Criterion 5 Faculty Information and Contributions 200	
---	--

# **For the Year 2017-18**

lember	•	Qualification		ıstitute						demi searcl		Funded	oduct	
Name of the Faculty Member	Degree	University	Year with Graduation	Association with the Institute	Designation	Date of Joining	Department	Specialization	Research Paper Publications	PhD. D. Guidance	Faculty Receiving	Sponsored Research (Funded Research)	Consultancy and Product Development	
Prof. Aijaz Ahmad	Ph.D	IIT Delhi	1998	33 Years	Professor	01/10/1985	Electrical Engineering Department	Power Systems	4	5	-	-	-	
Prof. Mairaj -ud- Din Mufti	Ph.D	IIT Delhi	1998	32 Years	Professor	01/09/1986	Electrical Engineering Department	Power Systems	5	6	-	-	-	
Prof. Shameem Ahmad Lone	Ph.D	NIT Srinagar	2007	28 Years	Professor	06/1990	Electrical Engineering Department	Power Systems	7	7	1	-	-	
Dr. Abdul Hamid Bhat	Ph.D	IIT Roorkee	2007	22 Years	Associate Professor	16/01/1996	Electrical Engineering Department	Power Electronics	14	5	-	-	-	
Dr. Sheikh Javed Iqbal	Ph.D	NIT Srinagar	2014	22 Years	Associate Professor	14/3/1996	Electrical Engineering Department	Power Systems	-	4	1	-	-	
Dr. Mohammad Abid Bazaz	Ph.D	IIT Delhi	2013	18 Years	Assistant Professor	23/03/2000	Electrical Engineering Department	Control Systems	7	5	1	-	-	
Ms. Tabish Nazir Mir	B.Tech	NIT Srinagar	2014	2 Years	Assistant Professor	08/01/2016	Electrical Engineering Department	Power Electronics	0	1	Y	-	-	
Mr. Amit Kumar	M.Tech	NIT Srinagar	2015	2 Years	Assistant Professor	18/09/2015 to 31/08/2017	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr Masood- ibn-Nazir	M.Tech	VIT	2016	6 Months	Assistant Professor	20/03/2017 to 19/09/2018	Electrical Engineering Department	Control Systems	-	-	-	-	-	
Mr. Zahid Farooq	M.Tech	AL-Falah University	2016	1 Year 6 Moths	Assistant Professor	03/04/2017 to 27/09/2018	Electrical Engineering Department	Power Systems	-	-	1	-	-	
Ms. Saima Ashraf	M.Tech	MRIU	2016	1 Year 6 Moths	Assistant Professor	03/04/2017 to 31/12/2018	Electrical Engineering Department	Power Systems	-	-	1	-	-	

Ms. Bisma Hamid	M.Tech	JNTU	2016	5 Months	Assistant Professor	03/04/2017 to 04/09/2017	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Imtiyaz Alam	M.Tech	Gautam Buddha University	2016	8 Months	Assistant Professor	21/04/2017 to 29/12/2017	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Keshav Dutt	M.Tech	NIT Srinagar	2017	6 Months	Assistant Professor	05/09/2017 to 18/07/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Deep Agarwal	M.Tech	NIT Srinagar	2017	6 Months	Assistant Professor	05/09/2017 to 31/12/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr.Chanda n Kumar	M.Tech	NIT Srinagar	2017	6 Months	Assistant Professor	05/09/2017 to 27/09/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Nasir Rehman	M.Tech	AL-Falah University	2016	6 Months	Assistant Professor	05/09/2017 to 27/09/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Rakesh Kumar Singh	M.Tech	ISM Dhanbad	2014	6 Months	Assistant Professor	05/09/2017 to 20/12/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr Gaurav Bhatt	M.Tech	NIT Shillong	2017	3 Months	Assistant Professor	12/09/2017 to 29/12/2017	Electrical Engineering Department	Power Systems	1	-	1	1	1	
Ms. Kiran Rana	M.Tech	NIT Kurukshet ra	2016	3 Months	Assistant Professor	18/09/2017 to 29/12/2017	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Sheikh Safiullah	M.Tech	Sharda University	2017	6 Months	Assistant Professor	06/03/2018 to 25/09/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Aabid Hussain Sheikh	M.Tech	AL-Falah University	2017	6 Months	Assistant Professor	06/03/2018 to 31/12/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Dr. Tanweer Jalal	Ph.D	AMU	1993	20 Years	Associate Professor	03/07/1998	Mathematics	Sequence Spaces	-	-	-	-	-	
Dr. Abdul Liman	Ph.D	Kashmir University	2008	22 Years	Assistant Professor	17/01/1996	Mathematics	Approximatio n Theory	-	-	-	-	-	
Dr. Neyaz Ahmed Sheikh	Ph.D	AMU	1996	18Years	Associate Professor	30/03/2000	Mathematics	Wavelet Analysis	-	-	-	-	-	
Dr. Zamrooda Jabeen	Ph.D	Kashmir University	2007	22 Years	Associate Professor	06/03/1996	Mathematics	Statistics and Operation Research	-	-	-	-	-	
Dr. P. A. Ganai	Ph.D	Kashmir University	2010	18 Years	Assistant Professor	03/2000	Physics Department	Nuclear Physics	-	-	-	-	-	
Dr Fozia Jan Sofi	Ph.D	Jamia Millia Islamiia	2014	2 Years	Assistant Professor	09/03/2016	Humanities Department	Management Studies	-	-	-	-	-	

