



INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN
AND MANUFACTURING, KURNOOL

RECRUITMENT OF JUNIOR ENGINEER (ELECTRICAL)

(Advt. No. IIITDM/Advt./2019-20/7, dated 22.11.2019)

PROVISIONAL LIST OF SHORTLISTED CANDIDATES
APPLICATION NUMBERS

1903JEE0004	1903JEE0039	1903JEE0071	1903JEE0095
1903JEE0007	1903JEE0041	1903JEE0072	1903JEE0096
1903JEE0011	1903JEE0044	1903JEE0074	1903JEE0097
1903JEE0020	1903JEE0047	1903JEE0076	1903JEE0100
1903JEE0023	1903JEE0050	1903JEE0078	1903JEE0102
1903JEE0024	1903JEE0054	1903JEE0079	1903JEE0106
1903JEE0027	1903JEE0055	1903JEE0081	1903JEE0108
1903JEE0028	1903JEE0057	1903JEE0082	1903JEE0109
1903JEE0030	1903JEE0059	1903JEE0083	1903JEE0111
1903JEE0031	1903JEE0062	1903JEE0084	1903JEE0113
1903JEE0032	1903JEE0064	1903JEE0085	1903JEE0114
1903JEE0033	1903JEE0065	1903JEE0086	1903JEE0115
1903JEE0034	1903JEE0066	1903JEE0087	1903JEE0116
1903JEE0035	1903JEE0067	1903JEE0090	1903JEE0117
1903JEE0036	1903JEE0069	1903JEE0091	1903JEE0121
1903JEE0038	1903JEE0070	1903JEE0092	1903JEE0122

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1903JEE0197
1903JEE0198
1903JEE0201

SCHEDULE FOR REPORTING, VERIFICATION & WRITTEN TEST

Level of Exam	Date, Day and Time	Remarks
Level 1	7 th March 2020 (Saturday) 08:00 AM	Reporting and Occupying the Allotted Room
	7 th March 2020 (Saturday) 09:00 AM to 10:00 AM	Verification of Original Certificates along with Identity Proof
	7 th March 2020 (Saturday) 10:00 AM to 12:00 Noon	Written Test
Level 2	8 th March 2020 (Sunday) 10:00 AM to 12:00 Noon	Level 2 Written test and Level 3 Skill test Only for candidates qualified in Level 1
Level 3	8 th March 2020 (Sunday) 02:00 PM on wards	

Scheme of Examination

Levels of Exams:

Level 1:

All the shortlisted candidates shall be called for the Aptitude Test carrying maximum of 100 Marks (Objective type). Maximum duration of exam is 2 hours.

Level 2:

It is the subject knowledge Test designed to test the candidate's suitability in the concerned areas like basic concepts, circuit law, Magnetic circuits, AC Fundamentals, measurement and measuring instruments, Electrical machines. The questions will be objective/descriptive type carrying maximum of 100 marks. Maximum duration of exam is 2 hours.

Level 3:

It is the practical/skill Test based on the Level-2 Syllabus carrying maximum of 100 marks.

Weightage of Exams

Level 1:

Candidates securing the minimum qualifying marks shall be shortlisted for further evaluation process scheduled on the next day. In case of SC/ST candidates, the

minimum qualifying marks is relaxable at the discretion of the competent authority. The marks secured in the screening test shall not be taken into account for preparation of final selection list.

Level 2 & Level 3:

Level 2 and Level 3 are of qualifying nature and merit list will be prepared based on the following allocation of weightage.

Level 2: 60% and Level 3: 40%

*** In case of tie, suitable criteria decided by duly constituted committee will be followed.*

Note:

Success in the examination confers no right of appointment.

Syllabus of Examination

Level 1:

Aptitude: Averages, Number Systems, Profit and Loss, Time and Work, Problems on Trains, Compound Interest, Decimal Fractions, Calendar, Area, Problems on Numbers, Square Root and Cube Root, Boats and Streams, Probability, Interest, Percentage, Ratio, Time and Distance, Problems on Ages, Partnership, Clock, Simplifications, Volume and Surface, Problems on H.C.F And L.C.M, Logarithm, Chain Rule, Pipes and Cistern, Odd Man Out and Series, Height and Distance.

Reasoning: Number Series Compilation, Missing Number Finding, Continuous Pattern Series, Direction Sense Test, Puzzle, Verbal Classification, Matching Definitions, Logical Deduction, Series Compilations, Classification, Missing Character Finding, Odd Man Out, Blood Relations, Analogy, Coding And Decoding, Truth Verification of The Statement, Syllogisms, Analogies, Verbal Reasoning, Statement And Conclusions, Letter And Symbol Series, Logical Problems, Logical Sequence Of Words, Arithmetic Reasoning, Data Sufficiency and Numerical Ability.

