

## Ph. D Admission (JUL 2019 Session)

List of Candidates shortlisted for Written Test /Interview to be held on 13-06-2019

### Computer Science and Engineering

S.No	Application No	Name of Candidate	Mode Of Admission
1.	19020031	GUNJAN THAKUR	Regular HTRA
2.	19020035	D.PRAVEENA ANJELIN	Regular HTRA
3.	19020070	AJNI K AJAI	Regular HTRA
4.	19020082	GURUGUBELLI V ESWARA RAO	Regular HTRA
5.	19020088	N ARUN KUMAR	Regular HTRA
6.	19020087	MERCY FAUSTINA J	Regular HTRA
7.	19020027	M. JEHOSEBA MARGARET	Regular HTRA
8.	19020152	V SRILAKSHMI	Regular HTRA
9.	19020174	V. STELLA MARY	Regular HTRA
10.	19020164	THURIMERLA PRASANTH	Regular HTRA
11.	19020184	K.VIJAYALAKSHMI	Regular HTRA
12.	19020043	A LAVANYA MATHIYALAGI	Regular HTRA
13.	19020194	RAMISETTY KAVYA	Regular HTRA
14.	19020158	VEERA VENKATA SUDHAKAR R	Regular HTRA
15.	19020223	SRIJANEE MOOKHERJI	Regular HTRA
16.	19020244	LELLA KRANTHI KUMAR	Regular HTRA
17.	19020247	PRIYADHARSHINI G	Regular HTRA
18.	19020015	ANGEL BARAKKA. J	Regular HTRA
19.	19020266	DHANALAKSHMI G	Regular HTRA
20.	19020272	NAGARAJAN M K	Regular HTRA
21.	19020275	PRAKASH A	Regular HTRA
22.	19020286	ARUNDHATI SAHOO	Regular HTRA
23.	19020327	AGILAN.S	Regular HTRA
24.	19020358	SONA C P	Regular HTRA
25.	19020034	EBENEZER RAJADURAI T	Regular HTRA
26.	19020389	M AMUDHA	Regular HTRA
27.	19020390	P RAJESH	Regular HTRA
28.	19020387	LATHA. R	Regular HTRA
29.	19020401	CHANDRABHUSHAN PRASAD	Regular HTRA
30.	19020403	J. ARUMUGAM	Regular HTRA
31.	19020404	MANJUNATHAN N	Regular HTRA
32.	19020407	SHEERIN SITARA N	Regular HTRA
33.	19020431	GAYATHRIDEVI M	Regular HTRA
34.	19020229	DEBARATI BHATTACHARJEE	Regular HTRA
35.	19020442	KAMATCHI A	Regular HTRA
36.	19020415	M MANJU PRECILLAH	Regular HTRA
37.	19020313	MITHUN ARAVIND M A	Regular HTRA
38.	19020361	BANDI PRASHANTH BABU	Regular HTRA
39.	19020477	SUMITHRA M	Regular HTRA
40.	19020483	MONIKA A	Regular HTRA
41.	19020292	ALIVA PANDA	Regular HTRA

42.	19020510	LENIN S T	Regular HTRA
43.	19020508	BODDU VENKATESWARLU	Regular HTRA
44.	19020520	JAYANTHI J	Regular HTRA
45.	19020522	KANDADA LAKSHMI NARASIMHA ARUN	Regular HTRA
46.	19020524	BISWAJIT SENAPATI	Regular HTRA
47.	19020537	RAVI SHANKAR K	Regular HTRA
48.	19020182	DHIVYA.V	Regular HTRA
49.	19020541	MIROTHALI CHAND C	Regular HTRA
50.	19020538	JANANI S	Regular HTRA
51.	19020536	S.POORANI	Regular HTRA
52.	19020241	ANDAL PRIYADHARSINI R	Regular NHTRA
53.	19020242	SHEERIN SITARA N	Regular NHTRA
54.	19020295	PRABU U	Regular NHTRA
55.	19020392	DEEPAK V	Regular NHTRA
56.	19020399	A LALITHA	Regular NHTRA
57.	19020456	RAJIV S	Regular NHTRA
58.	19020067	MANIKANDAN D	External
59.	19020068	VISWANATHASARMA CHEEMALAPATI	External
60.	19020020	RANJITH R	External
61.	19020132	SATYASRI NAGA SUBBALXMI	External
62.	19020173	KAUSHIK R	External
63.	19020186	ASHOK KUMAR.V	External
64.	19020215	NAVEEN P	External
65.	19020298	MADUGULA YADIAH	External
66.	19020315	ABHAY KUMAR	External
67.	19020353	UTUKURU SAIRAM	External
68.	19020400	SATHISH KUMAR S	External
69.	19020402	N.MANJUNATHAN	External
70.	19020429	SIVA RAMA LINGHAM N	External
71.	19020461	VINU S	External
72.	19020121	LAVANYA P	External
73.	19020532	PRAMEELA MADAMBAKAM	External
74.	19020535	RAJESH G	External
75.	19020047	N SUNDARESWARAN	Internal
76.	19020372	P.DEEPAVATHI	Internal
77.	19020540	R.GAYATHRI	Internal

