. Familiarization with MATLAB control system tool box, MAT LAB simulink tool box & PSPICE. 2. Determination of step response for first order & second order system with unity feedback on CRO & calculations of control system specifications like time constant, % peak overshoot, settling time etc., from the response. 3. Simulation of step response & impulse response for type-0, type-1 & type –2 system with unity feedback using MATLAB & PSPICE. 4. Determination of root locus, bode- plot, nyquist plot using MATLAB control system toolbox for 2nd order system & determination of different control system specifications from the plot. 5. Determination of PI, PD and PID controller action of first order simulated process. 6. Determination of approximate transfer function experimentally from bode plot. 7. Evaluation of steady state error, setting time, percentage peak overshoot, gain margin, phase margin with addition of lead compensator & by compensator in forward path transfer function for unity feed back control system using PSPICE or otherwise. 8. Study of a practical position control system & determination of control system specifications for variation of system parameters.[hardware] Facilities: All experiments are performed by MATLAB or PSPICE.			
	6th	**Power Electronics Lab. (EE-693)**	**PEL1/40PEL2/68 ESL2/55 ADM (Ground Floor) & ACD-III (Ground Floor)**	Yes 1. Study of the characteristics of an SCR. 2. Study of the characteristics of a TRIAC. 3. Study of different triggering circuits of SCR. 4. Study of firing circuits suitable for triggering SCR in a single phase fully controlled bridge converter. 5. Study of the operation of single phase fully controlled bridge converter. 6. Study of single phase half controlled symmetrical and asymmetrical bridge converters. 7. Study of step down Chopper. 8. Simulation of single phase controlled converter with & without the source inductance. 9. Simulation of step up and step down chopper with MOSFET and GTO. 10. Simulation of single phase half controlled symmetrical and asymmetrical bridge converters. 11. Simulation of PWM bridge inverter using MOSFET with R-L load. 12. Simulation of three phase AC regulator. 13. Study of performance of a Dual converter. (simulation) 14. Study of performance of a Cycloconverter (simulation) 15. Study of performance of three phase controlled converter with R & R-L load. (simulation) ** Experiment 4, 5 and 6 are performed using MATLAB			

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B. TECH/ ELECTRICAL ENGINEERING		**Power system Lab-I I (EE-692)**	**PSL/75 ESL2/55 ACD-I (Ground Floor) & ADM (Ground Floor)**	Yes 1. Polarity, Ratio and Magnetization Characteristics Test of CT & PT 2. Testing on (i) Under Voltage Relay and (ii) Earth Fault Relay 3. Study on D C Load Flow 4. Study of A C Load Flow Using Gauss – Seidel Method 5. Study of A C Load Flow Using Newton Raphson Method 6. Study on Economic Load Dispatch 7. Study of Transformer Protection by Simulation 8. Study of Generator Protection by Simulation 9. Study of the characteristics of on delay relay and off delay relay 10. Study of different characteristics of over current relay			
	6th	**Control System Lab-II (EE-691)**	**CS & CT/75 ESL1/55 ACD-I (Ground Floor) & ADM (Ground Floor)**	Yes List of experiments: 1. Study of a practical position control system. 2. Tuning of P, PI and PID controller for first order plant with dead Time using z-n method. 3. Design of Lead, Lag and Lead-Lag compensation circuit for the given plant transfer function. Analyze step response of the system 4. State variable analysis using command tool.To obtain step response and initial condition response for a single input, two-output system in SV form 5. State variable analysis using block diagram tool. 6. Performance analysis of a discrete time system Study of closed response of a continuous system with a digital controller and sample and hold circuit. 7. Studying the effects of nonlinearity in a feedback controlled System using time response. 8. Studying the effects of nonlinearity in a feedback controlled system using phase plane plots Facilities: All experiments are performed using MATLAB			
	7th	**Electrical Drives Lab (EE-791)**	**EDL1/60 ESL2/55 ADM (Ground Floor)**	Yes 1. Thyristor controlled DC Drive. 2. Chopper fed DC Drive 3. AC Single phase motor-speed control using TRIAC. 4. PWM Inverter fed 3 phase Induction Motor control using MATLAB Software. 5. VSI/CSI fed Induction motor Drive analysis using MATLAB Software. 6. Study of V/f control operation of 3 phase induction motor drive. 7. Study of permanent magnet synchronous motor drive fed by PWM Inverter using Software. 8. Regenerative/ Dynamic braking operation for DC Motor - Study using software. 9. Regenerative/ Dynamic braking operation of AC motor - study using software. PC/PLC based AC/DC motor control operation.			

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				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRICAL ENGINEERING	**7th**	**ELECTRICAL SYSTEMS Design-I (EE-782)**	**EDL2/75 ACD-I (Ground Floor)**	Yes 1. Designing a heating element with specified wattage, voltage and ambient temperature. 2. Designing an air core grounding reactor with specified operating voltage, nominal current and fault current. 3. Designing the power distribution system for a small township. 4. Designing a double circuit transmission line for a given voltage level and power (MVA) transfer. 5. Wiring and installation design of a multistoried residential building (G+4, not less than 16 dwelling flats with a lift and common pump). 6. Designing of a substation. 7. Designing an ONAN distribution transformer. 8. Designing a three phase squirrel cage induction motor 9. Designing a three phase wound rotor induction motor 10. Designing a split phase squirrel cage induction motor for a ceiling fan or a domestic pump 11. Designing a permanent magnet fractional hp servo motor			
		Project-I (EE-783)	**ACD-III (Ground Floor) PL/70**	Yes			
	8th	**Project-II (EE-881)**		Yes			
		ELECTRICAL SYSTEMS Design-II (EE-782)	**ACD-I (Ground Floor) EDL2/75**	Yes 1. Designing a heating element with specified wattage, voltage and ambient temperature. 2. Designing an air core grounding reactor with specified operating voltage, nominal current and fault current. 3. Designing the power distribution system for a small township. 4. Designing a double circuit transmission line for a given voltage level and power (MVA) transfer. 5. Wiring and installation design of a multistoried residential building (G+4, not less than 16 dwelling flats with a lift and common pump). 6. Designing of a substation. 7. Designing an ONAN distribution transformer. 8. Designing a three phase squirrel cage induction motor 9. Designing a three phase wound rotor induction motor 10. Designing a split phase squirrel cage induction motor for a ceiling fan or a domestic pump 11. Designing a permanent magnet fractional hp servo motor			
		ELECTRICAL SYSTEMS Design-II (EE-882)		12.Design the control circuit of a Lift mechanism 13.Design a controller for speed control of DC machine. 14.Design a controller for speed control of AC machine.			

Department of ELECTRONICS & COMMUNICATION ENGINEERING

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B. TECH/ ELECTRONICS & COMMUNICATION ENGINEERING	1st	**Basic Electrical & Electronic Engineering -1 (ES-191)**	**BAEL/80 ADM 2nd Floor**	**Yes** a) Familiarization of Passive and active electronic components: Resistors, Inductors, Capacitors, Diodes, Transistors (BJT) and electronic equipment like DC power supplies, Multimeters etc. b) Measuring and testing process: CRO, Signal generators etc. c) I-V characteristics of Junction diodes. d) I-V characteristics of Zener diodes. e) Half and Full wave rectifiers with Regulation and Ripple factors. f) I-V characteristics of BJTs.			
	2nd	**Basic Electrical & Electronic Engineering- II (ES-291)**	**BAEL/80 ADM 2nd Floor**	**Yes** a) I-V characteristics of Field Effect Transistors. b) OPAMPs : input -offset voltage, input bias current and Slew rate calculation c) OPAMPs : CMRR, Bandwidth and Off-set null calculation d) OPAMP circuits: Inverting and Non-inverting amplifiers, Adders, Integrators and Differentiators. e) Logic Gates and realization of Boolean functions using Logic Gates. f) Experiment on Characteristic curves for CB, CE and CC mode transistors			
	3rd	**Circuit Theory & Network Lab (EC-391)**	**SML/54 (EE Dept) ACD-1 Ground Floor**	**Yes** 1. Experiment on Characteristics of Series & Parallel Resonant circuits 2. Verification of Network Theorems 3. Transient Response in R-L & R-C Networks ; simulation / hardware 4. Transient Response in RLC Series & Parallel Circuits & Networks ; simulation / hardware 5. Impedance (Z), and Admittance (Y) parameters of Two-port networks 6. MATLAB simulation : Periodic, exponential, sinusoidal, damped sinusoidal, step, impulse and ramp signals 7. MATLB simulation : Poles and Zeros in s plane, partial fraction expansion in s domain and cascade connection of second order system 8.MATLAB simulation: Laplace Transform, different time domain time domain functions, and Inverse Laplace Transformation			
		Solid State Devices (EC-392)	**DEC/60 ACD-1 2nd Floor**	**Yes** 1. JEET drain and transfer characteristics. 2.JEET biasing arrangement Graphical method. 3.JEET CS amplifier : performance parameters: AV, Ri, RO.. 4.Input and Output Characteristics of BJT CE configuration 5.Spice Simulation : BJT CE amplifier : Calculation of AV, Ri, RO, AI. 6.Experiment on MOSFET drain and transfer characteristics 7.Frequency response for BJT/ FET single stage amplifiers			

