॥ सा विद्या या विमुक्तये ॥
भारतीय प्रौद्योगिकी संस्थान धारवाड
Indian Institute of Technology Dharwad

Indian Institute of Technology Dharwad
WALMI Campus, Belur Industrial Area,
Near High Court, PB Road, Anjaneya Nagar,
Dharwad 580011, Karnataka

Recruitment Advertisement No: IITDH/Admin/Non-Faculty Recruitment/12/2018-19 dated 07 December 2018

Test details for the post of Junior Technical Superintendent (Electrical Engineering) (Job Reference No. NFR/2018/12)

All shortlisted candidates are required to appear for the screening test (Stage-I), which will be held on 16th July, 2019. Based on the performance in the screening test, the candidates will be shortlisted for the next round of the laboratory test (Stage-II). Stage II is likely to be conducted on 16th and 17th of July, 2019. The venue for both the stages is IIT Dharwad, academic building.

Stage-I: Screening Test

Question paper pattern and syllabus

The screening test is divided into four sections as follows:

Section	Topics/Subjects	Weightage of marks
1	General knowledge	10%
2	English language and aptitude	20%
3	Computer skills	20%
4	Basic electrical/electronics	50%

Broad areas of syllabus for each section are as follows:

Section	Topics/Subjects	Broad syllabus
1	General knowledge	Everyday applications of science, international organizations, geography, history (both Indian and foreign), economics, current affairs and sports.
2	English language and aptitude	Synonyms, grammar, sentence correction/completion, vocabulary, and general aptitude questions.
3	Computer skills	Basic tools such as Microsoft Word, Excel etc., general computer terminology, basic software and hardware questions, basics of networking and internet.
4	Basic electrical/electronics	Basic DC and AC circuit analysis, principles of measurements, basic electronic components: diode, transistor, MOSFET, Zener diode, and OPAMP, and the corresponding circuits, basic digital electronics: TTL and CMOS gates, flip-flops, counters, and their interfacing, 8085 Microprocessor architecture and programming, Test instruments: multimeter, oscilloscope, function generator, basic signals and systems: transforms, LTI systems, basics of control system: open/closed loop systems and stability.

Stage-II: Laboratory Test:

The final selection of the candidates will be purely based on their performance in the laboratory test. The candidate will be allowed to choose one of the following three topics: (i) Electronic circuits: Handling and operating electrical/electronic instruments and equipment's, building, testing and debugging of electrical/electronic circuit and systems, (ii) signal processing: implementing simple signal processing related functions in MATLAB, and (iii) electrical machines and power electronics.