## **Instruction for Shortlisted candidates**

- You are requested to report for Written Test cum Interview at 09.30AM on 13.06.2019 (Thursday) in Indian Institute of Information Technology Design and Manufacturing Kancheepuram located at Melakottaiyur, Vandalur-Kelambakkam Road, Chennai-600127.
- **You are requested to produce the following certificates in Original along with one set of self attested copy of certificates at the time of Interview for verification:**
  - Diploma, Degree Certificates or Provisional Certificates from the Competent Authority of University or Institute concerned. In case of candidates whose results are awaited, producing the marksheets / grade cards will be sufficient. However if selected, they have to produce the certificate mentioned for verification at the time of Admission.
  - All Mark Statements / Grade Cards of qualifying Examinations.
  - GATE Score Card / UGC / CSIR and Other fellowship award letter (as the case may be)
  - SC / ST / OBC Certificate, if applicable.
  - Sponsorship Letter, if applicable.
  - No Objection Certificate from the present employer, if applicable.
  - Printed Copy of Application generated through Online Registration.
- In case of discrepancy in the data provided online, you will not be permitted to attend Written Test / Interview.
- **No TA/DA will be paid for attending Exam and Interview for Ph.D programme.**
- Kindly confirm your participation for Written Test cum Interview by email to [admissions@iiitdm.ac.in](mailto:admissions@iiitdm.ac.in). The Written Test cum Interview cannot be postponed under any circumstances. The syllabus and other information are uploaded in our website: [www.iiitdm.ac.in](http://www.iiitdm.ac.in).
- In case of final selection, candidates are required to send their acceptance together with the fees for the first semester on or before 05<sup>th</sup> July 2019. Academic session for JUL-NOV 2019 semester will commence on 22<sup>nd</sup> July 2019 onwards.

## List of Subjects and their Syllabus for Entrance Exam

The following subjects are for Computer Science students:

- (i) Discrete Mathematics
- (ii) Data Structures and Algorithms
- (iii) C programming
- (iv) Computer Organization

The following subjects are for Electronics and Communication Engineering

- (i) Data communications or Digital Signal Processing
- (ii) Data Structures and Algorithms
- (iii) C programming
- (iv) Computer Organization

**Note:** One optional subject related to the research area.

**Evaluation:** If a student opts for the optional subject, then his/her performance will be assessed against 5 subjects, otherwise 4 subjects.

### Syllabus

**Discrete Mathematics:** Logic, Sets, Relations, Functions, Graphs

**Data structure and algorithms:** Linear ADTs – Stacks, Queues, List, Priority Queue ADT - Heaps, Non-Linear ADTs – Trees and Graphs, Searching and Sorting

**Computer Organization:** Fixed point and floating point representation, Binary Arithmetic (addition, subtraction, multiplication, division), Cache memory

**C programming:** Input/Output statements, Selection (IF/Switch Case) and Repetition Statements (For/While loop).

**Data communications:** Introduction, Data and signals, Digital Transmission, Bandwidth utilization: Multiplexing and spreading, Transmission media, Switching, Error detection and correction, Multiple access, Ethernet, Logical addressing, Internet protocol, TCP, UDP.

**Digital Signal Processing:** Signals and Systems, transformations, filters, processor architectures, 2-D signal processing.

## Ph. D Admission (JUL 2019 Session)

List of Candidates shortlisted for Written Test /Interview to be held on 14.06.2019