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B. TECH/ ELECTRONICS & COMMUNICATION ENGINEERING	3rd	**Signal System Lab (EC-393)**	**COMP2/80, ADM, 2nd Floor**	**Yes** 1. Experiment on Z- transform of: a) Sinusoidal signals b) Step functions. 2. Comparision of Fourier and Laplace transformations of a signal. 3. Experiment on Signal Synthesis via sum of harmonics. 4. Experiment on LPF &HPF, band pass and reject filters using RC circuits. 5. Experiment on Sampled of Signals & sampling rate calculation. 6. Sampling theorem for low pass signals and band pass signals . 7. Experiment on various components of: a) Square wave b) Clipped sine wave.			
		M(CS) 391 Numerical Lab	**CSE dept./65, ACD – I, 2nd Floor**	**Yes** 1. Assignments on Newton forward /backward, Lagrange's interpolation. 2. Assignments on numerical integration using Trapezoidal rule, Simpson's 1/3 rule, Weddle's rule. 3. Assignments on numerical solution of a system of linear equations using Gauss elimination and Gauss-Seidel iterations. 4. Assignments on numerical solution of Algebraic Equation by Regular-falsi and Newton Raphson methods. 5. Assignments on ordinary differential equation: Euler's and Runga-Kutta methods. 6. Introduction to Software Packages: Matlab / Scilab / Labview / Mathematica.			
		Analog Electronic Circuits Lab (EC-394)	**AEC/75 ACD-1 2nd Floor**	**Yes** 1. Experiment on Diode as clipper & clamper 2. Experiment on Zener diode as a voltage regulator 3. Experiment on ripple and regulation characteristics of full wave rectifier 4. Experiment on of B.J.T & F.E.T characteristics curves. 5. Experiment on R-C coupled amplifier & study of it's gain & Bandwidth. 6. Experiment on class A & class B power amplifiers. 7. Experiment on timer circuit using NE555 : monostable & astable multivibrator.. 8. Experiment on Bistable multivibrator using NE 555.. 9. . Experiment on Switched Mode Power Supply. 10. Construction on a simple function generator using IC. 11 Realization of a V-to-I & I-to-V converter using Op-Amps. 12. Realization of a Phase Locked Loop using Voltage Controlled Oscillator (VCO). 13. Study of D.A.C & A.D.C.			

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B. TECH/ ELECTRONICS & COMMUNICATION ENGINEERING	4^{th}	**EM Theory & Tx Lines Lab (EC-491)**	**MWL/ 75 ACD-1 1st Floor**	**Yes** 1. Plotting of Standing Wave Pattern along a transmission line when the line is open! circuited, short! Circuited and terminated by a resistive load at the loadend. 2. Input Impedance of a terminated coaxial line using shift in minima technique. 3. Study of Smith chart on Matlab platform. 4. Radiation Pattern of dipole antenna. 5. Radiation pattern of a 3! Element Yagi Uda Antenna. 6. Radiation pattern, Gain, Directivity of a Pyramidal Horn Antenna. 7. Study of Spectrum Analyzer. 8. Radiation Pattern of a folded dipole antenna.			
		Digital Electronic & Integrated Circuits Lab (EC-492)	**DEC/60 ACD-1 2nd Floor**	**Yes** 1. Realization of basic gates using Universal logic gates. 2. Code conversion circuits- BCD to Excess-3 and vice-versa. 3 Four-bit parity generator and comparator circuits. 4. Construction of simple Decoder and Multiplexer circuits using logic gates. 5. Combinational circuit for BCD to decimal conversion to drive 7-segment display 6. Construction of simple arithmetic circuits-Adder, Subtractor. 7. Realization of RS-JK and D flip-flops using Universal logic gates. 8. Realization of Universal Register using JK flip-flops and logic gates. 9. Design of Sequential Counter with irregular sequences. 10. Realization of Ring counter and Johnson's counter. 11. Construction of adder circuit using Shift Register and full Adder.			

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	5th	**Analog Communication Lab (EC-591)**	**COEL/75 ACD-1 2nd Floor**	**Yes** 1. Measurement of modulation index of an AM signal. 2. Measurement of output power with varying modulation index an AM signal (for both DSB- & SSB). 3. Measurement of distortion of the demodulated output with varying modulation index of an AM signal (for both DSB-SC & SSB). 4. Measurement of power of different frequency components of a frequency modulated signal & the measurement of the bandwidth. 5. Design a PLL using VCO & to measure the lock frequency. 6. Design a FM demodulator using PLL. 7. Measurement of selectivity, sensitivity, fidelity of a super heterodyne receiver.. 8. One innovative experiment.			
		Control System lab (EC-593)	**COMP2/80, ADM, 2nd Floor**	**Yes** 1. Familiarization with MATLAB Control System tool Box, MATLAB! SIMULINK tool box & pSPICE. 2. Determination of step response for 1st order & 2nd order system with amity feedback on CRO & calculation of control system specifications for variations of system design. 3. Simulation of step response & impulse response for Type!I & Type!II system with unity feedback using MATLAB & pSPICE. 4. Determination of root locus, Bode!plot, Nyquist Plot, using MATLAB control system toolbox for a given 2nd order transfer function & determination of different control system specifications. 5. Determination of PI, PD, and PID controller action on 1st order simulated process. 6. Determination of approximate transfer function experimentally using Bode Plot. 7. Evaluation of steady state error, setting time, percentage peak overshoots, gain margin, phase margin with addition of lead compensator in forward path transfer functions using MATLAB & pSPICE. 8. Study of position control system using servomotor. 9. Design and hardware implementation of a temperature controller using microprocessor/ microcontroller.			

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				All available => Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRONICS & COMMUNICATION ENGINEERING	5th	**Microprocessor & Microcontroller Lab (ECE)-592)**	**MPL/60 ADM 2nd Floor**	**Yes** 1. Study of prewritten programs on trainer kit using the basic instruction set (data transfer, Load/Store, Arithmetic, Logical) Assignments based on above 2. a) Familiarization with 8085 & 8051simulator on Kit. Study of prewritten programs using basic instruction set (data transfer, Load/Store, Arithmetic, Logical) on the simulator. Assignments based on above 3. Programming using kit and simulator for: i) Table look up ii) Copying a block of memory iii) Shifting a block of memory iv) Packing and unpacking of BCD numbers v) Addition of BCD numbers vi) Binary to ASCII conversion vii) String Matching, Multiplication using shift and add method and Booth's Algorithm 4. Program using subroutine calls and IN/OUT instructions using 8255 PPI on the trainer kit e.g. subroutine for delay, reading switch state and glowing LEDs accordingly. 5. Study of timing diagram of an instruction on oscilloscope 6. Interfacing of 8255: Keyboard and Multi4digit Display with multiplexing using 8255			
		Data Structure & C (EC-594B)	**Computer Department Lab 4/65 ACD-1 2nd Floor**	**Yes** 1. Experiments should include but not limited to : 2. Implementation of array operations: 3. Stacks and Queues: adding, deleting elements Circular Queue: Adding & deleting elements Merging Problem : 4. Evaluation of expressions operations on Multiple stacks & queues : 5. Implementation of linked lists: inserting, deleting, inverting a linked list. Implementation of stacks & queues 6. using linked lists: Polynomial addition, Polynomial multiplication 7. Sparse Matrices: Multiplication, addition. 8. Recursive and Nonrecursive traversal of Trees 9. Threaded binary tree traversal. AVL tree implementation 10. Application of Trees. Application of sorting and searching algorithms 11. Hash tables implementation: searching, inserting and deleting, searching & sorting techniques.			

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				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRONICS & COMMUNICATION ENGINEERING	6th	**Digital Communications (EC-691)**	**COEL/75 ACD-1 2nd Floor**	**Yes** 1. Design, implementation and study of all the properties of length and 15length pn sequences using shift register. 2. Study of PAM and demodulation. 3. Study of PCM and demodulation. 4. Study of line coders: polar/unipolar/bipolar NRZ ,RZ and Manchester. 5. Study of delta modulator and demodulator. 6. Study of adaptive delta modulator and demodulator. 7. Study of BPSK modulator and demodulator. 8. Study of BFSK modulator and demodulator. 9. Study of ASK modulator and demodulator. 10. Study of QPSK modulator and demodulator.			
		Digital Signal Processing (EC-692)	**COMP1/75, ACD-1, 2nd Floor**	**Yes** 1. Sampled sinusoidal signal, various sequences and different arithmetic operations. 2. Convolution of two sequences using graphical methods and using commands- verification of the properties of convolution. 3. Z-transform of various sequences – verification of the properties of Z-transform. 4. Twiddle factors – verification of the properties. 5. DFTs / IDFTs using matrix multiplication and also using commands. 6. Circular convolution of two sequences using graphical methods and using commands, differentiation between linear and circular convolutions. 7. Verifications of the different algorithms associated with filtering of long data sequences and Overlap –add and Overlap-save methods. 8. Butterworth filter design with different set of parameters. 9. FIR filter design using rectangular, Hamming and Blackman windows. **Hardware Laboratory using either 5416 or 6713 Processor and Xilinx FPGA:** 1. Writing & execution of small programs related to arithmetic operations and convolution using Assembly Language of TMS320C 5416/6713 Processor, study of MAC instruction.			
		Object oriented programming (EC-695A)	**Computer Dept. Lab-3/65, ACD – I, 1st Floor**	**Yes** 1. Assignments on class, constructor, overloading, inheritance, overriding 2. Assignments on wrapper class, arrays 3. Assignments on developing interfaces! multiple inheritance, extending interfaces 4. Assignments on creating and accessing packages 5. Assignments on multithreaded programming 6. Assignments on applet programming			

