

DEPARTMENT OF WATER RESOURCES AND OCEAN ENGINEERING
NITK, SURATHKAL

Name of the Exam.: M.Tech. (WROE)

Written Test Date and Time: June 16th 2022, 8.30 AM – 09.30 AM

Interview Date and Time: June 16th 2022, 10.00 AM

**Shortlisted Candidates for Written Test / Interview of M.Tech (Sponsored/Research)
Program 2022-23**

SL. NO	APPLICATION NO	NAME
MARINE STRUCTURES		
1	MTR2022MS0002	SOUMYABRATA HATY
2	MTR2022MS0004	B H RACHANA
3	MTR2022MS0006	ABHIJITH P A
WATER RESOURCES ENGINEERING AND MANAGEMENT		
1	MTR2022WR0002	CHANDANKUMAR N M
2	MTR2022WR0004	SOUMYABRATA HATY
3	MTR2022WR0005	ABDULREHAMAN ASIF BAGWAN
4	MTS2022WR0006	VINOD JOGUR
5	MTR2022WR0009	ROSHAN KUMAR
6	MTR2022WR0010	SIDDHARTHAN M
7	MTR2022WR0011	THAPASYA GOPINATH
8	MTR2022WR0012	ANANT DIKSHIT
9	MTR2022WR0013	GANESH B
10	MTR2022WR0014	ABHIJITH P A
GEOINFORMATICS		
1	MTR2022GF0001	VISWAS R
2	MTR2022GF0003	SOUMYABRATA HATY
3	MTR2022GF0004	ABDULREHAMAN ASIF BAGWAN
4	MTR2022GF0005	MEENATCHI G
5	MTR2022GF0008	ABHIJITH P A
6	MTR2022GF0009	SHEETHAL RAJ S G

Sd/-
Chairperson (DRPC)

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 (offline mode):

1. Syllabus for the written aptitude test is provided in annexure.
2. Mode of the written aptitude test is offline. 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 30 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 30
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:** June 16th 2022, 8.30 AM onwards. **No extra time will be given.**
10. **Interview Date and Time:** June 16th 2022,, 10.00 AM Onwards.

Sd/-

Chairperson (DRPC)

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.

Sd/-

Chairperson (DRPC)