### Electronics and Communication Engineering (Including Electrical Engineering)

S.No	Application No	Name of Candidate	Mode Of Admission
1.	19020005	MEENA A	Regular HTRA
2.	19020026	SARALA A	Regular HTRA
3.	19020036	SUBHAM KUMAR JALAN	Regular HTRA
4.	19020044	PRIYAMVADA	Regular HTRA
5.	19020050	P. SASIKALA	Regular HTRA
6.	19020073	SANJEEVA RAO BHIMADOLU	Regular HTRA
7.	19020095	RON CARTER S B	Regular HTRA
8.	19020072	MURALI KRISHNA A G	Regular HTRA
9.	19020093	C.JANANI	Regular HTRA
10.	19020105	SRINIVASAN R	Regular HTRA
11.	19020108	SANCHANNA G	Regular HTRA
12.	19020098	DHARAVAT NAGARAJU	Regular HTRA
13.	19020116	M SURENDRA NATHA REDDY	Regular HTRA
14.	19020129	F MAX SAVIO	Regular HTRA
15.	19020002	SABARESH G	Regular HTRA
16.	19020064	M. JEHOSEBA MARGARET	Regular HTRA
17.	19020134	ANISH MONSLEY	Regular HTRA
18.	19020138	PVL NARASIMHA RAO	Regular HTRA
19.	19020148	DHIVYABHARATHI D	Regular HTRA
20.	19020153	ABINETHRI R	Regular HTRA
21.	19020154	BADISA ANIL BABU	Regular HTRA
22.	19020101	ANAND KUMAR	Regular HTRA
23.	19020085	SELVAMUTHUKUMAR M	Regular HTRA
24.	19020161	DHARMENDRA KUMAR	Regular HTRA
25.	19020163	ANISH JOY A	Regular HTRA
26.	19020165	MANJU MARIYA	Regular HTRA
27.	19020038	CHANDRA PRABHA G	Regular HTRA
28.	19020177	TAMIZHVANAN C	Regular HTRA
29.	19020178	M LAVANYA	Regular HTRA
30.	19020175	ESTHER MONICA.K	Regular HTRA
31.	19020185	SUBBARAO GENIKALA	Regular HTRA
32.	19020191	PONMANI RAJA M	Regular HTRA
33.	19020059	AMITA BISWAL	Regular HTRA
34.	19020197	B VENU	Regular HTRA
35.	19020202	MUKKU PAVAN KUMAR	Regular HTRA
36.	19020205	BAIRABATHINA SAIKUMAR	Regular HTRA

37.	19020200	SIVASAKTHIVEL	Regular HTRA
38.	19020118	G PURNACHANDRARAO	Regular HTRA
39.	19020234	SATHEESWARAN C	Regular HTRA
40.	19020236	GUDIVADA NARENDRA	Regular HTRA
41.	19020235	LAVETI HEMANTH KRISHNA	Regular HTRA
42.	19020246	SINDHUMITHA K	Regular HTRA
43.	19020248	PARVATHY M L	Regular HTRA
44.	19020253	PUNITH KUMAR YANAGANDULA	Regular HTRA
45.	19020259	M SIVALINGAMAIAH	Regular HTRA
46.	19020262	HIMANTH YANDRA	Regular HTRA
47.	19020211	SUNDARA BABU SHODAVARAM	Regular HTRA
48.	19020299	PANDIYAN R	Regular HTRA
49.	19020301	AUGUSTIA N	Regular HTRA
50.	19020303	RAJASEKARAN M	Regular HTRA
51.	19020304	SARATH P	Regular HTRA
52.	19020311	M.VENKATA RAMANA REDDY	Regular HTRA
53.	19020317	ARUNA KUMARI	Regular HTRA
54.	19020316	KONDREDDI GOPI	Regular HTRA
55.	19020336	T SATHEESHKUMAR	Regular HTRA
56.	19020344	ISWARIYA S	Regular HTRA
57.	19020343	SUGANYADEVI S	Regular HTRA
58.	19020330	RESHMA K	Regular HTRA
59.	19020142	P JOHN NEHEMIAH	Regular HTRA
60.	19020331	BARUNA KUMAR TURUK	Regular HTRA
61.	19020352	DEVULAPALLI RANJITH	Regular HTRA
62.	19020355	YUGESH KUMAR P	Regular HTRA
63.	19020356	MADHU RAJ KUMAR	Regular HTRA
64.	19020357	GOWTHAMI A	Regular HTRA
65.	19020359	BOMMALA SILPA	Regular HTRA
66.	19020367	VIJAYAN P M	Regular HTRA
67.	19020225	SASIKUMAR S	Regular HTRA
68.	19020383	PRAVEEN KUMAR BARIK	Regular HTRA
69.	19020386	ANAND	Regular HTRA
70.	19020380	REUBEN THOMAS RAJ A J	Regular HTRA
71.	19020393	RAMAKRISHNA GURAJALA	Regular HTRA
72.	19020265	MERLIN SHARMILA A	Regular HTRA
73.	19020419	SIVARAMAKRISHNAN A	Regular HTRA
74.	19020371	RAMEEZ RAJA SHAIK	Regular HTRA
75.	19020434	R. BHARATHI	Regular HTRA
76.	19020436	ARUNA JEEVA BHARATHI B	Regular HTRA
77.	19020446	VASANTHAKUMAR K	Regular HTRA
78.	19020458	G SUBRAMANIAN	Regular HTRA
79.	19020462	SWASTIK SAHOO	Regular HTRA
80.	19020463	KASETTY PRAVEENKUMAR	Regular HTRA