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRONICS & COMMUNICATION ENGINEERING	6th	**Electronic measurement & instrumentation (EC-695C)**	**AEC/75 ACD-1 2nd Floor**	**Yes** 1. Study of Static Characteristics of a Measuring Instrument. 2. Study of Dynamic Characteristics of a Measuring Instrument 3. Acquaintance with basic structure of DMM and measurement of different electrical parameters 4. Realization of a V to 1 & 1 to V converter 5. Statistical analysis of errors in measurement. 6. Study of VCO (Voltage controlled oscillator) & PLL (Phase Locked Loop).. 7. Study of Kelvin double bridge 8. Study of Wiren bridge 9. Study of Anderson bridge 10. Study of Deasuty bridge			
	7th	**RF & Microwave Engg Lab (EC793A)**	**MWL/75 ACD-1 1st Floor**	**Yes** 1. Measurement of wavelength, guide wavelength and frequency using X*band waveguide test bench. 2. Measurement of Attenuator 3. Measurement of coupling factor and Directivity of a Directional coupler 4. Klystron characteristics using power meter with Bolometer and calibrated wave meter. 5. Measurement of phase shift of a microwave phase shifter 6. Scattering matrix of a magic tee / E plane tee / H plane tee using waveguide test bench at X-band. 7. Measuring of dielectric constant of a material using waveguide test bench 8. Frequency response of RF amplifier using spectrum analyzer with tracking generator 9. Frequency response of low pass filter, high pass filter, band pass filter using spectrum Analyzer with tracking generator			
		Optical Communication & N/W Lab (EC793B)	**ACL/60 ACD-1 2nd Floor**	**Yes** Experiment with Optical fibre : To calculate attenuation constant, bending loss and numerical aperture of optical fibre. Experiments using LED module : Study of DC characteristics. I-V characteristics of LED (i) using optical fibre between LED and power meter and (ii) without using optical fibre. P-I characteristics of LED (i) using optical fibre between LED and power meter and (ii) without using optical fibre. Experiment with fibre Optic analog link : Input-output characteristics using long optical fibre. Calculation of attenuation per unit length of optical fibre.			

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				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ ELECTRONICS & COMMUNICATION ENGINEERING	7th	**Power Electronics Lb (EC795D)**	**COMP2/80, ADM, 2nd Floor**	**Yes** 1. Study of the characteristics of an SCR. 2. Study of the characteristics of a Triac 3. Study of different triggering circuits of an SCR 4. Study of firing circuits suitable for triggering SCR in a single phase full controlled bridge. 5. Study of the operation of a single phase full controlled bridge converter with R and R-L load. 6. Study of performance of single phase half controlled symmetrical and asymmetrical bridge converters. 7. Study of performance of step down chopper with R and R-L load. 8. Study of performance of single phase controlled converter with and without source inductance (simulation) 9. Study of performance of step up and step down chopper with MOSFET, IGBT and GTO as switch (simulation). 10. Study of performance of single phase half controlled symmetrical and asymmetrical bridge converter. (simulation) 11. Study of performance of three phase controlled converter with R & R-L load. (simulation) 12. Study of performance of PWM bridge inverter using MOSFET as switch with R and R-L load. 13. Study of performance of three phase AC controller with R and R-L load (simulation) 14. Study of performance of a Dual converter. (simulation) 15. Study of performance of a Cycloconverter (simulation)			
		VLSI Design Lab(EC-792)	**COMP1/75, ACD-1, 2nd Floor**	**Yes** 1. Familiarity with Spice simulation tool 2. Spice Simulation of Inverter, NAND, NOR Gates. 3. Familiarity with EDA tools for VLSI design /FPGA based system design 4. Layouts, Transistors and tools 5. Standards cell Design 6. Design of CMOS XOR/XNOR Gates. 7. Design of CMOS Full adder 8. Design of CMOS Flip flops (R-S ,D , J-K) 9. Design of 8 bit synchronous Counter 10. Design of 8 bit bi-directional register with tri-stated input/ output bus 11. Design of a 12 bit CPU with few instructions and implementation and validation on FPGA			

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	8th	**Design Lab / Industrial problem related practical training (EC881)**	**AEC/75 ACD-1 2nd Floor**	**Yes** 1. Rectifiers (To design a rectifier for a given average output dc voltage and a given load resistance, compare between the theoretical values of $V_{dc,}$ $V_{rms,}$ RF, HD, output regulation, transformer utility factor etc. with the measured values, and thus comprehend the relevance/ effect of these various parameters). 2. DC power supplies regulation and protection circuits (To learn designing a series transistor based output regulation circuit, an output current limiting circuit, fold back circuit needed for a given output parameters). 3. Inverting and non-inverting amplifier of given dc gain, input impedance and output impedance (To learn the basic design, inter relation between the dc gain and input/ output impedances, offset balance and the relation between feedback and GBW). 4. Adder and subtractor (To learn the basic design and function of a multi input adder/ subtractor with ac and dc inputs present simultaneously). 5. Active filters: LP, BP, HP, 1st order, 2nd order (To learn the design of a filter and it's inherent phase shifting characteristics). 6. 555 based monostable and astable of duty cycle below and above 50% (To learn designing 555 based timer circuits). 7. Design and implement a BCD to 7-segment decoder with basic and universal gates (To understand clearly the method of writing a truth table, use of K-map, simplifying a logic function and optimum design with minimum number of ICs and inputs). 8. Designing logic circuits using multiplexers, demultiplexers and gates to implement logic functions (To learn the use multiplexers and demultiplexers). 9. RC phase shift Oscillator, Vien Bridge oscillator, Hartley and Colpitt oscillator. 10. Innovative-I 11. Innovative-II			
		Project- I & II (EC-882)	**PR/55 ADM 2nd Floor**	1. PCB Prototype Machine 2. Working Lab Station 3. Computer- i3, 4GB, Wi-fi card graphics card 4. Computer- i3, 8GB 5. Robotics Kit 6. HFSS An soft 7. NI LABVIEW			

Department of CIVIL ENGINEERING

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ CIVIL ENGINEERING	3rd	**Surveying Practice - I (CE 392)**	**SP/ 75 CE- Workshop**	**YES** 1. Chain surveying Preparing index plans, Location sketches, Ranging, Preparation of map, Heights of objects using chain and ranging rods, Getting outline of the structures by enclosing them in triangles/ quadrilaterals, Distance between inaccessible points, Obstacles in chain survey. 2. Compass surveying Measurement of bearings, Preparation of map, Distance between two inaccessible points by chain and compass, Chain and compass traverse 3. Plane Table survey Temporary adjustments of plane table and Radiation method, Intersection, Traversing and Resection methods of plane tabling, Three-point problem 4. Leveling Temporary adjustment of Dumpy level, Differential leveling, Profile leveling and plotting the profile, Longitudinal and cross sectioning, Gradient of line and setting out grades, Sensitiveness of Bubble tube 5. Contouring Direct contouring, Indirect contouring – Block leveling, Indirect contouring – Radial contouring, Demonstration of minor instruments			
		Solid Mechanics (CE 391)	**SMCE/ 75, ME Dept. Ground Floor**	**YES** 1. Tension test on Structural Materials: Mild Steel and Tor steel (HYSD bars) 2. Compression Test on Structural Materials: Timber, bricks and concrete cubes 3. Bending Test on Mild Steel 4. Torsion Test on Mild Steel Circular Bar 5. Hardness Tests on Ferrous and Non-Ferrous Metals: Brinnel and Rockwell Tests 6. Test on closely coiled helical spring 7. Impact Test: Izod and Charpy 8. Demonstration of Fatigue Test			
	4th	**Fluid Mechanics (CE 491)**	**HYDEC/ 320 ME- Workshop**	**YES** 1. Determination of Orifice co-efficient 2. Calibration of Orifice meter 3. Calibration of V- Notch 4. Measurement of velocity of water in an open channel using a pitot tube 5. Measurement of water surface profile for flow over Broad crested weir 6. Preparation of discharge rating curve for a sluice 7. Measurement of water surface profile for a hydraulic jump 8. Determination of efficiency of a Centrifugal pump 9. Determination of efficiency of a Reciprocating pump 10. Determination of efficiency of a Pelton wheel Turbine 11. Determination of efficiency of a Francis Turbine 12. Determination of efficiency of a Hydraulic Ram			
		Surveying Practice – II (CE 492)	**SP/ 75 CE- Workshop**	**YES** 10. Traversing by Using Theodolite: Preparation of Gales Table from field data 11. Traversing by using Total Station 12. Use of Total Station for leveling and Contouring 13. Setting out of Simple Curves			