## **For the Year 2018-19**

fember	(	Qualification		nstitute						demi searcl		Funded	oduct	
Name of the Faculty Member	Degree	University	Year with Graduation	Association with the Institute	Designation	Date of Joining	Department	Specialization	Research Paper Publications	PhD. D. Guidance	Faculty Receiving	Sponsored Research (Funded Research)	Consultancy and Product Development	
Prof. Aijaz Ahmad	Ph.D	IIT Delhi	1998	34 Years	Professor	01/10/1985	Electrical Engineering Department	Power Systems	4	6	1	-	-	
Prof. Mairaj -ud- Din Mufti	Ph.D	IIT Delhi	1998	33 Years	Professor	01/09/1986	Electrical Engineering Department	Power Systems	3	9	-	-	-	
Prof. Shameem Ahmad Lone	Ph.D	NIT Srinagar	2007	29 Years	Professor	06/1990	Electrical Engineering Department	Power Systems	0	8	-	1	-	
Dr. Abdul Hamid Bhat	Ph.D	IIT Roorkee	2007	23 Years	Professor	16/01/1996	Electrical Engineering Department	Power Electronics	5	5	-	-	-	
Dr. Sheikh Javed Iqbal	Ph.D	NIT Srinagar	2014	23 Years	Associate Professor	14/3/1996	Electrical Engineering Department	Power Systems	0	6	-	-	-	
Dr. Mohammad Abid Bazaz	Ph.D	IIT Delhi	2013	19 Years	Associate Professor	23/03/2000	Electrical Engineering Department	Control Systems	14	6	-	-	-	
Ms. Tabish Nazir Mir	B.Tech	NIT Srinagar	2014	3 Years	Assistant Professor	08/01/2016	Electrical Engineering Department	Power Electronics	6	-	Y	1	-	
Dr. Obbu Chandra Sekhar	Ph.D	JNTU Hyderaba d	2017	14 months	Associate Professor	29/10/2018	Electrical Engineering Department	Power Electronics	3	1	0	0	0	
Dr. Asadur Rahman	Ph.D	NIT Silchar	2016	14 months	Assistant Professor	30/10/2018	Electrical Engineering Department	Power & Energy Systems	0	2	0	0	0	
Dr. Neeraj Gupta	Ph.D	IIT Roorkee	2015	14 months	Assistant Professor	29/10/2018	Electrical Engineering Department	Power system	0	2	0	0	0	
Dr. Farhad Ilahi Bakhsh	Ph.D	IIT Roorkee	2017	14 months	Assistant Professor	01/11/2018	Electrical Engineering Department	Renewable Energy Systems	3	2	0	0	0	
Dr. Kushal M Jagtap	Ph.D	IIT Roorkee	2017	14 months	Assistant Professor	26/10/2018	Electrical Engineering Department	Electrical and Power Engineering	0	0	0	0	0	