81.	19020428	SIBBALA SREELATHA	Regular HTRA
82.	19020468	THAMIZHARASAN P	Regular HTRA
83.	19020472	HIMANTH YANDRA	Regular HTRA
84.	19020467	HIMANSHU PRIYADARSHI	Regular HTRA
85.	19020464	VIKRAM G	Regular HTRA
86.	19020460	SARIKA K	Regular HTRA
87.	19020362	LOGANATHAN R	Regular HTRA
88.	19020455	T VENUGOPAL REDDY	Regular HTRA
89.	19020465	SATYANARAYANA MURTHY CH V	Regular HTRA
90.	19020487	PAVULURI BHARGAV	Regular HTRA
91.	19020451	PARTHASARATHY P	Regular HTRA
92.	19020495	BOMMALA SILPA	Regular HTRA
93.	19020494	PREMANAND S	Regular HTRA
94.	19020498	SHERIN A THOMAS	Regular HTRA
95.	19020496	V KARUTHARAJA	Regular HTRA
96.	19020499	venu allapakam	Regular HTRA
97.	19020500	SHILPA SAMARLA	Regular HTRA
98.	19020470	SABARIGIRI D	Regular HTRA
99.	19020503	STEPHEN JOHN T	Regular HTRA
100.	19020505	SUVEDHA .M	Regular HTRA
101.	19020305	REJI G	Regular HTRA
102.	19020509	D. AISWARIYADEVI	Regular HTRA
103.	19020506	BHAVANASI VENKATA SUMANTH BABU	Regular HTRA
104.	19020516	MAHENDRAN M	Regular HTRA
105.	19020519	BADAL KUMAR	Regular HTRA
106.	19020395	V.BANUPRIYA	Regular HTRA
107.	19020319	GEETHA PRIYA K	Regular HTRA
108.	19020517	GOMATHY M	Regular HTRA
109.	19020528	UDHAYANAN S	Regular HTRA
110.	19020531	RAMESH KUMAR	Regular HTRA
111.	19020090	B.PRIYADHARSHINI	Regular NHTRA
112.	19020107	YASHWANTH KUMAR N	Regular NHTRA
113.	19020368	CHILLAKURU PRASAD	Regular NHTRA
114.	19020385	PREETHI P	Regular NHTRA
115.	19020424	STEPHEN JOHN T	Regular NHTRA
116.	19020435	VANGARA HARI MADHAVI	Regular NHTRA
117.	19020469	DHAVALESWARAPU VENKATACHARI	Regular NHTRA
118.	19020411	ASWINRAJ M	Regular NHTRA
119.	19020482	MONISHA YUVARAJ	Regular NHTRA
120.	19020512	RAMALAKSHMI K	Regular NHTRA
121.	19020006	UJWALA GAJULA	External
122.	19020123	SATHISH KUMAR T	External
123.	19020180	PURUSHOTHAM BABU DOODALA	External
124.	19020181	SRINIVASULU UTCHURU	External

125.	19020243	RAJANIKANTH	External
126.	19020270	G MURUGAN	External
127.	19020276	BADIGINENI AJAY	External
128.	19020312	NIDHI GOPAL	External
129.	19020369	VIJAYA LAKSHMI M	External
130.	19020391	P MANI MOHAN	External
131.	19020417	BANALA SARITHA	External
132.	19020438	NANDHA KISHORE S R	External
133.	19020440	LOGANATHAN G S	External
134.	19020449	K SRINIVASAN	External
135.	19020473	B RAMA DEVI	External
136.	19020492	C. V. UMAMAHESWARI	External
137.	19020513	SUMY MANUEL	External
138.	19020521	JIJIN GODWIN J	External
139.	19020526	RAGUPATHI G K	External
140.	19020493	JAIGANESH M	External
141.	19020479	R HEMALATHA	Internal
142.	19020476	PRAMODKUMAR AYLPOGU	Internal



## **Instruction for Shortlisted candidates**

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  - All Mark Statements / Grade Cards of qualifying Examinations.
  - GATE Score Card / UGC / CSIR and Other fellowship award letter (as the case may be)
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  - Sponsorship Letter, if applicable.
  - No Objection Certificate from the present employer, if applicable.
  - Printed Copy of Application generated through Online Registration.
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- **No TA/DA will be paid for attending Exam and Interview for Ph.D programme.**
- Kindly confirm your participation for Written Test cum Interview by email to [admissions@iiitdm.ac.in](mailto:admissions@iiitdm.ac.in). The Written Test cum Interview cannot be postponed under any circumstances. The syllabus and other information are uploaded in our website: [www.iiitdm.ac.in](http://www.iiitdm.ac.in).
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## Ph.D. Written Test Syllabus

### Important Note:

1. The candidate can choose the research area based on educational background.
2. There will be two evaluation parts: (i) Written test and (ii) Interview
3. The time duration for written test will be **one hour**.
4. The total marks for written test will be **50**.
5. The written test generally begins **at 9.30 AM** in the **Academic Complex Ground floor**, IITD&M Kancheepuram, Chennai - 127.