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B. TECH/ CIVIL ENGINEERING	4th	**Soil Mechanics lab - I (CE 493)**	**SMCE/75, CE Workshop**	**YES** 1. Field identification of different types of soil as per Indian standards [collection of field samples and identifications without laboratory testing], determination of natural moisture content. 2. Determination of specific gravity of i) Cohesionless ii) cohesive soil 3. Determination of Insitu density by core cutter method & sand replacement method. 4. Grain size distribution of cohessionless soil by sieving & fine grained soil by hydrometer analysis. 5. Determination of Atterberg's limits (liquid limit, plastic limit & shrinkage limit). 6. Determination of co- efficient of permeability by constant head parameter (coarse grained soil) & variable head parameter (fine grained soil). 7. Determination of compaction characteristics of soil.			
	5th	**Soil Mechanics lab - II (CE 591)**	**SMCE/ 75, CE-Workshop**	**NO** 1. Determination of compressibility characteristics of soil by Oedometer test (co-efficient of consolidation & compression Index) 2. Determination of unconfined compressive strength of soil 3. Determination of Shear parameter of soil by Direct shear test 4. Determination of shear parameter of soil by Triaxial test (UU) 5. Standard Penetration Test 6. Determination of C.B.R. value	Determination of undrained shear strength of soil by Vane shear test.		
	5th	**Concrete Laboratory (CE 592)**	**CEL/ 60 CE- Workshop**	**NO** 1. Tests on cement – specific gravity, fineness, soundness, normal consistency, setting time, compressive strength on cement mortar cubes 2. Tests on fine aggregate – specific gravity, bulking, sieve analysis, fineness modules, moisture content, bulk density and deleterious materials. 3. Tests on coarse aggregate - specific gravity, sieve analysis, fineness modulus, bulk density. 4. Tests on Fresh Concrete: Workability : Slump, Vee Bee, Compaction factor tests 5. Hardened Concrete: Compressive strength on Cubes, Split tensile strength, Static modulus of elasticity, Flexure tests, Non destructive testing (Rebound hammer & Ultrasonic pulse velocity) 6. Mix Design of Concrete.	Non destructive testing (Ultrasonic pulse velocity)		
	5th	**Engineering Geology Laboratory (CE 594)**	**GEO/ 60 CE- Workshop**	**YES** 1.Study of crystals with the help of crystal models 2. Identification of Rocks and Minerals [Hand Specimens] 3. Microscopic study of Rocks and minerals 4.Study of Geological maps, interpretation of geological structures Thickness problems, Bore-hole Problems			
	6th	**Highway and Transportation Engineering Lab (CE 691)**	**HEL/93 CE- Workshop**	**NO** 1. Aggregates- Impact value, Los-Angeles Abrasion value water absorption, Elongation & Flakiness Index. 2. Bitumen & bituminous materials: Specific gravity, penetration value, softening point, loss on heating, Flash & Fire point test. 3.Stripping value test 4..Design of B.C. & S.D.B.C. Mix 5.CBR Test 6.Marshal Stability Test	Benkelman Beam Apparatus		
		CAD Laboratory (CE 693)	**SD/ 57 ADM 1st Floor**	**YES** 1. Introduction and important features of a software dealing with analysis and design of structures 2. Analysis and design of a multistoried building using software, Preparation of detailed drawings of different structural elements including ductility detailing 3. RCC Slab, beam, column, stair and footing design			

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available => Yes	Deficiencies =>Please enumerate		
B. TECH/ CIVIL ENGINEERING	7th	**Environmental engineering Lab (CE 791)**	**ENE/31 ADM Ground Floor**	**YES** 1. pH colour , turbidity 2. Solids – suspended , dissolved , settleable and volatile 3. Dissolved oxygen, BOD , COD 4. Determination of fluorides and Iron Hardness , Chlorides 5. Nitrite – Nitrogen and Ammonical – Nitrogen 6. Available chlorine in bleaching powder, Residual chlorine in water & Chlorine demand. 7. Bacteriological quality of water – presumptive test, confirmative test and Determination of MPN 1. 8. Jar Test.			
		Computer Application in Civil Engineering-I Lab	**PL-CE/ 57 ADM 1st Floor**	**YES** 1. Curve fitting, Straight line fitting by method of least squares 2. Matrix Applications. a) Solution of simultaneous equations. b) Integration,Trapezoidal rule, Simpsons Rule, Gauss-Quadrature. c) Application Programs. i) Bearing Capacity Coefficient ii) Stability of slopes 3. Application programs in hydraulics and fluid mehcnics a. Coefficient of permeability for flow through layered soil, i) Parallel to layers. ii) Perpendicular to layers iii) Pipe Net work solution 4. Application programs in Structural Engineering: a. SF and BM at different sections of a simply supported beam with different loading conditions. b. Design of rectangular sections of RCC beam. i) Limit State method. ii) Working Stress method.			
	8th	**Computer Application in Civil Engineering – II (CE 891)**	**PL-CE/ 57** **ADM 1st Floor**	**YES** 1. Digital terrain model from leveling data 2. WGS (World Geodetic System Co-ordinate) from total station traverse 3. Estimation of flood hydrograph at a section from given rainfall data 5. Flood routing through storage reservoir with given area level parameter and inflow hydrograph 2. Water quality management programme 3. Analysis of simple framed structure by direct stiffness method 4. Analysis of two way slab by IS 456 2000 5. Design of flexible pavement by IRC 37 - 2001 6. Bearing capacity and settlement analysis of shallow foundation as per IS 6403 and IS 8009 (Part I) 7. Design of super-elevation 8. Determination of stresses for rigid pavement 9. Design of water treatment plant			

Department of MECHANICAL ENGINEERING (B. TECH)

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ MECHANICAL ENGINEERING	**1st yr. 1st sem. & 2nd sem**	**Engg. Drawing & Computer Graphics** **ME191 & ME 292**	**Graphic LAB /140 ACD-1 Ground Floor E-GRA**	**YES** 1. Lines, lettering, dimensioning, scales; plain scale, diagonal scale. 2. Geometrical construction and curves; construction of polygons, parabola, hyperbola, ellipse. 3. projection of points, lines, surfaces; orthographic projection- 1st and 3rd angle projection, projection of lines and surfaces– hexagon. 4. Projection of solids; cube, pyramid, prism, cylinder, cone. 5. Drawing isometric view from orthogonal/ sectional views of simple solid objects. 6. Full and half sectional views of solids. 7. Development of surfaces; prism, cylinder, cone. 8. Computer Aided Drafting **Lab facilities:** ▪ 70 nos. of drawing board Models for demonstration			
	1st yr 2nd sem	**Workshop Practice** **ME192 & ME 291**	**Workshop I & II/ 300 WS-MCL-I**	Lab Facilities: ▪ 4 No. Forging ovens and necessary tools and equipments available. ▪ Casting boxes, tools and necessary equipments available. ▪ 40 no. of vices and related carpeting tools available. ▪ MIG, ARC, Gas and spot welding setups. ▪ 7 nos. of Lathes. ▪ Milling Machine – 1. ▪ Drilling Machine – 1. ▪ Grinders Machine - 1. ▪ Shaper – 1. ▪ Surface Grinding Machine ▪ Turret Milling Machine ▪ Power Hack Saw ▪ Abrasive Grinding Machine			
	2nd yr 3rd sem	**Machine Drawing –I ME391**	**Machine Drawing Lab /140 ACD-1 Ground Floor E-GRA**	**YES** 1. Schematic product symbols for standard components in mechanical, electrical and electronic systems, welding symbols and pipe joints; 2. Orthographic projections of machine elements, different sectional views- full, auxiliary sections; 3. Isometric projection of components; Assembly and detailed drawings of a mechanical assembly, such as a Plummer block, tool head of a shaping machine, tailstock of a lathe, welded pipe joints indicating work parts before welding, etc. **Lab facilities:** 70 nos. of drawing board & Models for demonstration			