General English: Antonyms, Synonyms, Spelling Check, Change of Voice, Spotting Errors, Sentence Improvement, One Word Substitute, Selecting Words, Sentence Corrections, Idioms and Phrases, Communication Skills, Common Error Detection, Sentence Compilation, Ordering of Words, Ordering of Sentences, Verbal Analogies, Sentence Formation, Completing Statements, Change of Speech.

Data Interpretation: Pie Chart, Bar Chart, Line Chart, Table Chart and their interpretations.

General Knowledge: Indian History, Indian Economy, Indian Culture, Environmental Science, Awards And Honors, Famous Places In India, World Organization, Sports, Books And Authors, Famous Personalities, Days And Years, World Geography, Basic General Knowledge, Physics, Biology, Indian Politics, Indian Geography, General Science, Chemistry, Technology, Inventions, Current Affairs.

Computer Fundamentals: Components of computer, Input and output devices, Operating Systems, Word processing software, data representations and conversions.

Level 2:

Basic concepts	Concepts of resistance, inductance, capacitance, and various factors affecting them. Concepts of current, voltage, power, energy and their units.
Circuit law	Kirchhoff's law, Simple Circuit solution using network theorems
Magnetic Circuit	Concepts of flux, mmf, reluctance, Different kinds of magnetic materials, Magnetic calculations for conductors of different configuration e.g. straight, circular, solenoidal, etc. Electromagnetic induction, self and mutual induction
AC Fundamentals	Instantaneous, Peak, R.M.S. and average values of alternating waves, Representation of sinusoidal wave form, simple series and parallel AC Circuits consisting of R.L. and C, Resonance, Tank Circuit. Poly Phase system – star and delta connection, 3 phase power, DC and sinusoidal response of R-L and R-C circuit.
Measurement and measuring instruments	Measurement of power (1 phase and 3 phase, both active and reactive) and energy, 2 wattmeter method of 3 phase power measurement. Measurement of frequency and phase angle. Ammeter and voltmeter (both moving coil and moving iron type), extension of range wattmeter, Multimeters, Megger, Energy meter AC Bridges. Use of CRO, Signal Generator, CT, PT and their uses. Earth Fault detection.
Electrical Machines	(a) D.C. Machine – Construction, Basic Principles of D.C. motors and generators, their characteristics, speed control and starting of D.C. Motors. Method of braking motor, Losses and efficiency of D.C. Machines. (b) 1 phase and 3 phase transformers – Construction, Principles of operation, equivalent circuit, voltage regulation, O.C. and S.C. Tests, Losses and efficiency. Effect of voltage, frequency and wave form on losses. Parallel operation of 1 phase /3phase transformers. Auto transformers. (c) 3 phase induction motors, rotating magnetic field, principle of operation, equivalent circuit, torque-speed characteristics, starting and speed control of 3phase induction motors. Methods of braking, effect of voltage and frequency variation on torque speed characteristics.
Fractional Kilowatt Motors and Single Phase Induction Motors	Characteristics and applications
Synchronous Machines	Generation of 3-phase e.m.f. armature reaction, voltage regulation, parallel operation of two alternators, synchronizing, control of active and reactive power. Starting and applications of synchronous motors.
Generation, Transmission and Distribution	Different types of power stations, Load factor, diversity factor, demand factor, cost of generation, inter-connection of power stations. Power factor improvement, various types of tariffs, types of faults, short circuit current for symmetrical faults. Switchgears – rating of circuit breakers, Principles of arc extinction by oil and air, H.R.C. Fuses, Protection against earth leakage / over current, etc. Buchholtz relay, Merz-Price system of protection of generators & transformers, protection of feeders and bus bars. Lightning arresters, various transmission and distribution system, comparison of conductor materials, efficiency of different system. Cable – Different type of cables, cable rating and derating factor.
Estimation and	Estimation of lighting scheme, electric installation of machines and relevant IE

costing	rules. Earthing practices and IE Rules.
Utilization of Electrical Energy	Illumination, Electric heating, Electric welding, Electroplating, Electric drives and motors.
Basic Electronics	Working of various electronic devices e.g. P N Junction diodes, Transistors (NPN and PNP type), BJT, JFET, MOSFET and Op-Amp. Simple circuits using these devices
Power Electronics	Working of various power electronic devices, Different types of Converters, Inverters and UPS.

Level 3:

Practical/Skill Test based on Level-2 topics

* *All shortlisted candidates will be received communication to their registered e-mail shortly with regard to admit card and other instructions, if any.*

* *Queries will be answered only through e-mail (recruitment@iiitk.ac.in).*