Research Groups	Syllabus
<p><b>EE1 :</b>  <b>Communications/Networking/Signal Processing *</b></p> <p>(*Candidate can choose either Paper-1 or Paper-2 )</p>	<p><b>Communication/Networking: Paper - 1</b></p> <ul style="list-style-type: none"> <li>• Basics Concepts of Probability Theory</li> <li>• Basics Concepts of Wireless Communication</li> <li>• Analog and Digital Communication</li> </ul> <hr/> <p><b>Signal Processing: Paper - 2</b></p> <p>Linear Time-invariant Systems; The Continuous-time Fourier Transform</p> <p>Sampling: Sampling and reconstruction of signals; Convolution, Correlation, Spectral estimation and PSD/ESD</p> <p>The Z-transform; Transform Analysis of Linear Time Invariant Systems</p> <p>The Discrete Fourier Transform; FIR and IIR filter design, Structure of FIR and IIR filters</p> <p>Computation of the DFT and the Fast Fourier Transform; Adaptive filter design and multi-rate signal processing</p> <p>Analog and Digital Electronics Circuit Design – Concepts and basic designs</p> <p>Network theory- Fundamental concepts; MATLAB fundamentals</p> <p>Books for Reference:</p> <ol style="list-style-type: none"> <li>1. Proakis and Manolakis, “<b>Digital Signal Processing</b>”, 4th Edition, Pearson.</li> </ol>

<b>EE2: Microelectronics / VLSI / MEMS</b>	<b>Microelectronic Circuits:</b> Diodes and applications, MOSFET and BJT amplifier circuits, Ideal Op amp, arithmetic circuits and other applications using Op amp. Boolean Algebra, Combinational circuit design, Sequential circuit design, Arithmetic circuits design, Memory design, CMOS Inverter, DC and Transfer characteristics, propagation delay, power dissipation.  Books for Reference: <ol style="list-style-type: none"><li>1. Charles H Roth, "<b>Fundamentals of Logic Design</b>".</li><li>2. Donald A. Neamen, "<b>Electronic circuit analysis and design</b>"</li><li>3. Adel S. Sedra, Kenneth Carless Smith, "<b>Microelectronic Circuits</b>"</li><li>4. Ramesh S. Gaonkar, "<b>Microprocessor Architecture, Programming, and Applications with the 8085/8080A</b>"</li></ol>
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**EE3: Power Electronics/Controls \***

(\*Candidate can choose either Paper-1 or Paper-2 )

**Paper-1**

Operation of Buck, Boost and Buck-boost converters, Power semiconductor devices and characteristics, Operation of inverters – 180 degree mode and SPWM operation – single phase and three phase, AC to DC bridge converters – single and three phase.

Fourier series and Laplace transforms, DC, Single phase and three phase AC Circuit Analysis and Network Theorems. Theory and operation of DC machines, Induction machines and PM synchronous machines (BLDC and PMSM). Electric Drives – Power electronic control of DC & Induction machines.

Transfer function, transient and steady state response, Routh-Hurwitz, Bode plots, Root loci, Stability analysis, P, PI and PID controllers, State space model, State transition matrix, eigen values. Time and frequency domain analysis.

Books for Reference:

1. Ned Mohan, Undeland and Robbins, **Power Electronics: Converters Applications and Design**, John Wiley, 2010
2. Katsuhiko Ogata, **Modern Control Engineering**, Prentice Hall, 2010
3. Stephen J Chapman, **Electric Machinery Fundamentals**, 4th Edition, McGraw Hill 2010
4. P.S. Bimbhra, **Electrical Machinery**, 7<sup>th</sup> Edition, Khanna Publishers 2011

**Paper -2**

Transfer function, transient and steady state response, Routh-Hurwitz, Bode plots, Root loci, Stability analysis, P, PI and PID controllers, State space model, State transition matrix, eigen values. Time and frequency domain analysis, Controllability, Observability, Stability and pole-placement. Fourier series and Laplace transforms, D C, Single phase and three phase AC Circuit Analysis and Network Theorems, Electrical and Electronic Measurements: Static and dynamic characteristics of Measurement Systems. Bridges and potentiometers, measurement of R, L and C. Measurements of voltage, current, power, power factor and energy. Time, phase and frequency measurements. Resistive, Capacitive, Inductive and piezoelectric transducers and their signal conditioning. Measurement of displacement, velocity and acceleration (translational and rotational), force, torque, vibration and shock. Measurement of pressure, flow, temperature and liquid level. Measurement of pH, conductivity, viscosity and humidity.