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B. TECH/ MECHANICAL ENGINEERING	**2nd yr 3rd sem**	**Workshop Practice-II ME392**	**Pattern Making & Casting /200** **WS-PM1** **Welding Shop /200** **WS-PM2** **Machine Shop /190** **WS-MC-II** **Workshop – II**	**YES** 1. Pattern Making; pattern material, pattern allowances and types of patterns; 2. Mould making Practice: Uses of moulding tools: green sand moulding, gating system, risering system, core making; 3. Making a typical product using sheet metal; 4. Basic Forging processes like upsetting, drawing down and forge welding; 5. Practicing Resistance Spot Welding, Shielded Metal Arc Welding and Gas Welding; 6. Machining of typical products involving lathe, milling/ shaping operations and finishing process (es); Machining of gears. **Lab facilities:** ▪ Wood turning lathe ▪ Belt Grinder ▪ Forging oven ▪ Vice ▪ Tilting Furnace (Gas fired) ▪ Melting furnace (Electrical) (Muffle)			
	2nd yr 3rd sem	**Applied Mechanics Lab. ME393**	**Strength of Materials Lab/ 200** **ACD-1 Ground Floor SOM**	**YES** 1. Verification of Varignon's theorem; 2. Determining spring stiffness under tension and compressive loads; 3. Strain gauge based strain/ deflection/ force measurement of a cantilever beam; 4. Tension Test and Compression Test of ductile and brittle materials: stress-strain diagram, determination of yield strength, ultimate strength, modulus of elasticity, percentage elongation and percentage reduction in areas, observation of fractured surfaces; 5. Bend and re-bend test of flat test pieces, determination of bending stresses; 6. Torsion Test; 7. Hardness Tests: Brinnel/ Vickers and Rockwell tests, Shore hardness test; 8. Experiments on friction: determination of coefficient of friction; 9. Experiments to observe speed ratios obtained using belt pulley and gears, and to evaluate torque and energy required. **Lab facilities:** ▪ Torsion Testing M/C ▪ Universal Testing M/C ▪ Brinell Hardness Testing M/C ▪ Rockwell Testing M/C ▪ Charpy Testing M/C ▪ Izod Testing M/C			

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B. TECH/MECHANICAL ENGINEERING	**2nd yr 4th sem**	**Fluid Mechanics & Hydraulics Lab ME491**	**Hydraulics Lab/135 Workshop – I HYD**	**YES** Fluid flow measurements: Determining coefficient of discharge for venturimeter, orificemeter, weirs; Experiment to verify Bernouli's theorem; Study and performance test of a single acting reciprocating air compressor. **Lab facilities:** ▪ Francis turbine test ▪ Orifice meter ▪ Centrifugal pump test Rig ▪ Experiment on Pitot tube ▪ Single acting reciprocating compressor ▪ Hydraulic Ram ▪ Pipe friction in series and parallel apparatus			
	2nd yr 4th sem	**Manufacturing Technology Lab ME 492**	**Sand Testing Lab/ 66 STL Casting Shop/200 Workshop – II WS-PM1**	**YES** Sand preparation and testing: specimen preparation for testing permeability, clay content, grain fineness number, moisture content, green compression strength, green shear strength, splitting strength, hardness, etc.; Casting of metals after preparation of suitable moulds; Experiments on properties of post casting, fettling, cleaning, debarring, and polishing operations; **Lab facilities:** ▪ Sand shaker ▪ Permeability meter ▪ Sand rammer ▪ Core sand strength testing m/c ▪ Mould boxes and tools ▪ Tilting Furnace (Gas fired) Melting furnace (Electrical)			
	2nd yr 4th sem	**Material Testing Lab ME493**	**Strength of Material Lab/200 SOM ACD-1 Ground Floor**	**YES** 1. Impact tests: Charpy and Izod tests; 2. Test for draw ability of sheet metals through cupping test; Fatigue test of a typical sample. 3. Sample preparation and etching of ferrous and non-ferrous metals and alloys for metallographic observation; 4. Experiments on heat treatment of carbon steels under different rates of cooling including quenching and testing for the change in hardness and observing its micro structural changes through metallographic studies. 5. Observation of presence of surface/ sub-surface cracks using different non-destructive techniques, such as dye penetration (DP) test, magna flux test, ultrasonic or eddy current test. **Lab facilities:** ▪ Chirpy & Izod Testing M/C ▪ Polishing Machine ▪ Microscope ▪ Muffle furnace ▪ Rockwell Hardness Tester ▪ Brinell Hardness Tester ▪ Vickers Hardness Tester(Under TEQIP-II procurement)			

Course / Branch [To be filled by the College]	Semester [To be filled by the College]	Name of the Laboratory with MAKAUT,WB Paper Code [To be filled by the College]	Room No. / Area (Sq.ft.) [To be filled by the College]	Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set) [To be filled by the College]		Observations of the Inspection Team [If found in order, please write OK, otherwise enumerate deficiencies]	
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B. TECH/ MECHANICAL ENGINEERING	**2nd yr 4th sem**	**Machine Drawing-II ME 494**	**E-GRA/ 140 ACD-1 1st Floor**	**YES** Assembly and detailed drawings of a mechanical assembly, such as a simple gear box, flange coupling, welded bracket joined by stud bolt on to a structure, etc. Practicing AutoCAD or similar graphics softwares and making orthographic and isometric projections of different components. **Lab facilities:** 30 computers Auto CAD free version Solid modeling Software CRE-O (PRO-E) – 50 nos.			
	3rd yr 5th sem	**Applied Thermodynamics & Heat Transfer Lab ME 592**	**Workshop-II/ 66 HTR-I**	**YES** 1. Determination of dryness fraction of steam by combined separating and throttling calorimeter. 2. Study and performance test of a single acting reciprocating air compressor. 3. Determination of thermal conductivity of a metal rod. 4. Determination of thermal conductivity of an insulating powder/or an insulating plate. 5. Determination of 'h' for forced convection over a pin fiN. 6. Verification of emissivity of a plate. 7. Study of a shell and tube heat exchanger and determination of LMTD. **Lab facilities:** ▪ Heat transfer from a pin-fin(Forced & Natural convection) ▪ Measurement of emissivity of a surface ▪ Determination convective heat transfer coefficient in Natural convection ▪ Determination convective heat transfer coefficient in forced convection for air flowing through pipe ▪ Thermal conductivity of metal rod ▪ Stefan –Boltzman apparatus ▪ Parallel/counter flow heat exchanger ▪ Thermal conductivity of insulating powder ▪ Over all heat transfer coefficient of composite wall ▪ Variable compression ratio multi fuel engine test rig Cooling tower test rig			
	3rd yr 5th sem	**Design Practice-I ME 593**	**Machine Drawing Lab/66 DESPR** **ACD-1 Ground Floor**	**YES** 1. Knuckle/Cotter joint 2. Bolted bracket/ turn buckle 3. Screw jack 4. Riveted joints 5. Welded joints 6. Shaft Couplings 7. Belt pulley drive 8. Helical compression spring/ Leaf spring. **Lab facilities:** 70 nos. of drawing board & Models for demonstration			

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ MECHANICAL ENGINEERING	**3rd yr 5th sem**	**Metrology & Measurement Lab ME-594**	**Engineering Measurement lab/ 56 MML ACD-III Ground Floor**	**YES** 1. Taking measurements using following instruments : (i) Vernier height & depth gauge, (ii) Dial micrometer, (iii) Thread gauge, (iv) Radius gauge, (v) Filler gauge, (vi) Slip gauge. 2. Measurement of angle of a component using : (i) Vernier bevel protractor, (ii) angle gauges, (iii) Sine-bar and slip gauges. 3. Checking / measuring parallelism, cylindricity and concentricity of components using dial indicator. 4. Measurement of a specific dimension for a lot of components, and prepare a histogram from the data obtained. 5. Measurement of surface finish by a Talysurf instrument. 6. Measurement of micro feature of a product (eg. Thread of a bolt or saw etc.) in a profile projector. 7. Determine natural cooling characteristics of a heated object by using a thermocouple. 8. Measurement of air velocity across an air duct using anemometer. 9. Fixing a strain gauge on a cantilevered flat section of steel. Then calibration of it as a force dynamometer using a Wheatstone bridge and loading arrangement. **Lab facilities:** ▪ Verniercaliper (0-250mm) ▪ Disk micrometer (50-75 mm), 0.01 mm ▪ Gear tooth venire caliper(0-150 mm), 0.01 mm ▪ Depth micrometer (0-150 mm), 0.01 mm ▪ Micrometer ▪ Thread micrometer (0-25mm), 0.01mm ▪ Disk micrometer(25-50mm) 0.01mm ▪ Inside micrometer (50-600mm), 0.01mm ▪ Gear tooth micrometer (10-25mm), 0.01 mm ▪ Inside micrometer (5-30mm), 0.01 mm ▪ Micrometer(25-50mm), 0.01mm ▪ Micrometer(Mitutoya)(50-75mm), 0.01mm ▪ Micrometer(0-25mm),0.01mm Slip gauge set (NCE) Profile projector			
	3rd yr 5th sem	**Applied Fluid Mechanics Lab ME 595**	**Workshop – I/ 180 AFML**	**YES** 1. Study of cavitation characteristics of centrifugal pump. 2. Study of the characteristics of submerged jet. 3. Study of characteristics of hydraulic jump. 4. Study of cavitation phenomenon. 5. Verification of Stokes law. 6. Determination of loss through pipes and fittings. 7. Performance test of pumps in series & parallel. **Lab facilities:** Cavitations test ring Impact of jet apparatus Tilting bed type hydraulic flume Strokes law apparatus Friction losses due to pipe fittings apparatus Centrifugal pump test ring series and parallel			