Dr. Ravi Bhushan	Ph.D	IIT (ISM) Dhanbad	2018	14 months	Assistant Professor	29/10/2018	Electrical Engineering Department	Power and Energy System	3	2	0	0	0	
Dr. Chilaka Ranga	Ph.D	NIT Hamirpur	2018	14 months	Assistant Professor	23/10/2018	Electrical Engineering Department	Power Systems (Electrical Machines)	02	1	0	0	0	
Mr. Zahid Farooq	M.Tech	AL-Falah University	2016	1 Year 6 Moths	Assistant Professor	03/04/2017 to 27/09/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Ms. Saima Ashraf	M.Tech	MRIU	2016	1 Year 6 Moths	Assistant Professor	03/04/2017 to 31/12/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Keshav Dutt	M.Tech	NIT Srinagar	2017	6 Months	Assistant Professor	05/09/2017 to 18/07/2018	Electrical Engineering Department	Power Systems	1	-	-	1	-	
Mr. Deep Agarwal	M.Tech	NIT Srinagar	2017	6 Months	Assistant Professor	05/09/2017 to 31/12/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr.Chanda n Kumar	M.Tech	NIT Srinagar	2017	6 Months	Assistant Professor	05/09/2017 to 27/09/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Nasir Rehman	M.Tech	AL-Falah University	2016	6 Months	Assistant Professor	05/09/2017 to 27/09/2018	Electrical Engineering Department	Power Systems	-	-	-	1	-	
Mr. Rakesh Kumar Singh	M.Tech	ISM Dhanbad	2014	6 Months	Assistant Professor	05/09/2017 to 20/12/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Sheikh Safiullah	M.Tech	Sharda University	2017	6 Months	Assistant Professor	06/03/2018 to 25/09/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Mr. Aabid Hussain Sheikh	M.Tech	AL-Falah University	2017	6 Months	Assistant Professor	06/03/2018 to 31/12/2018	Electrical Engineering Department	Power Systems	-	-	-	-	-	
Dr. Tanweer Jalal	Ph.D	AMU	1993	20 Years	Associate Professor	03/07/1998	Mathematics	Sequence Spaces	-	-	-	-	-	
Dr. Abdul Liman	Ph.D	Kashmir University	2008	22 Years	Professor	17/01/1996	Mathematics	Approximatio n Theory	-	-	-	-	-	
Dr. Neyaz Ahmed Sheikh	Ph.D	AMU	1996	18Years	Professor	30/03/2000	Mathematics	Wavelet Analysis	-	-	-	-	-	
Dr. Zamrooda Jabeen	Ph.D	Kashmir University	2007	22 Years	Associate Professor	06/03/1996	Mathematics	Statistics and Operation Research	-	-	-	-	-	
Dr. P. A. Ganai	Ph.D	Kashmir University	2010	18 Years	Associate Professor	03/2000	Physics Department	Nuclear Physics	-	-	-	-	-	
Dr Fozia Jan Sofi	Ph.D	Jamia Millia Islamiia	2014	2 Years	Assistant Professor	09/03/2016	Humanities Department	Management Studies	-	-	-	-	-	
Dr. Jaya Shrivastava	Ph.D.	IIT Indore	2016	3	Assistant Professor	31/12/2018	Humanities Department	English Literature	-	-	-	-	-	-
Mr. Aaqib Ali Abbas	M.Tech	NIT Srinagr	2018	9 months	Assistant Professor	19/03/2019	Electrical Engineering Department	Power Systems		-	-	-	-	-

# For the Year 2019-20

lember	(	Qualification		ıstitute						demi searcl		Funded	oduct	
Name of the Faculty Member	Degree	University	Year with Graduation	Association with the Institute	Designation	Date of Joining	Department	Specialization	Research Paper Publications	PhD. D. Guidance	Faculty Receiving	Sponsored Research (Funded Research)	Consultancy and Product Development	
Prof. Aijaz Ahmad	Ph.D	IIT Delhi	1998	34 Years	Professor	01/10/1985	Electrical Engineering Department	Power Systems	7	6	0	0	0	
Prof. Mairaj -ud- Din Mufti	Ph.D	IIT Delhi	1998	33 Years	Professor	01/09/1986	Electrical Engineering Department	Power Systems	13	9	0	0	0	
Prof. Shameem Ahmad Lone	Ph.D	NIT Srinagar	2007	29 Years	Professor	06/1990	Electrical Engineering Department	Power Systems	1	7	0	0	0	
Prof. Abdul Hamid Bhat	Ph.D	IIT Roorkee	2007	23 Years	Professor	16/01/1996	Electrical Engineering Department	Power Electronics	7	8	0	0	0	
Dr. Sheikh Javed Iqbal	Ph.D	NIT Srinagar	2014	23 Years	Associate Professor	14/3/1996	Electrical Engineering Department	Power Systems	0	6	0	0	0	
Dr. Mohammad Abid Bazaz	Ph.D	IIT Delhi	2013	19 Years	Associate Professor	23/03/2000	Electrical Engineering Department	Control Systems	12	5	0	1	0	
Dr. Obbu Chandra Sekhar	Ph.D	JNTU Hyderaba d	2017	14 months	Associate Professor	29/10/2018	Electrical Engineering Department	Power Electronics	12	2	0	1	0	
Dr. Asadur Rahman	Ph.D	NIT Silchar	2016	14 months	Assistant Professor	30/10/2018	Electrical Engineering Department	Power & Energy Systems	6	2	0	0	0	
Dr. Neeraj Gupta	Ph.D	IIT Roorkee	2015	14 months	Assistant Professor	29/10/2018	Electrical Engineering Department	Power system	6	4	0	0	0	
Dr. Farhad Ilahi Bakhsh	Ph.D	IIT Roorkee	2017	14 months	Assistant Professor	01/11/2018	Electrical Engineering Department	Renewable Energy Systems	15	2	0	1	0	
Dr. Kushal M Jagtap	Ph.D	IIT Roorkee	2017	14 months	Assistant Professor	26/10/2018	Electrical Engineering Department	Electrical and Power Engineering	1	0	0	1	0	
Dr. Ravi Bhushan	Ph.D	IIT (ISM) Dhanbad	2018	14 months	Assistant Professor	29/10/2018	Electrical Engineering Department	Power and Energy System	1	3	0	0	0	