**Ph. D Admission (JUL 2019 Session)**

**List of Candidates shortlisted for Written Test /Interview to be held on 14.06.2019**

**Mathematics**

<b>S.No</b>	<b>Application No</b>	<b>Name of Candidate</b>	<b>Mode Of Admission</b>
1.	19020249	APARNA M P	Regular HTRA
2.	19020443	DIVYA D	Regular HTRA
3.	19020374	KIRUBAKARAN V K	Regular NHTRA
4.	19020171	NAVANEETHA KRISHNAN M	Internal

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  - All Mark Statements / Grade Cards of qualifying Examinations.
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- In case of discrepancy in the data provided online, you will not be permitted to attend Written Test / Interview.
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## SYLLABUS FOR PH.D CANDIDATES MATHEMATICS

**Real Analysis:** Sequences and series, convergence. Continuity, uniform continuity, differentiability, mean value theorem. Sequences and series of functions, uniform convergence. Riemann sums and Riemann integral.

**Complex Analysis:** Cauchy-Riemann equations, analytic functions, harmonic functions. Conformal mappings, Mobius transformations. Contour integrals, Cauchy Integral formula. Taylor's series, singularities, Laurent's series. Residues, Cauchy Residue theorem.

**Linear Algebra:** Vector spaces, algebra of linear transformations. Algebra of matrices, rank and determinant of matrices. Eigenvalues and eigenvectors. Matrix representation of linear transformations. Inner product spaces, orthonormal basis, Gram-Schmidt orthogonalization.

**Algebra:** Groups, subgroups, normal subgroups, quotient groups, homomorphisms, cyclic groups, permutation groups. Rings, ideals, prime and maximal ideals, quotient rings, Euclidean domain. Polynomial rings and irreducibility criteria. Fields, finite fields, field extensions.

**Ordinary Differential Equations:** Solution methods for ordinary first order differential equations. General theory of homogenous and non-homogeneous linear ordinary differential equations, variation of parameters, power series methods.

**Graph Theory and Combinatorics:** Permutations, combinations, pigeon-hole principle, inclusion-exclusion principle. Graphs, Euler and Hamilton graphs, Trees and other special families of graphs. Matching, independent set, coloring, graph isomorphism.

## Ph. D Admission (JUL 2019 Session)

List of Candidates shortlisted for Written Test /Interview to be held on14.06.2019

### Mechanical Engineering

S.No	Application No	Name of Candidate	Mode Of Admission
1.	19020018	A.L ABISHEK	Regular HTRA
2.	19020025	S.SATHYARAJ	Regular HTRA
3.	19020009	RAJESH KUMAR	Regular HTRA
4.	19020040	JEEVAN	Regular HTRA
5.	19020045	P V DIVAKAR RAJU	Regular HTRA
6.	19020065	RAJALINGAM A	Regular HTRA
7.	19020076	MOHANASARAVANAN P S	Regular HTRA
8.	19020077	NITHYANANDHAM G	Regular HTRA
9.	19020091	GOKUL KRISHNA U	Regular HTRA
10.	19020004	SUGANTH V	Regular HTRA
11.	19020111	VENKATESAN R	Regular HTRA
12.	19020022	MUGILAN T	Regular HTRA
13.	19020094	B. JAGADEESH	Regular HTRA
14.	19020112	BHADRAGIRI MANOJ	Regular HTRA
15.	19020115	SANTHOSH S	Regular HTRA
16.	19020110	KELLA JAYASREE	Regular HTRA
17.	19020117	SASTHA ROOPAN G	Regular HTRA
18.	19020060	SARAN KUMAR K	Regular HTRA
19.	19020049	RAHUL KRISHNA H	Regular HTRA
20.	19020130	CHINTHALA PANDU BALAJI	Regular HTRA
21.	19020140	RAJENDRA KUMAR R T P	Regular HTRA
22.	19020052	GABRIEL A	Regular HTRA
23.	19020159	DINESHBABU	Regular HTRA
24.	19020160	SIVAGANGAI	Regular HTRA
25.	19020168	PRABAKARAN	Regular HTRA
26.	19020141	JAGATHEESHKUMAR S	Regular HTRA
27.	19020179	GEETHANJALI K S	Regular HTRA
28.	19020189	MOHAN MITHRA S P	Regular HTRA
29.	19020074	PALIVELA BHARGAV CHANDAN	Regular HTRA
30.	19020195	AKSHAY RMAESH GOVANDE	Regular HTRA
31.	19020187	JANGA VENKATA SOMI REDDY	Regular HTRA
32.	19020201	SIVARAMAN.B	Regular HTRA
33.	19020170	CHINRAJ N	Regular HTRA
34.	19020258	VIJAYARAGAVAN R	Regular HTRA
35.	19020122	VENUGOPAL B	Regular HTRA
36.	19020281	SARAVANAN M K	Regular HTRA



