

## **Exams for Fall/Winter– October – December 2024**

*Last updated April 25, 2024*

**04-BS-1**, Mathematics

**04-BS-2**, Probability and Statistics

**04-BS-3**, Statics and Dynamics

**04-BS-4**, Electric Circuits and Power

**04-BS-5**, Advanced Mathematics

**04-BS-6**, Mechanics of Materials

**04-BS-7**, Mechanics of Fluids

**04-BS-8**, Digital Logic Circuits

**04-BS-9**, Basic Electromagnetics

**04-BS-10**, Thermodynamics

**04-BS-11**, Properties of Materials

**04-BS-12**, Organic Chemistry

**04-BS-13**, Biology

**04-BS-14**, Geology

**04-BS-15**, Engineering Graphics & Design Process

**04-BS-16**, Discrete Mathematics

**11-CS-1 / 98-CS-1**, Engineering Economics

**11-CS-2**, Engineering in Society - Health and Safety

**11-CS-3**, Sustainability, Engineering, and the Environment

**11-CS-4**, Engineering Management

**98-CS-2**, Engineering in Society - Health, Safety and the Environment

**98-CS-3**, Management Concepts for Engineers

**04-Agric-A1**, Applied Plant, Animal or Human Physiology

**04-Agric-A4**, Fluid Flow

**04-Agric-A5**, Principles of Instrumentation

**04-Agric-A7**, Chemistry and Microbiology of Foods

**04-Agric-B6/07-Wrse-A7-1**, Irrigation, Drainage and Erosion Control

**04-Agric-B10/16-Chem-B4**, Biochemical Engineering

**04-Bio-A2**, Process Dynamics and Control

**04-Bio-A3**, Cellular and Molecular Biology and Biochemistry

**04-Bio-A4/16-Mec-B13**, Biomechanics

**04-Bio-A7**, Fluid Mechanics

**04-Bio-B4**, Digital Image Processing

**07-Bld-A1**, Elementary Structural Analysis

**07-Bld-A2**, Elementary Structural Design

**07-Bld-A3**, Construction Engineering

**07-Bld-A4**, Building Engineering Systems

**07-Bld-A5**, Building Science

**07-Bld-A6**, Geotechnical Materials and Analysis

**07-Bld-A7**, Building Envelope Design

**07-Bld-B1**, Computer Programming

**07-Bld-B4**, Modern Building Materials

**07-Bld-B5**, Fire and Smoke Control in Buildings

**07-Bld-B6**, Building Energy Conservation Technologies

**07-Bld-B7**, Indoor Air Quality

**16-Chem-A1**, Process Balances and Chemical Thermodynamics

**16-Chem-A2**, Unit Operations & Separation Processes

**16-Chem-A3**, Heat and Mass Transfer

**16-Chem-A4**, Chemical Reactor Engineering

**16-Chem-A5**, Chemical Plant Design and Economics

**16-Chem-A6**, Process Dynamics and Control

**16-Chem-B1**, Transport Phenomena

**16-Chem-B2**, Environmental Engineering

**16-Chem-B4/04-Agric-B10**, Biochemical Engineering

**16-Chem-B5**, Pulp and Paper Technology

**16-Chem-B6**, Petroleum Refining and Petrochemicals

**16-Chem-B8**, Polymer Engineering

**16-Chem-B10**, Life Cycle Assessment

**16-Civ-A1/07-Str-A1**, Elementary Structural Analysis

**16-Civ-A2/07-Str-A2**, Elementary Structural Design

**16-Civ-A3**, Elementary Environmental Engineering (national only)

**16-Civ-A3/07-Wrse-A6**, Municipal and Environmental Engineering (PEO only)

**16-Civ-A4/07-Str-A3/07-Tra-A6**, Geotechnical Materials and Analysis

**16-Civ-A5/07-Str-B11**, Hydraulic