Dr. Chilaka Ranga	Ph.D	NIT Hamirpur	2018	14 months	Assistant Professor	23/10/2018	Electrical Engineering Department	Power Systems (Electrical Machines)	4	1	0		0	
Ms. Tabish Nazir Mir	B.Tech	NIT Srinagar	2014	3 Years	Assistant Professor	08/01/2016	Electrical Engineering Department	Power Electronics	3	0	Y	0	0	
Mr. Aaqib Ali Abbas	M.Tech	NIT Srinagar	2018	18 months	Assistant Professor	19/03/2019	Electrical Engineering Department	Power Systems		-	-	-	-	1
Dr. Shufali Ashraf Wani	Ph.D.	JamiaMill iaIslamia	2019	14 months	Assistant Professor	30/10/2019	Electrical Engineering Department	Instrumentatio n	6	0	0	0	0	
Mr. MuneebUl Bashir	M.Tech	JamiaMill iaIslamia	2019	14 months	Assistant Professor	30/10/2019	Electrical Engineering Department	Power Systems		-	-	-	-	-
Prof. Neyaz Ahmed Sheikh	Ph.D	AMU	1996	18Years	Professor	30/03/2000	Mathematics	Wavelet Analysis		-	-	-	-	-
Prof. Muhammad Ikram	Ph.D.	AMU	1996	21 years	Professor	13/05/2000	Physics Department	Magnetism, thin films, swift heavy ion irradiation, Nano science	- 1	-	-	-	-	1
Dr. Ujwal Sureshrao Warbhe	Ph.D.	VNIT Nagpur	2018	11 Months	Assistant Professor	23/01/2019	Mathematics Department	Numerical Analysis	1	0	0	0	0	
Dr. Tahir Ahmad Wani	Ph.D.	Jamia Millia Islamia	2016	12 months	Assistant Professor	31-12-2019	HSS Department	Marketing Management	10	2	-	-	-	-
Mr. Aman Heera	M.Tech	GEC Jabalpur	2012	13 months	Assistant Professor	10/4/2019	Mechanical Engineering Department	Thermal Engineering	4	0	0	0	0	0

# For the Year 2020-21

fember	-	Qualification		nstitute						demi searcl	-	Funded	oduct	
Name of the Faculty Member	Degree	University	Year with Graduation	Association with the Institute	Designation	Date of Joining	Department	Specialization	Research Paper Publications	PhD. D. Guidance	Faculty Receiving	Sponsored Research (Funded Research)	Consultancy and Product Development	
Prof. Aijaz Ahmad	Ph.D	IIT Delhi	1998	34 Years	Professor	01/10/1985	Electrical Engineering Department	Power Systems	6	6	0	0	0	
Prof. Mairaj -ud- Din Mufti	Ph.D	IIT Delhi	1998	33 Years	Professor	01/09/1986	Electrical Engineering Department	Power Systems	10	9	0	0	0	
Prof. Shameem Ahmad Lone	Ph.D	NIT Srinagar	2007	29 Years	Professor	06/1990	Electrical Engineering Department	Power Systems	4	7	0	0	0	
Prof. Abdul Hamid Bhat	Ph.D	IIT Roorkee	2007	23 Years	Professor	16/01/1996	Electrical Engineering Department	Power Electronics	8	8	0	0	0	
Dr. Sheikh Javed Iqbal	Ph.D	NIT Srinagar	2014	23 Years	Associate Professor	14/3/1996	Electrical Engineering Department	Power Systems	1	6	0	0	0	
Dr. Mohammad Abid Bazaz	Ph.D	IIT Delhi	2013	19 Years	Associate Professor	23/03/2000	Electrical Engineering Department	Control Systems	9	5	0	0	0	
Dr. Obbu Chandra Sekhar	Ph.D	JNTU Hyderaba d	2017	14 months	Associate Professor	29/10/2018	Electrical Engineering Department	Power Electronics	2	2	0	0	0	
Dr. Asadur Rahman	Ph.D	NIT Silchar	2016	14 months	Assistant Professor	30/10/2018	Electrical Engineering Department	Power & Energy Systems	3	2	0	0	0	
Dr. Neeraj Gupta	Ph.D	IIT Roorkee	2015	14 months	Assistant Professor	29/10/2018	Electrical Engineering Department	Power system	4	4	0	0	0	
Dr. Farhad Ilahi Bakhsh	Ph.D	IIT Roorkee	2017	14 months	Assistant Professor	01/11/2018	Electrical Engineering Department	Renewable Energy Systems	5	2	0	0	0	
Dr. Kushal M Jagtap	Ph.D	IIT Roorkee	2017	14 months	Assistant Professor	26/10/2018	Electrical Engineering Department	Electrical and Power Engineering	0	0	0	0	0	
Dr. Ravi Bhushan	Ph.D	IIT (ISM) Dhanbad	2018	14 months	Assistant Professor	29/10/2018	Electrical Engineering Department	Power and Energy System	1	3	0	0	0	