37.	19020279	PADIRI MURALI	Regular HTRA
38.	19020284	EPPA RAKESH	Regular HTRA
39.	19020290	VIVEK R	Regular HTRA
40.	19020291	SANJEEVIPRAKASH K	Regular HTRA
41.	19020307	RAJAGOPALAN G	Regular HTRA
42.	19020308	PALANISAMY C	Regular HTRA
43.	19020318	USHA RANI S	Regular HTRA
44.	19020329	JAYA KUMAR K	Regular HTRA
45.	19020287	RAGHULNATH D	Regular HTRA
46.	19020226	ELANGO VAN T	Regular HTRA
47.	19020021	SOMASUNDARAM M	Regular HTRA
48.	19020347	SHRAVAN KUMAR YADAV	Regular HTRA
49.	19020345	DILEEP KUMAR	Regular HTRA
50.	19020373	MANOJ KUMAR V	Regular HTRA
51.	19020354	DHANAPAL S	Regular HTRA
52.	19020377	ANUPOJU HEMASUNDARA SAI KIRAN	Regular HTRA
53.	19020378	VENKATESH M	Regular HTRA
54.	19020379	KALIKIRI VENKATA KRISHNA	Regular HTRA
55.	19020388	SANTOSH KUMAR	Regular HTRA
56.	19020398	RAJESH S	Regular HTRA
57.	19020397	DEENA DAYALA SHARMA G	Regular HTRA
58.	19020406	MEGANATHAN S	Regular HTRA
59.	19020413	K BALAJI	Regular HTRA
60.	19020414	ASHISH KUMAR	Regular HTRA
61.	19020405	VIJAYASANKAR A	Regular HTRA
62.	19020441	MOHAN P	Regular HTRA
63.	19020457	ELANGO V	Regular HTRA
64.	19020324	KONDETI SRAVANTH	Regular HTRA
65.	19020454	RENURAMAN J	Regular HTRA
66.	19020475	GOPI R	Regular HTRA
67.	19020430	SATHISKUMAR	Regular HTRA
68.	19020375	K. RAM PRASAD	Regular HTRA
69.	19020484	SARATHKUMAR D	Regular HTRA
70.	19020491	VRIJESH KUNWAR	Regular HTRA
71.	19020425	SAROJA S	Regular HTRA
72.	19020502	PRITHVI SHUKLA	Regular HTRA
73.	19020504	AMIT GOSWAMI	Regular HTRA
74.	19020408	RAHUL ROY	Regular HTRA
75.	19020453	KALIL BASHA J	Regular HTRA
76.	19020523	DANUSHKOTTI G	Regular HTRA
77.	19020525	HIMALAYA SARKAR	Regular HTRA
78.	19020328	SARAVANAN S	Regular HTRA

79.	19020135	ARUN KUMAR N	Regular NHTRA
80.	19020139	NARESH R	Regular NHTRA
81.	19020062	SARAN KUMAR K	External
82.	19020013	RAVINDRANAIDU GANTA	External
83.	19020051	MURALIDHARAN	External
84.	19020221	NIRUBAN PROJOTH T	External
85.	19020252	MEGANATHAN	External
86.	19020466	GOPINATH C	External
87.	19020490	YOGANAND.K	External

## **Instruction for Shortlisted candidates**

- You are requested to report for Written Test cum Interview at 09.30AM on 14.06.2019 (Friday) in Indian Institute of Information Technology Design and Manufacturing Kancheepuram located at Melakottaiyur, Vandalur-Kelambakkam Road, Chennai-600127.
- **You are requested to produce the following certificates in Original along with one set of self attested copy of certificates at the time of Interview for verification:**
  - Diploma, Degree Certificates or Provisional Certificates from the Competent Authority of University or Institute concerned. In case of candidates whose results are awaited, producing the marksheets / grade cards will be sufficient. However if selected, they have to produce the certificate mentioned for verification at the time of Admission.
  - All Mark Statements / Grade Cards of qualifying Examinations.
  - GATE Score Card / UGC / CSIR and Other fellowship award letter (as the case may be)
  - SC / ST / OBC Certificate, if applicable.
  - Sponsorship Letter, if applicable.
  - No Objection Certificate from the present employer, if applicable.
  - Printed Copy of Application generated through Online Registration.
- In case of discrepancy in the data provided online, you will not be permitted to attend Written Test / Interview.
- **No TA/DA will be paid for attending Exam and Interview for Ph.D programme.**
- Kindly confirm your participation for Written Test cum Interview by email to [admissions@iiitdm.ac.in](mailto:admissions@iiitdm.ac.in). The Written Test cum Interview cannot be postponed under any circumstances. The syllabus and other information are uploaded in our website: [www.iiitdm.ac.in](http://www.iiitdm.ac.in).
- In case of final selection, candidates are required to send their acceptance together with the fees for the first semester on or before 05<sup>th</sup> July 2019. Academic session for JUL-NOV 2019 semester will commence on 22<sup>nd</sup> July 2019 onwards.