Engineering

**16-Civ-A6**, Highway Design, Construction, and Maintenance

**16-Civ-B1/07-Str-A4**, Advanced Structural Analysis

**16-Civ-B2/07-Str-A5**, Advanced Structural Design

**16-Civ-B3/07-Str-B1**, Geotechnical Design

**16-Civ-B4/07-Wrse-A2**, Engineering Hydrology

**16-Civ-B5/07-Wrse-B3**, Water Supply and Wastewater Treatment

**16-Civ-B6**, Urban and Regional Planning

**16-Civ-B7**, Transportation Planning and Engineering

**16-Civ-B8/07-Str-B2**, Management of Construction

**16-Civ-B9/07-Str-A6-1**, The Finite Element Method

**16-Civ-B10**, Traffic Engineering

**16-Civ-B11**, Structural Materials

**16-Civ-B12**, Risk & Safety in Civil Engineering

**17-Comp-A1**, Electronics

**17-Comp-A2**, Digital Systems Design

**17-Comp-A5**, Operating Systems

**17-Comp-A6**, Software Engineering

**17-Comp-B5**, Computer Communications

**16-Elec-A1/16-Mex-A2**, Circuits

**16-Elec-A2/17-Phys-B5**, Systems and Control

**16-Elec-A3/17-Phy-A3**, Signals and Communications

**16-Elec-A4/16-Mex-A3/17-Phys-B3**, Digital Systems and Computers

**16-Elec-A5/16-Mex-A2**, Electronics

**16-Elec-A6/16-Mex-B10**, Power Systems and Machines

**16-Elec-A7**, Electromagnetics

**16-Elec-B1**, Digital Signal Processing

**16-Elec-B2/16-Mex-B3**, Advance Control Systems

**16-Elec-B3**, Digital Communications systems

**16-Elec-B4**, Information Technology Networks

**16-Elec-B5**, Advanced Electronics

**16-Elec-B6**, Integrated Circuit Engineering

**16-Elec-B7**, Power Systems Engineering

**16-Elec-B8**, Power Electronics and Drives

**16-Elec-B9**, Electromagnetic Field, Transmission

**16-Elec-B10**, Electro-Optical Engineering

**18-Env-A1/07-Wrse-B11**, Principles of Environmental Engineering

**18-Env-A2**, Hydrology and Municipal Hydraulics Engineering

**18-Env-A3/07-Wrse-A3**, Geotechnical & Hydrogeological Engineering

**18-Env-A5**, Air Quality and Pollution Control Engineering

**18-Env-A4**, Water and Wastewater Engineering

**18-Env-A6**, Solid Waste Engineering and Management

**18-Env-B1**, Environmental Assessment and Management Systems

**18-Env-B2**, Water Resources

**18-Env-B4**, Site Assessment and Remediation

**18-Env-B5**, Industrial and Hazardous Waste Management

**18-Env-B7**, Environmental Sampling and Analysis

**18-Geol-A1**, Mineralogy and Petrology

**18-Geol-A2**, Hydrogeology

**18-Geol-A3**, Sedimentation and Stratigraphy

**18-Geol-A4**, Structural Geology

**18-Geol-A5**, Rock Mechanics

**18-Geol-A6**, Soil Mechanics

**18-Geol-B1**, Contaminant Hydrogeology

**18-Geol-B3**, Site Investigation

**18-Geol-B4**, Geomorphology and Pleistocene Geology

**18-Geol-B10-1**, Gravity & Magnetic Fields

  

**18-Geom-A1**, Surveying

**18-Geom-A3**, Geodesy & Positioning

**18-Geom-A4**, Photogrammetry

**18-Geom-A5**, Remote Sensing and Image Analysis

**18-Geom-A6**, Cadastral Studies

**18-Geom-B1**, Digital Terrain Modelling

**18-Geom-B3**, Networks and Precise Engineering Surveys

**18-Geom-B5**, Survey Law

  

