

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN AND MANUFACTURING, KURNOOL

RECRUITMENT OF JUNIOR TECHNICAL SUPERINTENDENT

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

PROVISIONAL LIST OF SHORTLISTED CANDIDATES APPLICATION NUMBERS

1904JTS0001	1904JTS0051	1904JTS0098	1904JTS0143
1904JTS0002	1904JTS0053	1904JTS0102	1904JTS0144
1904JTS0003	1904JTS0054	1904JTS0104	1904JTS0151
1904JTS0005	1904JTS0058	1904JTS0106	1904JTS0154
1904JTS0009	1904JTS0062	1904JTS0107	1904JTS0155
1904JTS0011	1904JTS0070	1904JTS0113	1904JTS0157
1904JTS0018	1904JTS0074	1904JTS0115	1904JTS0158
1904JTS0023	1904JTS0079	1904JTS0116	1904JTS0159
1904JTS0024	1904JTS0080	1904JTS0123	1904JTS0160
1904JTS0028	1904JTS0082	1904JTS0131	1904JTS0164
1904JTS0030	1904JTS0084	1904JTS0132	1904JTS0169
1904JTS0031	1904JTS0086	1904JTS0133	1904JTS0170
1904JTS0032	1904JTS0087	1904JTS0134	1904JTS0172
1904JTS0040	1904JTS0091	1904JTS0137	1904JTS0173
1904JTS0044	1904JTS0094	1904JTS0138	1904JTS0176
1904JTS0046	1904JTS0095	1904JTS0140	
1904JTS0047	1904JTS0096	1904JTS0141	

SCHEDULE FOR REPORTING, VERIFICATION & WRITTEN TEST

Level of Exam	Date, Day and Time	Remarks
	14 th March 2020 (Saturday) 01:00 PM	Reporting and Occupying the Allotted Room
Level 1	14 th March 2020 (Saturday) 01:00 PM to 02:00 PM	Verification of Original Certificates along with Identity Proof
	14 th March 2020 (Saturday) 02:30 PM to 04:30 PM	Written Test
Level 2	16 th March 2020 (Monday) 10:00 AM to 12:00 Noon	Level 2 Written Test and Level 3 Skill Test only for
Level 3	16 th March 2020 (Monday) 02:00 PM on wards	candidates qualified in Level 1 Test

Scheme of Examination

Levels of Exams:

Level 1:

All the shortlisted candidates shall be called for the skill/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 Computer science, Electronics and mechanical areas. The questions will be objective/descriptive type carrying maximum of 100 marks. Maximum duration of exam is 2 hours.

Level 3:

It is the skill oriented Test based on level 2 syllabus. This test carries 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 extant of rules of Government of India. 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 Selection Committee be final.

Note:

Success in the examination confers no right on the candidate for 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: There are two parts in Level 2.

Part A: is common to all candidates Common Paper) (20% Weightage)

Basic Computer fundamentals, latest ICT trends and tools, Industry 4.0, Applications of AI and Machine learning, Systems management and maintenance, MATLAB features, Open source tools

Part B: Select any one of the three Sub Parts I, II and III (80% weightage) Sub Part 1:

Programming in C – sequence, selection and repetition statements. Arrays. Problems involving arrays. - Error identification – debugging

System maintenance and troubleshooting – Windows and Linux OS installation procedures – Dual boot – Reserving space for User/ System while installing OS –Trouble shooting issues related to OS, device drivers – installing packages through apt- get install – using GUI

Networking – Creating LAN using switches – understanding switching tables – Networking commands – ping, netconfig, IP lookup, traceroute – IP settings – DHCP – DNS – Wi-Fi settings – Wired LAN – Wireless LAN – Access points

Website design and maintenance – database connectivity – applications involving PHP (python) and MySQL. Case studies involving academic administration.

Sub Part II:

Engineering Drawing: Principles of dimensioning, symbols, application the first angle and third angle projection, geometrical construction of shapes, orthographic projection, sectioning.

Materials: BCC, FCC structures, Properties of engineering materials, Iron and Steel, non-ferrous metals and alloys, heat treatment, stress-strain diagrams for engineering materials. Fluids and fluid properties,

Process and machineries: Hand tools and measurement tools, Different types of castings, design of patterns, moulds and cores; Fundamentals of hot and cold working processes; forging, rolling, extrusion, drawing and sheet metal forming processes. Principles of welding, brazing and soldering. Constructional features, Specifications, types, working principles and mechanism in lathe, drilling machine, milling machine, boring machines, shapers, gear hobbing. Working principle of welding, perform Arc & Gas welding and brazing operation.

Tools: Basic machine tools; single and multi-point cutting tools, tool geometry and materials, tool life and wear; Limits, fits and tolerances.

Mechanics: Free-body diagrams and equilibrium; kinematics and dynamics of particles and of rigid bodies in plane motion; impulse and momentum (linear and angular) and energy formulations, collisions, Stress and strain, elastic constants, Poisson's ratio.

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.

Sub Part III:

Analog and Digital Electronics: Diode and Wave shaping circuits, Bipolar Junction Transistor, MOSFET, Zener diode, Oscillators, Power Amplifier, BJT differential amplifier, non-ideal characteristics of differential amplifier, Phase Locked Loops, Operational Amplifiers, Boolean Algebra, Logic Gates and Networks, Combinational Circuit and sequential circuits, Multiplexers, Decoders, Encoders, Code Converters, arithmetic Comparators Circuits .Flip-Flops, Registers and Counters, Design of Counter using Sequential Circuit Approach.

Network Analysis: Network Elements and theorems, network analysis, Laplace Transform, Transient analysis in DC circuit using Laplace domain transformation method and State Variable Analysis, Fourier Series and System /Network Characterization, Frequency response, Two-port network analysis, basics of control system: open/closed loop systems and stability.

Electronics Measurement and Instrumentation: Static and Dynamic Characteristics, Test instruments, multi meter, function generator, Digital storage Oscilloscope, Measurement of different quantiles, Transducers and sensors

Microprocessors and Microcontroller: Overview of 8085 microprocessors, Interfacing with peripherals :8155, 8255, 8254, 8279, 8259, 8259, etc. Interfacing with keyboards, 8086 microprocessors, Intel Microprocessors :Pentium Series, i-series., Embedded and Processor Technology, Microcontroller 8051, Peripherals, Programmable Logic Controllers)PLCs.

Communication: Elements of Communication systems, Information sources and communication channels, Modulation , Multiplexing, FM Demodulators, AM and FM.Super Heterodyne Radio receiver receiver ,Sampling Theorem, Nyquist rate & Aliasing, Sampling, PAM, PWM & PPM system Delta and Adaptive delta modulation .Digital Time Division Multiplexing, Spectrum, communication system, Spread DS-SS & FH-SS, Shannon's Theorem and channel capacity.

Signal Processing: Continuous-time and discrete-time signals and systems, Continuous-time Linear Time-invariant (LTI) system, Discrete-time LTI system, Fourier series representation of continuous-time periodic signals, the Continuous-time Fourier Transform, DTFT, DFT, Z-transform.

Level 3:

Practical test based on the above (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 (<u>recruitment@iiitk.ac.in</u>).