## **Syllabus for Mechanical Engineering**

### **Written test (Duration - 2 hours)**

Part I – Basic Engineering Sciences - 50 marks - 1 hour (**Compulsory for all**)

### **Part II - 50 marks – 1 hour (Any one of the following Parts)**

Part II A – Engineering Design

Part II B – Materials and Manufacturing Processes

Part II C – Thermal Engineering

### **Part I – Basic Engineering Sciences (Common to all)**

**Engineering Mathematics:** Fundamentals of Linear algebra, Calculus, Differential equations, Probability and Statistics, and Numerical methods.

**Engineering Graphics:** Plane curves, projection of lines, planes and solids, section and development of solids, and isometric projection.

**Engineering Mechanics:** Free body diagram, equilibrium of particles and rigid bodies, friction, centroid, virtual work, kinematics and dynamics of particles and of rigid bodies in plane motion.

### **Part II A – Engineering Design**

**Mechanics of materials:** Theory of pure bending moment and torsion, deflection of beams, Euler theory of long columns, design of thin and thick pressure vessels, principal stress strain, combined bending and torsion, application of failure theories in design, design of mechanical components such as shafts, gears, cams and followers, design of mechanical joints and drives, application of fits and tolerances in design.

**Kinematics and dynamics of machines and mechanisms:** position-velocity-acceleration analysis, classification of robots and mechanisms, mapping and transformations in robotics, differential motion- Jacobian-trajectory analysis, design of robot mechanisms for various applications.

### **Part II B – Materials and Manufacturing Process**

**Engineering Materials:** Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials.

**Machining and Machine Tool Operations:** Mechanics of machining; basic machine tools; single and multi-point cutting tools, tool geometry and materials, tool life and wear; economics of machining; principles of non-traditional machining processes; principles of work holding, design of jigs and fixtures.

**Metrology and Inspection:** Limits, fits and tolerances; linear and angular measurements; comparators; gauge design; interferometry; form and finish measurement; alignment and testing methods; tolerance analysis in manufacturing and assembly.

### **Part II C – Thermal Engineering**

**Heat-Transfer:** Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis.

**Thermodynamics:** Thermodynamic systems and processes; properties of pure substances, behavior of ideal and real gases; Zeroth and first laws of thermodynamics, calculation of work and heat in various processes; second law of thermodynamics; thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations.

**Ph. D Admission (JUL 2019 Session)**

**List of Candidates shortlisted for Written Test /Interview to be held on 12.06.2019**

**Physics**

<b>S.No</b>	<b>Application No</b>	<b>Name of Candidate</b>	<b>Mode Of Admission</b>
1.	19020023	SIJU MISHRA	Regular HTRA
2.	19020053	ARUNA GUPTA	Regular HTRA
3.	19020147	VINOTH KUMAR R	Regular HTRA
4.	19020222	SHAMBHU PAL	Regular HTRA
5.	19020198	SOUMILI SAHOO	Regular HTRA
6.	19020293	MARIMUTHU L	Regular HTRA
7.	19020199	SUBHANKAR BERA	Regular HTRA
8.	19020360	CATHERINE TOM	Regular HTRA
9.	19020445	OBEIDULLAH KHAN	Regular HTRA
10.	19020427	PENNA VENKATA KARTHIK YADAV	Regular NHTRA

## **Instruction for Shortlisted candidates**

- You are requested to report for Written Test cum Interview at 09.30AM on 12.06.2019 (Wednesday) in Indian Institute of Information Technology Design and Manufacturing Kancheepuram located at Melakottaiyur, Vandalur-Kelambakkam Road, Chennai-600127.
- **You are requested to produce the following certificates in Original along with one set of self attested copy of certificates at the time of Interview for verification:**
  - Diploma, Degree Certificates or Provisional Certificates from the Competent Authority of University or Institute concerned. In case of candidates whose results are awaited, producing the marksheets / grade cards will be sufficient. However if selected, they have to produce the certificate mentioned for verification at the time of Admission.
  - All Mark Statements / Grade Cards of qualifying Examinations.
  - GATE Score Card / UGC / CSIR and Other fellowship award letter (as the case may be)
  - SC / ST / OBC Certificate, if applicable.
  - Sponsorship Letter, if applicable.
  - No Objection Certificate from the present employer, if applicable.
  - Printed Copy of Application generated through Online Registration.
- In case of discrepancy in the data provided online, you will not be permitted to attend Written Test / Interview.
- **No TA/DA will be paid for attending Exam and Interview for Ph.D programme.**
- Kindly confirm your participation for Written Test cum Interview by email to [admissions@iiitdm.ac.in](mailto:admissions@iiitdm.ac.in). The Written Test cum Interview cannot be postponed under any circumstances. The syllabus and other information are uploaded in our website: [www.iiitdm.ac.in](http://www.iiitdm.ac.in).
- In case of final selection, candidates are required to send their acceptance together with the fees for the first semester on or before 05<sup>th</sup> July 2019. Academic session for JUL-NOV 2019 semester will commence on 22<sup>nd</sup> July 2019 onwards.