Dr. Chilaka Ranga	Ph.D	NIT Hamirpur	2018	14 months	Assistant Professor	23/10/2018	Electrical Engineering Department	Power Systems (Electrical	2	1	0		0	
Dr. Tabish Nazir Mir	B.Tech	NIT Srinagar	2014	3 Years	Assistant Professor	08/01/2016	Electrical Engineering Department	Power Electronics	4	0	Y	0	0	
Mr. Aaqib Ali Abbas	M.Tech	NIT Srinagar	2018	18 months	Assistant Professor	19/03/2019	Electrical Engineering Department	Power Systems		-	-	-	-	-
Dr. Shufali Ashraf Wani	Ph.D.	JamiaMill iaIslamia	2019	14 months	Assistant Professor	30/10/2019	Electrical Engineering Department	Instrumentatio n	6	0	0	0	0	
Mr. MuneebUl Bashir	M.Tech	JamiaMill iaIslamia	2019	14 months	Assistant Professor	30/10/2019	Electrical Engineering Department	Power Systems		-	-	-	-	-
Prof. Neyaz Ahmed Sheikh	Ph.D	AMU	1996	18Years	Professor	30/03/2000	Mathematics	Wavelet Analysis		-	-	-	-	-
Prof. Muhammad Ikram	Ph.D.	AMU	1996	21 years	Professor	13/05/2000	Physics Department	Magnetism, thin films, swift heavy ion irradiation, Nano science		-	-	-	-	-
Dr. Ujwal Sureshrao Warbhe	Ph.D.	VNIT Nagpur	2018	11 Months	Assistant Professor	23/01/2019	Mathematics Department	Numerical Analysis	1	0	0	0	0	
Dr. Tahir Ahmad Wani	Ph.D.	Jamia Millia Islamia	2016	12 months	Assistant Professor	31-12-2019	HSS Department	Marketing Management	10	2	-	-	-	-
Mr. Aman Heera	M.Tech	GEC Jabalpur	2012	13 months	Assistant Professor	10/4/2019	Mechanical Engineering Department	Thermal Engineering	4	0	0	0	0	0
Dr. Shoeb Hussain	Ph.D.	NIT, Srinagar	2016	02 months	Assistant Professor	01/04/2021	Electrical Engineering Department	Control Systems	01	0	0	0	0	0
Dr. Hareesh Myneni	Ph.D.	NIT, Warangal	2019	02 months	Assistant Professor	07/04/2021	Electrical Engineering Department	Power Electronics	1	0	0	0	0	0
Dr. D V Siva Krishna Rao K	Ph.D.	NIT, Tiruchirap palli	2018	02 months	Assistant Professor	06/04/2021	Electrical Engineering Department	Energy Engineering	0	0	0	0	0	0

## 5.1 Student-Faculty Ratio (SFR) (20)

No. of UG programs in the department (n) = 1

No. of PG programs in the department (m) = 1

u1: No. of students in UG 2<sup>nd</sup> year

u2: No. of students in UG 3<sup>rd</sup> year

u3: No. of students in UG 4<sup>th</sup> year

p1: No. of students in PG 1st year

p2: No. of students in PG 2<sup>nd</sup> year

F: No. of faculty members in department

No. of students = Sanctioned intake + Actual admitted lateral entry students

$$UG = u1 + u2 + u3$$

$$PG = p1 + p2$$

$$S = UG + PG$$

$$SFR = S / F$$

	2020-21	2019-20	2018-19
u1	98	84	77
u2	84	77	77
u3	77	77	77
UG	259	238	231
p1	66	31	26
p2	31	26	26
PG	97	57	52
S	356	295	283
F	20	17	17
SFR	17.8	17.35	16.65
Average SFR		17.27	
Assessment		18	

## **5.2** Faculty Cadre Proportion (20)

**RF:** No. of faculty required to comply with 15:1 Student-Faculty Ratio based on the number of students as per 5.1.

	No. of Students (S)	No. of Faculty Required (RF)
2020-21	356	24
2019-20	295	19
2018-19	283	18

