

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL राष्ट्रीय प्रौद्योगिकी संस्थान कर्नाटक, सुरत्कल P.O SRINIVASNAGAR, MANGALORE - 575025

AM Call Letter List

M Tech. (Research), 2020 - 21

The following applicants have been selected for written exam and/or interview for the department for the department of Applied Mechanics and Hydraulics for M Tech. (Research) Programme. The applicants are requested to go through additional information provided in their Call letters.

Name	Reference Number	Branch/Specialisation
DEBANKAR DEY	MTR2020MS0003	Marine Structures
Ojaswi K S	MTR2020WR0007	Water Resources Engineering & Management
SUPRIYA K M	MTR2020WR0008	Water Resources Engineering & Management
SUPRIYA K M	MTR2020RS0006	Remote Sensing & Geographic Information Systems
MOHAMMED K P	MTR2020MS0007	Marine Structures
George Henri	MTR2020RS0007	Remote Sensing & Geographic Information Systems
MAHIMA S RAO	MTR2020WR0010	Water Resources Engineering & Management
Pooja Panchappa Kenchannavar	MTR2020WR0012	Water Resources Engineering & Management
ERRA KRANTHI RANADEV	MTR2020WR0013	Water Resources Engineering & Management

Head Of Department Applied Mechanics and Hydraulics

> PROFESSOR & HEAD Dept. of Water Resources & Ocean Engineering (Formerly Dept. of Applied Mechanics & Hydraulics) NITK Surathkal, P.O. Srinivasnagar, Mangaluru-575025

Doon Acadomice

# **Dept. Water Resources & Ocean Engineering**

## (Formerly Dept. of Applied Mechanics & Hydraulics)

# NITK, Surathkal, Mangalore, Pin: 575 025

## General Instructions for the candidates who are appearing for the M.Tech. (R/S) Written Aptitude Test & Interview:

- **1.** Syllabus for the written aptitude test is provided in annexure.
- Mode of the written aptitude test is online. Details of examination will be announced in our Institute's Website (https://www.nitk.ac.in/). For any further updates, the candidates are requested to visit our Institute's Website regularly.
- **3.** There will be 50 multiple choice questions (MCQ) for the M.Tech. (R/S) Written Aptitude Test. For every question, four options will be given. The candidates are expected to select correct option.
- 4. Each correct answer carries one mark. Total marks for the test is 50.
- 5. There is negative marking for wrong answer. For each wrong answer, 0.25 marks will be deducted.
- 6. Time duration is 60 minutes.
- 7. The candidates are allowed to use scientific calculators for solving numerical problems.
- 8. After the written test, shortlisted candidates will be allowed to attend the M.Tech. (R/S) interview.
- **9.** Written Test Date and Time: September 9<sup>th</sup> 2020, 8.00 AM onwards. No extra time will be given and your login page will be closed after the test duration.
- **10. Interview Date and Time:** September 9<sup>th</sup> 2020, 09.30 AM Onwards through online mode.

HEAD OF THE DEPARTMENT

**Annexure** 

## Syllabus for the M.Tech. (R/S) Written Aptitude Test

**Engineering Mechanics:** System of Forces, Free-Body Diagrams, Equilibrium Equations; Internal Forces in Structures; Plane Truss, Second Area Moment.

**Solid Mechanics:** Bending Moment and Shear Force in Statically Determinate Beams; Simple Stress and Strain Relationships; Simple Bending Theory, Flexural and Shear Stresses, Uniform Torsion, Buckling of Column.

**Fluid Mechanics:** Properties of Fluids, Fluid Statics; Continuity, Momentum, Energy and Corresponding Equations; Potential Flow, Applications of Momentum and Energy Equations; Laminar and Turbulent Flow; Flow in Pipes, Pipe Networks; Concept of Boundary Layer and its Growth.

**Numerical Methods:** Accuracy and Precision; Error Analysis. Numerical Solutions of Linear and Non-Linear Algebraic Equations; Least Square Approximation, Newton's and Lagrange Polynomials, Numerical Differentiation, Integration by Trapezoidal and Simpson's rule, Single and Multi-Step Methods for First Order Differential Equations.

**Calculus:** Functions of Single Variable; Limit, Continuity and Differentiability; Mean Value Theorems, Local Maxima and Minima.

-----

HEAD OF THE DEPARTMENT

## NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL P.O. SRINIVASNAGAR, MANGALURU-575 025

Telephone: 2474000-2474023 Fax: 91-0824-2474033 Website: www.nitk.ac.in Email: aracademic@nitk.edu.in

Date: 27-08-2020

No.PG/2019-20/E6

## Admit Card

### Sub: M Tech (R/S) Programme – Written Aptitude Test / Interview for the year 2020-21

With reference to his/her application for admission to M.Tech. (R/S) programme, Mr./Ms...... is requested to appear for an online Written test/Interview. He/she has to produce all the original records such as Date of Birth Certificate, Degree Marks Cards, SC/ST/ OBC/EWS certificate (if applicable as per proforma), Person with disability certificate (if applicable), Sponsorship letter (if applicable) and Conduct Certificate during the interview.

Department	: Department of Water Resources & Ocean Engineering		
	(Formerly Dept. of Applied Mechanics & Hydraulics)		
Place of Reporting	: Online		
Written Test Date and Time	: September 9 <sup>th</sup> 2020, 8.00 AM – 9.00 AM		
Interview Date and Time	: September 9 <sup>th</sup> 2020, 9.30 AM Onwards		

#### NOTE:

- 1. Candidates should be prepared to appear for a written Aptitude Test before the interview.
- 2. Candidates should be prepared to appear for an online written Aptitude Test before the interview. Fee Structure for M Tech (S/R) programme and Course syllabus for aptitude test are provided on Institute's website, i.e. <u>www.nitk.ac.in</u>. A copy of the syllabus for the aptitude test has been appended to this call letter. **The details on the access to the online test portal, the instructions on the online test and the link for the online interview will be communicated to you by email.**
- 3. Full-time/External Registrants sponsored from Industry or other organizations, should have been serving in the sponsoring organisation for a period of <u>at least 2 years</u> after qualifying degree and have to produce a letter from their employer stating that the candidate is deputed for M Tech / M Tech (Research) in the Institute on full salary during the study period. The employer should indicate that the candidate will not be withdrawn midway before the completion of the course. (Sponsorship letter should be in the format provided in the Application Form).
- 4. Candidates who have <u>not submitted</u> marks of final examination along with application form shall produce the same at the time of admission if available. However, candidates who have written final year examinations and yet to obtain final semester mark cards should submit the same on or before **30.09.2020**
- 5. Your candidature for this test is provisional & is subject to your fulfilling the educational qualifications & other criteria prescribed for the programme as mentioned in the Information Brochure, failing which your candidature can be summarily rejected after verification/scrutiny at a later stage
- 6. Please keep the Admit Card ready during the online test and interview. You are responsible for safe custody of the Admit Card and in the event of any other person using this Admit Card, the responsibility lies on you to prove that you have not used the service of an impersonator.
- 7. The candidates who have qualified from the other university (Other than NITK) have to produce Migration Certificate in order to validate their admission.
- 8. Please note that no expenses shall be payable for appearing in the written test/Interview.
- 9. The Selected candidates are required to pay fees and get admitted during the period 18.09.2020 25.09.2020