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available => Yes	Deficiencies =>Please enumerate		
B. TECH/ MECHANICAL ENGINEERING	**3rd yr 6th sem**	**Machining & Machine Tools Lab ME 691**	**Workshop – I/ 300 WS-MCL**	**YES** 1. Measurement of cutting forces (Pz and Px or Py) in straight turning at different feeds and velocities. 2. Measurement of average cutting temperature in turning under different speed – feed combinations. 3. Measurement of surface roughness in turning under different conditions 4. Study of chip formation (type, color & thickness) in turning mild steel and evaluation of role of variation of Cutting velocity and feed on chip reduction coefficient /cutting ratio and shear angle. 5. Measurement of tool – wear and evaluation of tool life in turning mild steel by HSS or carbide tool 6. Geometrical and kinematic test of a centre lathe or a drilling machine 7. Producing a cast iron vee – block by machining 8. Production of a straight toothed spur gear from a cast or forged disc **Lab facilities:** ▪ HMT NH22 Heavy duty Lathe -1no. ▪ All geared lathe- 4 nos. ▪ General purpose Belt pulley driven lathe-2 nos. ▪ Milling Machine-1no. ▪ Drilling Machine – 2 nos. ▪ Shaping Machine-1no ▪ Metal cutting shaw-1no ▪ HMT Praga Precision Grinding Machine -1 No ▪ Belt grinder-1no.(not for experiment) ▪ Force measuring Turning dynamometer ▪ Tool tip temperature measuring sensor			
	3rd yr 6th sem	**IC Engine Lab ME 692**	**IC Engine Lab. I/ 180 ICE** **Workshop – I**	**YES** 1. Determination of calorific value of a fuel by Bomb calorimeter. 2. Flue gas analysis by ORSAT apparatus. 3. Study of valve timing diagram of Diesel Engine. 4. Performance Test of a multi -cylinder Petrol Engine by Morse method. 5. Performance Text of an I.C. Engine using electric (eddy current) dynamometer. 6. Use of catalytic converters and its effect on flue gas of an I.C. Engine. 7. Study of MPFI (multipoint fuel injection system). **Lab. Facilities:** ▪ To find out calorific value of diesel & coal by Bomb calorimeter ▪ Abel Apparatus for determining fire & flash point ▪ Cleve land apparatus ▪ To find out cloud point and pour point of petrol & Diesel ▪ To find out calorific value of diesel & coal by Bomb calorimeter ▪ Boiler Models for demonstration ▪ Four stroke three cylinder petrol engine test rig coupled to hydraulic dynamometer with Mohr's test facility ▪ Load test on four stroke Petrol engine with electrical load box & rope brake dynamometer ▪ Load test on four stroke Diesel engine & rope brake dynamometer			

Course / Branch [To be filled by the College]	**Semester** [To be filled by the College]	**Name of the Laboratory with MAKAUT,WB Paper Code** [To be filled by the College]	**Room No. / Area (Sq.ft.)** [To be filled by the College]	**Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set)** [To be filled by the College]		**Observations of the Inspection Team** [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available => Yes	Deficiencies =>Please enumerate		
B. TECH/ MECHANICAL ENGINEERING	**3rd yr 6th sem**	**Design Practice-II ME 693**	**CAD-CAM Lab/ 56 CCL** **ACD-1 1st Floor**	**YES** 1. At least **two assignments** on 2-D and 3-D modeling of mechanical components and systems using software packages like AUTOCAD, CATIA, PRO E or similar software 2. At least **one assignment** on design analysis of mechanical components using software packages like CATIA, PRO E or similar software. 3. At least **one assignment** on Design Practice using codes, e.g., Pressure vessel codes, Gear design codes etc. 4. At least **one assignment** on Selection of mechanical components from manufacturers' catalogue, e.g., chain drive, rolling element bearings etc. **Lab. facilities:** ▪ 30 computers ▪ Solid modeling Software **Creo** (PRO-E) 50 nos.	Solid modelling Software **Creo** (Under TEQIP-II procurement)		
	3rd yr 6th sem	**Dynamics of Machine Lab ME 694**	**Dynamics of Machine lab/ 66 DOM** **ACD-III Ground Floor**	**YES** 1. Studying and designing different mechanisms for performing specific tasks in a machine tool, and for common engineering applications. 2. Studying vibratory systems of single and more than one degree of freedom in linear and rotary systems; 3. Static and dynamic balancing of rotating masses; 4. Balancing of reciprocating masses; 5. Experiments on working of governor, operation and analysis. 6. Experiments on working of gyroscope, operation and analysis. 7. Designing cam, 8. Studying operation of cams and its analysis. **Lab. facilities:** ▪ Universal governor ▪ Motorized gyroscope ▪ Statics and dynamics balancing apparatus ▪ CAM analysis apparatus ▪ Vibration measurement ▪ Model for demonsration			

Course / Branch [To be filled by the College]	Semester [To be filled by the College]	Name of the Laboratory with MAKAUT,WB Paper Code [To be filled by the College]	Room No. / Area (Sq.ft.) [To be filled by the College]	Experimental Set-up required as per MAKAUT,WB syllabus (Maximum four students shall work on one set) [To be filled by the College]		Observations of the Inspection Team [If found in order, please write OK, otherwise enumerate deficiencies]	
				All available =>Yes	Deficiencies =>Please enumerate		
B. TECH/ MECHANICAL ENGINEERING	**3rd yr 6th sem**	**Professional Elective-II Lab Mechatronics Lab ME 695B**	**Mechatronics Lab/ 56 MMCL Workshop-II**	**YES** At least 6 (six) experiments of the following list of topics to be conducted. Experiments on: 1. Open loop position control; 2. Closed loop position control using positional and velocity feedback; 3. Use of analog and digital servo-systems, 4. Use of PID control; 5. Experiments on pneumatic drives and actuators; 6. Experiments on hydraulic drives and actuators; 7. Use of logic gates; 8. Programming on a 8085 Microprocessor training kit; 9. Programming on a PLC for simple control operations. **Lab. facilities:** ▪ 8085 Microprocessor kit ▪ PID Controller ▪ Motor speed control driver ▪ PLC Software(Allen Bradley) ▪ PLC with trainer kits			
		Professional Elective-II Lab Air conditioning and Refrigeration Lab ME-695a	**Air conditioning and Refrigeration Lab/ 75 ACRL ACD-III Ground Floor**	Name of the Experiments: ▪ Study of a Domestic Refrigerator. ▪ Study of a room (window type) Air Conditioner. ▪ Determination of C.O.P of a vapour compression refrigeration system. ▪ Experiment in an Air Conditioning Test Unit; Determination of bypass factor and plotting of the cooling – dehumidification process on a psychometric chart. ▪ Performance test of thermoelectric refrigeration system Lab facility: . Determination of C.O.P of a vapour compression refrigeration system . Performance test of thermoelectric refrigeration system. Mini Air Conditioner Tutor	Procurement done		
	4th year 7th sem	**Advanced Manufacturing Lab ME 791**	**Manufacturing Technology Research Lab/ 66 MTRL Workshop-I**	**YES** 1. Study of Abrasive Jet Machining 2. Study of Ultrasonic Machining 3. Parametric Study of Electro-Discharge Machining 4. Study of Electro-Chemical Machining 5. Study of geometry of robot manipulator, actuators and grippers 6. Programming on CNC Turning 7. Programming on CNC Milling Machine 8. Robot Programming. **Lab. Facilities:** ▪ Die sinking EDM(ZNC ELECTRONICA) ▪ Abrasive Jet Machine ▪ CNC Lathe Trainer ▪ ECM Machine can be fabricated ▪ Model Robot can be used temporarily (available with departments)	▪ Ultrasonic Machining ▪ Electro-Chemical Machining ▪ CNC Milling Machine ▪ are not available		

Course / Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No. / Area (Sq.ft.) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available =>Yes	Deficiencies => Please enumerate	O.K.	Deficiencies
B. TECH/ MECHANICAL ENGINEERING	**4th year 8th sem**	**Design of Mechanical System** **ME881**	**CAD-CAM Lab/ 56 CCL** **ACD-1 1ST Floor**	**YES** In this sessional course work the students have to make design calculations and prepare component & assembly Drawings/sketches (preferably in CAD) on a mechanical system assigned to a group of 4 to 5 students. Mechanical systems will include plants, equipment, instruments, drives, mechanisms, hydraulic/pneumatic/lubrication systems etc. The teachers will allocate one suitable mechanical system appropriate for a 8th. Semester Mechanical Engineering student to each group of students. The students have to carry out the design work in consultation with the respective teacher/s and submit the design work in bound volumes individually and face a viva voce examination as proof of their individual understanding of the design work. **Lab. Facilities:** ▪ 23 computers ▪ Auto CAD free version ▪ Solid modeling Software **Creo** (PRO-E) 50 users.			