The reference Faculty Cadre Proportion is RF1: RF2: RF3 = 1:2:6

RF1: No. of Professors required (=RF x 1/9)

RF2: No. of Associate Professors required (=RF x 2/9)

RF3: No. of Assistant Professors required (=RF x 6/9)

	Profe	essors	Associate	Professors	Assistant l	Professors
	Required (RF1)	Available (AF1)	Required (RF2)	Available (AF2)	Required (RF3)	Available (AF3)
2020-21	3	5	5	3	16	15
2019-20	2	5	4	3	12	12
2018-19	2	5	4	3.5	12	9.5
Average	2.33	5	4.33	3.16	13.33	12.16

Cadre Ratio Marks	
$\left(\left(\frac{AF1}{RF1}\right) + \left(\frac{AF2}{RF2}\right) \times 0.6 + \left(\frac{AF3}{RF3}\right) \times 0.4\right) \times 10$	29.46

Marks / score	20
---------------	----

### **5.3** Faculty Qualification (20)

X: No. of regular faculty with Ph. D.

Y: No. of regular faculty with M. Tech.

RF: Faculty required as calculated in 5.2.

	X	Y	RF	Assessment 2 x (10X + 4Y)/RF
2020-21	20	3	24	17.67
2019-20	16	4	18	19.55
2018-19	16	1	18	18.22
	Avera	ge Assessment		18.48

## **5.4** Faculty Retention (10)

No. of faculty members in 2020-21 = 20

No. of faculty members in 2019-20 = 17

No. of faculty members in 2018-19 = 18

No. of faculty members in 2017-18 = 19

Percentage of faculty retained during the period of three academic years >90%

Assessment	10

## 5.5 Faculty Competencies in Correlation to Program Specific Criteria (10)

The program curriculum is designed to make the students able to analyze and design complex electrical systems and devices. It covers major areas of electric circuit analysis and synthesis, electric machines, power systems, control systems, electrical measurements, and power electronics. The department has the highly competent faculty to cater to the theoretical and practical requirement of all the major and allied areas of the program.

Name of Faculty	Qualification	Area of Specialization/Research Area	
Prof. Aijaz Ahmad		Power System Operation & Optimization, Flexible AC	
Fior. Arjaz Allinau	Ph.D.	Transmission Systems, Energy System Planning & Audit	
Prof. Mairaj-ud-Din		Control Systems, Power System Dynamics and Control, Energy	
Mufti	Ph.D.	Conversion and Energy Storage Devices	
Prof. Shameem Ahmad		Stand-Alone Power Systems, Application of Energy Storage	
Lone	Ph.D.	Devices in power systems, Measurement, and Instrumentation	
Dr. Abdul Hamid Bhat		Power Electronics and Drives, FACTS, Power Quality, Custom	
Dr. Abdul Hallilu Bilat	Ph.D.	Power Devices	
Dr. Sheikh Javed Iqbal		High Voltage, Engineering, Power System Dynamics and Control,	
Di. Sileikii Javed Iquai	Ph.D	Renewable Energy, Distributed Generation	
Dr. Mohammad Abid		Control System, Model Order reduction of dynamical systems	
Bazaz	Ph.D.		

Dr. Obbu Chandra Sekhar	Ph.D	Power Electronics Control of Electrical Drives, Special Machines and Control, Modulation and Control of Multi-Level Inverters, FACTS Controllers, Micro Grids and Smart Grids
Dr. Asadur Rahman	Ph.D	Power System Optimization & Control (AGC), Renewable Energy Systems (Solar & Wind), Hybrid Energy System & Smart Grid, Application of Soft Computing in Power & Energy Systems.
Dr. Neeraj Gupta	Ph.D	Power System, Renewable energy system, Probabilistic power system, Uncertainty quantification of power system, Power system analytics, Micro-Grid, Smart-Grid, Wind, PV and Electric Vehicle modelling. Grid integration of RES.
Dr. Farhad Ilahi Bakhsh	Ph.D	Variable Frequency Transformer (VFT), Renewable Energy Systems (Solar and Wind), Power Electronics, Drives and Alternate Energy Vehicles.
Dr. Kushal M Jagtap	Ph.D	Demand Side Management, Electric Vehicles, Smart Grid, Deregulation of Power System, Loss Allocation in Distribution Network, Distributed Generation, Storage System
Dr. Ravi Bhushan	Ph.D	Power System Stability & Control; Wind Energy Systems; Applications of Optimal Controller in Power Systems;
Dr. Chilaka Ranga	Ph.D	Condition Monitoring of Transformer and Rotating Machines, Artificial Intelligence based Health Assessment and Fault Diagnosis of Electrical Apparatus, Advances in Dielectrics and Electrical Insulation, High Voltage Engineering, Digital Signal Processing.
Ms. Tabish Nazir Mir	M. Tech.	Power Electronics, Induction Machine Drives, Power Quality