**17-Ind-A1**, Operations Research

**17-Ind-A2/08-Mfg-A4**, Analysis & Design of Work

**17-Ind-A3/08-Mfg-A5**, Facilities Planning

**17-Ind-A4/08-Mfg-A3**, Production Management

**17-Ind-A5/08-Mfg-A6**, Quality Planning, Control, and Assurance

**17-Ind-A6/08-Mfg-B3/16-Mex-A6**, System Simulation

**17-Ind-B1**, Applied Probability and Statistics

**17-Ind-B2/08-Mfg-A2**, Manufacturing Processes

**17-Ind-B3/08-Mfg-B1**, Computer Aided Design and Computer-Assisted Manufacturing

**17-Ind-B5/04-Bio-B11/ 08-Mfg-B12**, Ergonomics

**17-Ind-B6**, Workplace Design

**17-Ind-B10/08-Mfg-B9**, Workplace Health and Safety

**98-Mar-A2/16-Nav-A1**, Fundamentals of Naval Architecture

**98-Mar-A5/16-Mec-A7**, Advanced Strength of Materials

**98-Mar-B5/16-Mec-B6/08-Mfg-B11**, Fluid Machinery (Mec-A6 national)

**16-Mec-A1/17-Phys-B6/16-Nav-B1/16-Mex-A4**, Applied Thermodynamics and Heat Transfer

**16-Mec-A2/16-Mex-A5**, Kinematics and Dynamics of Machines

**16-Mec-A3/16-Mex-A1**, System Analysis and Control

**16-Mec-A4/08-Mfg-A1**, Design and Manufacture of Machine Elements

**16-Mec-A5**, Electrical and Electronics Engineering

**16-Mec-A6**, Advanced Fluid Mechanics (Mec-B6 national)

**16-Mec-A7/98-Mar-A5**, Advanced Strength of Materials

**16-Mec-B1**, Advanced Machine Design

**16-Mec-B2**, Environmental Control in Buildings

**16-Mec-B3**, Energy Conversion and Power Generation

**16-Mec-B4**, Integrated Manufacturing Systems

**16-Mec-B5/08-Mfg-B4/16-Mex-B8**, Product Design and Development

**16-Mec-B6/98-Mar-B5/08-Mfg-B11**, Fluid Machinery (Mec-A6 national)

**16-Mec-B7**, Aero and Space Flight

**16-Mec-B8**, Engineering Materials

**16-Mec-B9**, Advanced Engineering Structures

**16-Mec-B10**, Finite Element Analysis

**16-Mec-B12/08-Mfg-B8/16-Mex-B5**, Robotics Mechanics

**16-Mec-B13**, Biomechanics

**10-Met-A1**, Metallurgical Thermodynamics

**10-Met-A2**, Metallurgical Rate Phenomena

**10-Met-A3**, Metal Extraction Processes

**10-Met-A4/17-Phys-B7**, Structure of Materials

**10-Met-A6**, Phase Transformation and Thermal Treatment of Metals and Alloys

**10-Met-B1**, Mineral Processing

**10-Met-B6**, Physical Metallurgy of Iron and Steel

**10-Met-B7**, Phys. Metallurgy of Non-Ferrous Metals & Alloys

**10-Met-B10/12-Mtl-B10**, Advanced Electronic Materials

**16-Mex-A1/16-Mec-A3**, System Analysis and Control

**16-Mex-A2/16-Elec-A1**, Circuits

**16-Mex-A2/16-Elec-A5**, Electronics

**16-Mex-A3/16-Elec-A4/17-Phys-B3**, Digital Systems and Computers

**16-Mex-A4/16-Mec-A1/17-Phys-B6/16-Nav-B1**, Applied Thermodynamics and Heat Transfer

**16-Mex-A5/16-Mec-A2**, Kinematics and Dynamics of Machines

**16-Mex-A6/08-Mfg-B3/17-Ind-A6**, System Simulation

**16-Mex-B3/16-Elec-B2**, Advance Control Systems



**16-Mex-B5/16-Mec-B12/08-Mfg-B8**, Robotics Mechanics

**16-Mex-B8/16-Mec-B5/08-Mfg-B4**, Product Design and Development

**16-Mex-B10/16-Elec-A6**, Power Systems and Machines

**08-Mfg-A1/16-Mec-A4**, Design & Manufacture of Machine Elements

**08-Mfg-A2/17-Ind-B2**, Manufacturing Processes

**08-Mfg-A3/17-Ind-A4**, Production Management

**08-Mfg-A4/17-Ind-A2**, Analysis & Design of Work

**08-Mfg-A5/17-Ind-A3**, Facilities Planning

**08-Mfg-A6/17-Ind-A5**, Quality Planning, Control, and Assurance

**08-Mfg-B1/17-Ind-B3**, Computer Aided Design and Computer-Assisted Manufacturing

**08-Mfg-B3/16-Mex-A6/17-Ind-A6**, System Simulation

**08-Mfg-B4/16-Mec-B5/16-Mex-B8**, Product Design and Development

**08-Mfg-B5/16-Mec-B8**, Engineering Materials

**08-Mfg-B6**, Metrology

**08-Mfg-B8/16-Mec-B12/16-Mex-B5**, Robotics Mechanics

**08-Mfg-B9/17-Ind-B10**, Workplace Health and Safety

**08-Mfg-B10**, Tooling, Jigs & Fixture Design

**08-Mfg-B11/16-Mec-B6/98-Mar-B5**, Fluid Machinery (Mec-A6 national)

**18-MMP-A1**, General Geology and Exploration

**18-MMP-A2**, Underground Mining Methods and Design

**18-MMP-A3**, Mineral Processing