Department of MECHANICAL ENGINEERING (HEAT POWER ENGINEERING- M. TECH)

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus All available=> Yes	Deficiencies=> Please Enumerate	Observations of the Inspection Team O.K.	 Deficiencies
M. TECH/ MECHANICAL ENGINEERING	1ST Semester	Thermal Engineering Laboratory-I MHPE-191	**Heat Power lab –II/ 70 HTR-II Workshop – I**	• Performance test on Spark Ignition engines. • Emission measurement in Spark Ignition and Compression Ignition Engines. • Properties of fuel oils. • Solar radiation measurement. ---------- • Performance study of solar water heater. --------- Facility available ▪ Multi fuel V.C.R. Engine Test Rig. ▪ Three cylinder petrol engine test rig. ▪ Bomb calorimeter, ▪ pour point & cloud point apparatus ▪ Flash point & fire point apparatus.	-yet not procured - under modification		
		Thermal Engineering Laboratory-Ii MHPE-192	**Heat Power lab –II70 HTR-II Workshop – I**	• Performance study in a cooling tower. • Performance study in a refrigeration and heat pump systems.-------- • Performance of Heat Exchangers- concentric tube, shell & Tube & Plate type heat exchanger • Drop wise & Film wise condensation. • Study of heat transfer Augmentation -------- Facility available • Cooling tower test rig. • Shell & tube & plate type heat exchange rig. • Drop wise & film wise condensation test ring	- under modification -under development.		
	2nd Semester	Computational Fluid Dynamics Lab MHPE-291	**CFD Lab/ 66 CFDL ACD-I Ground Floor.**	Soft wares: Fluent / Star CD/ ANSYS/ CFX / user defined codes	-under development		
		Research Lab (Heat Transfer)	**I.C. Engine Lab./ 200 RESL-I Workshop -I**				
		Project Lab	**PROJL/ 56 ACD-I 1st Floor**		Extra Facility		

Department of MECHANICAL ENGINEERING (MANUFACTURING TECHNOLOGY- M. TECH

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available=> Yes	**Deficiencies=> Please Enumerate**	**O.K.**	**Deficiencies**
M. TECH/ MECHANICAL ENGINEERING	1ST Semester	Manufacturing Technology Lab - I Manufacturing Technology Lab (MTI 191)	**MCL-I/ 300 Workshop – I**	Yes The experiments are done at per institutional decision. ▪ 11 kW HMT Lathe -1 ▪ Grinding Machine-1 ▪ Universal Milling Machine	-		
		Manufacturing Technology Lab - II Machine Tools and Control Lab(MTI 192)	**MCL-I/ 300 Workshop – I**	Yes The experiments are done at per institutional decision. ▪ All gear lathe -4 ▪ Milling machine-1 ▪ Drilling machine-1 ▪ Grinding machine-1 ▪ Universal Milling Machine (PO placed)-1 ▪ Shaping machine-1 ▪ Hydraulic Power Control Circuit Trainer-1 ▪ Pneumatic Circuit Trainer-1	-		
	2nd Semester	Research Lab (Manufacturing Technology Lab - III Flexible & Manufacturing System Lab & Robotics Lab (MTI 291) & Manufacturing Technology)	**RESL-II/ 66 Workshop – I**	No The experiments are done at per institutional decision. ▪ CNC Lathe Trainer ▪ PLC ▪ Die Singing EDM ▪ A brasuve jet Maching	Yes		

Department of INFORMATION TECHNOLOGY

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available=> Yes	Deficiencies=> Please Enumerate	O.K.	Deficiencies
B. TECH/ INFORMATION TECHNOLOGY	3rd Sem	Data Structure & Algorithm Lab (CS - 392)	CL-I / 65, ACD – I, 2nd Floor,	**Yes** 1. Implementation of addition,deletion & traversal on single arrays. 2. Implementation of merge sort algorithm . 3. Implementation of quick sort algorithm. . 4. Implementation of bubble sort algorithm . 5. Implementation of linear search algorithm. 6. Implementation of binary search algorithm. 7. Implementation of graph traversal using BFS. 8. Implementation of graph traversal using DFS. **Hardware** P4/1.8GHz/40GB/640MB (17) P4/1.8GHz/40GB/768MB (3) P4/1.8GHz/40GB/632MB (1) Core-I3/3.19GHz/500GB/2GB (6) Dual-Core/3GHz/500GB/2GB (3) **Software** Windows XP Professional, Turbo C2.			
	5th Sem	Design & Analysis of Algorithm Lab (IT - 591)	CL-I / 65, ADM 2nd Floor,	**Yes** 1. Implementation of binary search algorithm using divide-and-conquer method. 2. Implementation of merge sort algorithm using divide-and-conquer method. 3. Implementation of quick sort algorithm using divide-and-conquer method. 4. Implementation of MAX-MIN algorithm using divide-and-conquer method. 5. Implementation of chain multiplication of matrices using dynamic programming method. 6. Implementation of 8-queen problem using backtracking. 7. Implementation of graph traversal using BFS. 8. Implementation of graph traversal using DFS. **Hardware** P4/1.8GHz/40GB/640MB (17) P4/1.8GHz/40GB/768MB (3) P4/1.8GHz/40GB/632MB (1) Core-I3/3.19GHz/500GB/2GB (6) Dual-Core/3GHz/500GB/2GB (3) **Software** Windows XP Professional, Turbo C2.			

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available=> Yes	Deficiencies=> Please Enumerate	O.K.	Deficiencies
B. TECH/ INFORMATION TECHNOLOGY	5th Sem	Computer Architecture Lab (IT - 592)	**Project Lab / 57, PL-CS, ADM 3rd Floor**	**Yes** 1. Implementation of basics of digital logic with HDL. 2. Design of 8 bit adder, 8 bit multiplexer,8 bit divider. 3. Design of 8 bit register. 4. Design of 8 bit simple ALU. 5. Design of 8 bit simple CPU. **Hardware** Core i3 2nd Gen/3.40 GHz/500GB/4GB(28) Core-2 Duo/2.39 GHz/300 GB/2 GB(1) P-IV/2.67 GHz/40 GB/1 GB(1) **Software** Windows XP Professional, Oracle 11g database, Xilinx-ISE 8.2i.			
		Operating System Lab (IT - 593)	**ITL-5/ 65, ADM 1st Floor**	**Yes** 1. Shell programming : creating a script, making a script executable, shell syntax 2. Process : starting new process, replacing a process image, duplicating a process image, waiting for a process, zombie process. 3. Signal: signal handling, sending signals, signal interface, signal sets. 4. Semaphore : programming with semaphores (use functions semctl, semget, semop, set_semvalue, del_semvalue, semaphore_p, semaphore_v). 5. POSIX Threads : programming with pthread functions(viz. pthread_create, pthread_join, pthread_exit, pthread_attr_init, pthread_cancel) 6. Inter-process communication: pipes(use functions pipe, popen, pclose), named pipes(FIFOs, accessing FIFO) Facilities- **Hardware-** Core-2 Duo/2.67GHz/160GB/1GB (32) **Software-** Windows 7, Oracle 11g database, Linux, JDK-6.			
		Programming Practices using C++ Lab (IT – 594F)	**Project Lab /57 PL-CS ADM 3rd Floor**	**Yes** For C++ language: 1) Program on arrays,strings,pointers,structures,unions. 2) Program on recursion. 3) Program on classes,constructors & destructors. 4) Program on abstract classes & virtual classes. 5) Program on inheritance. **Hardware** Core i3 2nd Gen/3.40 GHz/500GB/4GB(28) Core-2 Duo/2.39 GHz/300 GB/2 GB(1) P-IV/2.67 GHz/40 GB/1 GB(1) **Software** Windows XP Professional, turbo C++.			

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available=> Yes	Deficiencies=> Please Enumerate	O.K.	Deficiencies
B. TECH/ INFORMATION TECHNOLOGY	7th Sem	Internet Technology Lab (IT - 791)	ITL-5/ 65, ADM 1st Floor	**Yes** 1.Creation of Banner using Applet 2.Display Clock using Applet 3.Display image using Applet 4.Read/Write a file using Applet 5.Display Clock/Create Calculator using Java script 6.Program to Implement Array 7.Client-server based Stack program 8. HTML (Head, title, Body, bold/underline/Italic, Paragraph, URL, Table, Bullet Tags.) Facilities- **Hardware**- Core-2 Duo/2.67GHz/160GB/1GB (32) **Software-** Windows 7, Oracle 11g database, Linux, JDK-6.			
	7th Sem	Multimedia Lab (IT - 792)	Project Lab/ 57, PL-CS, ADM 3rd Floor	**Yes** 1.Creating Animations using Flash 2.Creating CV using HTML 3.Creating Travel Details using Dreamweaver 4.Superimposing on Images using Photoshop Facilities: **Hardware**- Core i3 2nd Gen/3.40 GHz/500GB/4GB(28) Core-2 Duo/2.39 GHz/300 GB/2 GB(1) P-IV/2.67 GHz/40 GB/1 GB(1) **Software-** Windows XP, Oracle 11g database, Dreamwaver, Flash 5, Photoshop 6.0, Java, turbo C++			
	2nd Sem	Basic Computations and Principle of Computer Lab-1 (CS – 291)	CL - I/ 65, ADM 2nd Floor	**Yes** 1. Basic Programs related to simple mathematical formulas 2. Programs to implement if-else 3. Programs to implement different loops 4. Programs to implement functions 5. Programs to implement pointers 6. Programs to implement Arrays 7. Programs to implement Strings 8. Programs to implement Structures 9. Programs to implement Files Facilities: **Hardware**- P4/1.8GHz/40GB/640MB (17) P4/1.8GHz/40GB/768MB (3) P4/1.8GHz/40GB/632MB (1) Core-I3/3.19GHz/500GB/2GB (6) Dual-Core/3GHz/500GB/2GB (3) **Software** :Windows XP Professional, Turbo C2.			