Marks Claimed	10
---------------	----

### 5.6 Innovations by the Faculty in Teaching and Learning (10)

Some of the methods adopted by faculty for improvement of student learning are:

- Lecture notes and class assignments are uploaded on the Institute website from time to time.
- Software tools like MATLAB/Simulink are used to simulate and analyze systems for a better understanding of the theoretical concepts taught in classrooms.
- Demonstrative simulation models are also uploaded on the Institute website for use and further development by the students.
- Students are encouraged to give presentations on topics pertaining to the state-of-the-art of the courses being taught.
- Students are free to discuss problems by interacting with the faculty by email, mobile applications.
- Faculty Development Programme was conducted by Institute to enhance the teaching skills of the faculties.
- IEEE Student Chapter was established by Dr. Farhad Ilahi Bakhsh. This chapter gives an opportunity to all the students of the Institute to build their academic career, offering programs, activities, and professional networking opportunities that can create critical skills outside of the classroom.
- Dr. Chilaka Ranga initiated an IET student chapter (On Campus) on 15<sup>th</sup> October 2019. IET On Campus is an initiative run by students, for students, giving you the skills and experience

you need to succeed in your future career, delivered in a fun way, funded and backed by the IET.

- Student club was started by Dr. Asadur Rahman. It maintains and improves the healthy atmosphere among the students.
- Dr. Ravi Bhushan started an Annual Departmental Newsletter containing information of the different departmental activities. This newsletter may expand the overall branding among the students inside and outside campus that are interested in what's happening at the department.
- Dr. Kushal M. Jagtap started Electrical Students Club in order to develop hardware projects and innovation in the area of electrical engineering.
- Few faculties use google classroom for sharing the notes/for discussion with students.
- For the betterment of the students Remedial Classes have been stated in the department. Dr. Chilaka Ranga and Dr. Ravi Bhuishan are the Co-ordinates of the Remedial Classes.
- Prof. A. H. Bhat installed Micro Lab Box in Power Electronics Lab to ensure the availability of all latest equipments for Electrical Engineering students on 08-AUG-2019.
- Digital Real-time simulator was installed by Prof. A. H. Bhat in Power Electronics Lab on 09-SEP-2019. The simulator helps in providing real-time experimentation on all Power Electronic Devices for quality research.

Marks Claimed	10

## 5.7 Faculty as Participants in Faculty development/ training activities/ STTPs (15)

**RF:** Faculty required as calculated in 5.2

Nome of the Feaulty	Marks			
Name of the Faculty	2019-20	2018-19	2017-18	
Prof. Aijaz Ahmad	2	0	0	
Prof. Mairaj-ud-Din Mufti	1	0	0	
Prof. Shameem Ahmad Lone	0	0	0	
Dr. Abdul Hamid Bhat	4	1	0	
Dr. Sheikh Javed Iqbal	0	1	0	
Dr. Mohammad Abid Bazaz	0	2	0	
Ms. Tabish Nazir Mir	0	0	0	
Dr. Obbu Chandra Sekhar	0	0	0	
Dr. Asadur Rahman	8	4	0	
Dr. Neeraj Gupta	6	2	0	
Dr. Farhad Ilahi Bakhsh	6	5	0	
Dr. Kushal M Jagtap	0	1	5	
Dr. Ravi Bhushan	8	6	2	
Dr. Chilaka Ranga	8	2	0	
Sum	43	24	7	
RF	18	18	18	
$Assessment = (3 \times Sum/0.5 RF)$	14.33	8	2.34	
(Marks limited to 15)	14.33	8	2.34	
Average Assessment		8.22	•	

### **5.8** Research and Development (75)

#### 5.8.1 Academic Research (20)

Pub: No. of research publications in refereed/SCI Journals, Conferences, Books, Book Chapters, etc.

Ph.D.: No. of Ph. D. Scholars registered/ awarded.

Name of the Faculty	2019	2019-20 201		-19	2017-18	
Name of the Faculty	Pub	PhD	Pub	PhD	Pub	PhD
Prof. Aijaz Ahmad	7	6	4	6	4	5
Prof. Mairaj-ud-Din Mufti	13	9	3	9	5	6
Prof. Shameem Ahmad Lone	1	7	0	8	7	7
Dr. Abdul Hamid Bhat	7	8	5	5	14	5
Dr. Sheikh Javed Iqbal	0	6	0	6	0	4
Dr. Mohammad Abid Bazaz	12	5	14	6	7	5
Dr. Obbu Chandra Sekhar	12	2	3	1	1	0
Dr. Asadur Rahman	6	2	0	2	0	0
Dr. Neeraj Gupta	6	4	0	2	3	0
Dr. Farhad Ilahi Bakhsh	15	2	3	2	5	0
Dr. Kushal M Jagtap	1	0	0	0	2	0
Dr. Ravi Bhushan	1	3	3	2	2	0
Dr. Chilaka Ranga	4	1	2	1	5	0
Ms. Tabish Nazir Mir	3	0	6	0	0	0
Total	88	55	43	50	55	32