**18-MMP-A5**, Surface Mining Methods and Design

**18-MMP-A6**, Mining and the Environment

**18-MMP-B1**, Applied Rock Mechanics

**18-MMP-B2**, Rock Fragmentation

**18-MMP-B3**, Material Handling

**18-MMP-B4**, Occupational Health, Safety and Loss Management

**18-MMP-B9**, Rock Slope Engineering

**12-Mtl-A1**, Materials Thermodynamics

**12-Mtl-A2**, Transport Phenomena in Materials Engineering

**12-Mtl-A3**, Structure and characterization of material

**12-Mtl-A4/10-Met-A5**, Mechanical Behaviour and Fracture of Materials

**12-Mtl-A5**, Phase Transformations of Metals, Glasses, and Ceramics

**12-Mtl-A6**, Thermal Treatment of Metals, Glasses, Ceramics

**12-Mtl-B6/10-Met-B6**, Physical Metallurgy of Iron and Steel

**12-Mtl-B10/10-Met-B10**, Advanced Electronic Materials

**12-Mtl-B15**, Joining of Material

**16-Nav-A1/98-Mar-A2**, Fundamentals of Naval Architecture

**16-Nav-A3**, Hydrodynamics of Ships: Ship Motion Exam

**16-Nav-A4**, Ship Structure and Strength of Ships

**16-Nav-A5**, Ship Design

**16-Nav-B1/16-Mec-A1/17-Phys-B6/16-Mex-A4**, Applied Thermodynamics and Heat Transfer

**16-Nav-B3**, Small Commercial Ships

**08-Nuc-A1**, Introduction to Nuclear Physics and Nuclear Engineering

**17-Pet-A2**, Petroleum Reservoir Fluids

**17-Pet-A3**, Fundamental Reservoir Engineering

**17-Pet-A4**, Oil and Gas Well Drilling and Completion

**17-Pet-A6**, Reservoir Mechanics

**17-Pet-A7**, Secondary and Enhanced Recovery

**17-Pet-B3**, Oil and Gas Evaluation and Economics

**17-Pet-B4**, Petroleum Geology

**17-Pet-B5**, Well Testing

**17-Phys-A1**, Classical Mechanics

**17-Phys-A2**, Statistical Physics

**17-Phy-A3/16-Elec-A3**, Signals and Communications

**17-Phys-A4**, Quantum Mechanics

**17-Phys-A5-A**, Electronic Materials and Devices

**17-Phys-B1**, Radiation Physics

**17-Phys-B3/16-Elec-A4/16-Mex-A3**, Digital Systems and Computers

**17-Phys-B5/16-Elec-A2**, Systems and Control

**17-Phys-B6/16-Mec-A1/16-Nav-B1/16-Mex-A4**, Applied Thermodynamics and Heat Transfer

**17-Phys-B7/98-Met-A4**, Structure of Materials

**20-Prelim-1**, Calculus

**20-Prelim-2**, Computing

**20-Prelim-3**, Physics

**20-Prelim-4**, Chemistry

**19-Soft-A1**, Algorithms & Data Structures  
**19-Soft-A4**, Real Time Systems  
**19-Soft-A5**, Requirements and Specifications  
**19-Soft-A6**, Software Quality Assurance  
**19-Soft-A7**, Software Development Process  
**19-Soft-B4**, Dependable System  
**19-Soft-B13**, Performance Analysis & Simulation

**07-Str-A1/16-Civ-A1**, Elementary Structural Analysis  
**07-Str-A2/16-Civ-A2**, Elementary Structural Design  
**07-Str-A3/07-Tra-A6/16-Civ-A4**, Geotechnical Materials and Analysis  
**07-Str-A4/16-Civ-B1**, Advanced Structural Analysis  
**07-Str-A5/16-Civ-B2**, Advanced Structural Design  
**07-Str-A6-1/16-Civ-B9/07-Str-B3**, The Finite Element Method  
**07-Str-A6-3/07-Str-B10**, Earthquake Engineering  
**07-Str-B1/16-Civ-B3**, Geotechnical Design  
**07-Str-B2/16-Civ-B8**, Management of Construction  
**07-Str-B3/07-Str-A6-1/16-Civ-B9**, Applications of the Finite Element Method  
**07-Str-B5**, Foundation Engineering  
**07-Str-B11/16-Civ-A5**, Hydraulic Engineering

**07-Tra-A1**, Introduction to Transportation Engineering

**07-Tra-A2**, Highway Design

**07-TRA-A3**, Traffic Engineering

**07-Tra-A4**, Pavement Materials, Design and Management

**07-Tra-A6/07-Str-A3/16-Civ-A4**, Geotechnical Materials and Analysis

**07-Tra-B1**, Transit System

**07-Tra-B6**, Highway Construction

**07-Tra-B9**, Traffic Safety

**07-Wrse-A2/16-Civ-B4**, Engineering Hydrology

**07-Wrse-A3/18-Env-A3**, Soil Mechanics & Groundwater

**07-Wrse-A6 /16-Civ-A3**, Municipal and Environmental Engineering (PEO only)

**07-Wrse-A7-1/04-Agric-B6, Irrigation**, Drainage and Erosion Control

**07-Wrse-B3/16-Civ-B5**, Water Supply and Wastewater Treatment

**07-Wrse-B11/18-Env-A1**, Principles of Environmental Engineering