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available=> Yes	Deficiencies=> Please Enumerate	O.K.	Deficiencies
B. TECH/ INFORMATION TECHNOLOGY	4th Sem	Numerical Methods & Programming Lab (MCS - 491)	ITL-3/ 65, ADM 2nd Floor	**Yes** 1. Assignments on Newton forward /backward, Lagrange's interpolation. 2. Assignments on numerical integration using Trapezoidal rule, Simpson's 1/3 rule, Weddle's rule. 3. Assignments on numerical solution of a system of linear equations using Gauss elimination and Gauss-Seidel iterations. 4. Assignments on numerical solution of Algebraic Equation by Bisection method, Regular-falsi and Newton Raphson methods. 5. Assignments on ordinary differential equation: Euler's and Runga-Kutta methods. Facilities: **Hardware-** P4/1.8GHz/40GB/640MB (23) Core-I3/3.19GHz/500GB/2GB (6) Dual-Core/3GHz/500GB/2GB (2) **Software**: Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2.			
		Software Tools Lab (IT - 492)	ITL-3/ 65, ADM 2nd Floor	**Yes** Introduction to Visual Basic & difference with BASIC. Concept about form Project, Application, Tools, Toolbox, i. Controls & Properties. Idea about Labels, Buttons, Text Boxes. ii. Data basics, Different type variables & their use in VB, iii. Sub-functions & Procedure details, Input box () & Msgbox (). iv. Making decisions, looping v. List boxes & Data lists, List Box control, Combo Boxes, data Arrays. vi. Frames, buttons, check boxes, timer control, vii. Programming with data, ODBC data base connectivity. viii. Data form Wizard, query, and menus in VB Applications, ix. Graphics. Case studies using any of the following items including relevant form design with the help of visual programming aids. Facilities **Hardware-** P4/1.8GHz/40GB/640MB (23) Core-I3/3.19GHz/500GB/2GB (6) Dual-Core/3GHz/500GB/2GB (2) **Software-** Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2.			
		Object Technology & UML Lab (IT - 491)	Project Lab/ 57, PL-CS, ADM 3rd Floor	**Yes** 1.Assignments on class, constructor, overloading, inheritance, overriding. 2. Assignments on wrapper class, vectors, arrays. 3. Assignments on developing interfaces-multiple inheritance, extending interfaces. 4. Assignments on creating and accessing packages 5. Assignments on multithreaded programming, handling errors and exceptions, applet programming and graphics programming Facilities- **Hardware-** Core i3 2nd Gen/3.40 GHz//500GB/4GB (28) Core-2 Duo/2.39 GHz/300GB/2GB (1) P-IV/2.67GHz//40GB/1GB (1) **Software-** Windows XP,Oracle 9i database, Dreamwaver, Flash 5, photoshop 6.0, java, turbo C++			

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available=> Yes	Deficiencies=> Please Enumerate	O.K.	Deficiencies
B. TECH/ INFORMATION TECHNOLOGY	6th Sem	DBMS Lab (IT - 691)	**Lab 5** **ADM** **3rd Floor**	**Yes** 1. Creating, altering and dropping tablesh integrity constraints. 2. Retrieving and modifying data from a database. 3. Retrieving data from database using IN, BETWEEN, LIKE, ORDER BY, GROUP BY and HAVING clause. 4. Use of scalar and aggregate functions. 5. Retrieving data from a database using Equi, Non Equi, Outer and Self Join. 6. Using subqueries, rowid and rownum for retrieving data. 7. Use of views, indexes and sequences. PL/SQL: 8. Introduction to PL/SQL , using output from server. 9. Use of implicit & explicit cursors in data handling. 10. Exception handling – Oracle defined and User defined. 11. Use of stored procedures & functions in data manipulation. 12. Use of trigger in data manipulation. Facilities- **Hardware-** Core i3 2nd Gen/3.40 GHz//500GB/4GB (28) Core-2 Duo/2.39 GHz/300GB/2GB (1) P-IV/2.67GHz//40GB/1GB (1) **Software-** Windows 7, Oracle 9i database.			
		Computer Network Lab (IT -692)	**ITL-5/ 65,** **ADM** **1st Floor**	**Yes** 1.UNDERSTANDING TCP/IP: (IP ADDRESS, SUBNET MASK, DNS) 2.CASE STUDY ON ETHERNET 3. NETWORK CONFIGURATION: i> NETWORK O.S CONFIG(LINUX,WINDOWS) ii>CONFIG DNS,FTP(LINUX) iii> SHARING FILES IN LAN ON VARIOUS NODES 4. SOCKET PROGRAMMING: i>BASIC UNIX SYSTEM CALL RELATED WITH SOCKET ii>ECHO CLIENT, ECHO SERVER iii>TIME SERVER iv>WHOIS CLIENT AND WHOIS SERVER) v>CHAT CLIENT AND SERVER vi>PROCESS COMMUNICATION 5.UNIX /LINUX NETWORK PROGRAMMING- RPC. 6.HANDS OM ACTIVITY IN PHYSICAL LINKS Facilities- **Hardware-** Core-2 Duo/2.67GHz/160GB/1GB (32) **Software-** Windows 7, Oracle 9i database, Linux, JDK-6			

Course/ Branch	Semester	Name of the Laboratory with WBUT Paper Code	Room No/ Area (Sq.ft) Location	Experimental Set-up required as per WBUT syllabus		Observations of the Inspection Team	
				All available=> Yes	Deficiencies=> Please Enumerate	O.K.	Deficiencies
B. TECH/ INFORMATION TECHNOLOGY	6th Sem	Software Engineering Lab (IT - 693)	ITL-3/ 65, ADM 2nd Floor	**Yes** 1. Create a student management system using USE CASE diagram. 2. Create a Staff management system using USE CASE diagram. 3. Create a student management system using Activity Diagram. Facilities: - **Hardware-** P4/1.8GHz/40GB/640MB (23) Core-I3/3.19GHz/500GB/2GB (6) Dual-Core/3GHz/500GB/2GB (2) **Software-** Windows XP service pack 2, Ms Office Professional 2003, Microsoft Visual Studio 6.0 with MSDN, JDK-1.5.0, Turbo C2.			
	8th Sem	E Commerce Lab (IT -892)	ITL-5/65 ADM 1st Floor	**Yes** 1. Following experiments are to be implemented using either VB, ASP, SQL or java, jsp, sql. i> Creating E-Commerce Site [3P]: Designing and .maintaining WebPages. Advertising in the Websie, Portals and Vortals. ii>E-Commerce Interaction [6P]: Comparison Shopping in B2C, Exchanges Handling in B2B, Interaction Example: Virtual Shopping Carts iii>E-Commerce Applications [6P]: Online Store, Online Banking, Credit Card Transaction Processing. Facilities:- **Hardware-** Core-2 Duo/2.67 GHz/160 GB/1 GB(32) P-IV/2.67 GHz/40 GB/1 GB(1) **Software-** Windows 7, Oracle 9i database,Linux, JDK-6			

Auditorium/ Seminar Halls/ Amphi	Auditorium- 01 Seminar Halls- 05	
Cafeteria	02	
Indoor Sports facilities	Yes – Carrom, Table Tennis	
Outdoor Sports facilities	Yes – Badminton, Cricket, Football, Basketball etc.	
Gymnasium facilities	Yes – Various types	
Facilities for disabled	Yes – Ramp, Lift	
Any other facilities	**Bank- In campus**	

16.

Items		
Boys Hostel	03 Nos.	
Girls Hostel	01 No.	

Medical & Other Facilities at Hostel	Yes	 

17.

Items	
Academic Sessions	1st July to 31st June
Examination system, Year/ Sem	Semester wise
Period of declaration of results	January & July each year

18.

Items	
Counseling/ Mentoring	Done centrally by Training & Placement Office and Department wise.
Career Counseling	Done regularly by Training & Placement wing and by Seminar
Medical facilities	Medical Unit with Bed
Student Insurance	Provision made through West Bengal University of Technology

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Items	
Students Activity Body	YES – 'SPARSH" (Social wing), FEST Committee (Elected annually)
Cultural activities	Annual Fest and other cultural meet every year
Sports activities	Annual Sports held every year apart from regular Indoor and Outdoor Sports Events.
Library activities	Departmental Library, Central Library, Reading Room & Reprographic Center & Digital Library
Magazine/ Newsletter	Magazine 'Shristichara' published every year.
Technical activities/ Tech Fest	Yes
Industrial Visits/ Tours	YES – Massanjore Dam, Bakreshwar Thermal Power Plant,Damodar Valley Corporation, Mython, Panchyet, Hind Motors etc.
Alumni activities	Alumnus are taking grooming classes for ongoing final year students.

20.

Items	
Name of the Information Officer for RTI	Smt. Moumita Sarkar Banerjee
Designation	Registrar (Acting)
Phone number with STD code	N.A.
FAX number with STD code	N.A.
Email	m.banerjee.eng@gmail.com

CAY = Current Academic Year
* Repeat this template for each department/ staff.
# Repeat this template for additional quota, if any.