#### 5.8.2 Sponsored Research (20)

- 'Model Order Reduction for Simulation Acceleration in Power Electronics' approved on dated 06/02/2019 by R&D CPRI Bangalore, granted amount 7.02 lakhs, duration 1.5 years.
- 'Application of Variable Frequency Transformer for Integration of Solar Photovoltaic and Wind Energy Systems using Typhoon HIL' approved on 10/08/2019 by Quarbz Info Systems, India and Typhoon HIL GmbH, Switzerland, granted amount 5.20 lakhs, duration 2 years.
- 'Weather stimulated passive and non passive protection system for Kashmir Valley' approved on dated 05/12/2019 by TEQIP-III, granted amount 1.00 lakh, duration 2 years.
- 'Design and development of switched reluctance motor drive for plug-in hybrid electric vehicles with voltage boosting & on-boarding charging capabilities' approved on dated 26/03/2021 by Science and Engineering Research Board (SERB), granted amount 55.70 lakhs, duration 3 years (Submitted in March 2020).

Marks Claimed 20
------------------

#### **5.8.3** Development Activities (15)

#### A) Research Laboratories

The following laboratories are extensively used for research activities:

- Energy Systems laboratory
- Power Electronics laboratory
- Virtual Instrumentation Laboratory

#### **B) Working Models/ Charts/ Monograms**

Many working models/ laboratory kits have been developed in the departments that serve as instructional aid/conduct of practical work by the students.

- Automatic DC motor Starter (Relay based).
- Model of a 132-kV, 50-MW, 100-km transmission line.
- Set-up demonstrating time grading of relays.
- A laboratory model of over-current protection of transformer and transmission lines using microprocessor-based relays.
- Laboratory set-up for determination of positive, negative and zero sequences components of the 3-phase transformer.
- Laboratory set-up of differential protection of single-phase transformer.
- Laboratory set-up of linear firing scheme.
- Resistance triggering technique for SCR's
- Bridge Rectifier
- 3-phase Voltage Source Inverter
- Single-phase to 3-phase Matrix Converter PCB Setup.
- 3-phase to 3-phase Matrix Converter PCB Setup.
- UJT firing circuit

Marks Claimed	15

#### 5.8.4 Consultancy (from Industry) (15)

Nill

### 5.9 Faculty Performance Appraisal and Development System (FPADS)(10)

The institute has in place a continuous, well-thought-of and effective faculty performance appraisal system for the faculty members. For this purpose an 'Annual Assessment Report for the Faculty Staff' is prepared for every faculty member which gives a detailed description of his/ her contribution to the teaching-learning process, contribution in laboratory development, course development, development of teaching aids, laboratory manuals, special lectures, participation in of organizing seminars, symposia, conferences, continuing education programs, research and development activities, sponsored research projects, contribution to department and institute administration, etc. A copy of the Assessment form is provided in Annexure X.

The annual assessment report is given a due weightage in the process of promotion/upgradation of faculty members and hence plays a vital role in the development of the academic, research and administrative system of the institute.

Marks Claimed	10

## 5.10 Visiting/ Adjunct/ Emeritus Faculty (10)

A few special lectures were organized by the department during the assessment years which include:

- 'Solar Photovoltaic System- Role of Power Electronics' on 29<sup>th</sup> of April, 2017 by Prof. Zainul Salam, Professor, Centre of Electrical Engineering Systems (CEES), Universiti Teknologi Malaysia.
- 'How to Publish Research Work in High Impact Journals' on 1<sup>st</sup> of May 2017 by Prof. Zainul Salam, Professor, Centre of Electrical Engineering Systems (CEES), Universiti Teknologi Malaysia.
- "Introduction and Basics of Programming skills using MATLAB and PYTHON" 27<sup>th</sup> to 31<sup>st</sup> May, 2019 by Dr. Santosh Bharti, School of Computer Science, PDPU, Gujarat, India.

Marks Claimed 3	
-----------------	--

## **SUMMARY:**

Sub-criterion	Max. Score	Obtained/Claimed Score
5.1	20	18
5.2	20	20
5.3	20	18.48
5.4	10	10
5.5	10	10
5.6	10	10
5.7	15	8.22
5.8	75	55
5.9	10	10
5.10	10	3
Total	200	162.7

Marks claimed: 162.7 out of 200