

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Name of Subject Basic Studies	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
04-BS-1, Mathematics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae
04-BS-2, Probability and Statistics (2hrs)	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. Note; statistical tables of the normal, t, chi-square and F distributions are provided
04-BS-3, Statics and Dynamics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. <u>THE AID SHEET MUST BE SUBMITTED WITH THE WRITTEN EXAM.</u> No external resources of any type are allowed to be accessed during the writing of this exam.
04-BS-4, Electric Circuits and Power	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
04-BS-5, Advanced Mathematics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
04-BS-6, Mechanics of Materials	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. Note, example problems and solutions to problems are NOT allowed. <u>THE AID SHEET MUST BE SUBMITTED WITH THE WRITTEN EXAM.</u>
04-BS-7, Mechanics of Fluids	2	CLOSED	Print diagrams in advance of the exam: https://www.egbc.ca/getmedia/e80aa7e6-bf1d-4e39-8146-8d730bc05a9d/PEO-Technical-Examinations-Required-Charts.pdf.aspx
04-BS-8, Digital Logic Circuits	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
04-BS-9, Basic Electromagnetics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
04-BS-10, Thermodynamics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
04-BS-11, Properties of Materials	2	CLOSED	NONE
04-BS-12, Organic Chemistry	2	CLOSED	NONE
04-BS-13, Biology	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

04-BS-14, Geology	2	CLOSED	NONE
04-BS-15, Engineering Graphics and Design Process	1	CLOSED	NONE
04-BS-16, Discrete Mathematics	2	CLOSED	NONE

Name of Subject Complementary Studies	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
11-CS-1, Engineering Economics	2	OPEN	Candidates should bring with them compound interest factors tables
11-CS-2, Engineering in Society- Health and Safety	1	CLOSED	The use of a flatbed scanner is preferred for submitting responses.
11-CS-3, Sustainability, Engineering and the Environment	2	CLOSED	NONE
11-CS-4, Engineering Management	1	CLOSED	NONE

Name of Subject Complementary Studies (APEGA CANDIDATES ONLY)	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
98-CS-1 (11-CS-1), Engineering Economics	2	OPEN	Candidates should bring with them compound interest factors tables
98-CS-2, Engineering in Society- Health, Safety and the Environment	2	CLOSED	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

98-CS-3, Management Concepts for Engineers	2	CLOSED	NONE
--	---	--------	------

Name of Subject Agricultural	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
04-Agric-B10, Biochemical Engineering	2	CLOSED	NONE

Name of Subject Biomedical/Biochemical	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
04-Bio-A1, Biomaterials and Biocompatibility	2	CLOSED	NONE
04-Bio-A6, Anatomy and Physiology	2	CLOSED	NONE
04-Bio-A7, Fluid Mechanics	2	OPEN	NONE
04-Bio-A8, Biophysical Measurements	1	OPEN	NONE
04-Bio-B5, Cell and Tissue Engineering	2	OPEN	NONE
04-Bio-B6, Bioinstrumentation	1	OPEN	NONE
04-Bio-B8, Rehabilitation Engineering	2	OPEN	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Name of Subject Building	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
07-Bld-A5 Building Science	2	OPEN	NONE
07-Bld-A7 Building Envelope Design	2	CLOSED	NONE

Name of Subject Chemical	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
16-Chem-A1, Process Balances and Chemical Thermodynamics	2	OPEN	This is an open-book exam. One textbook of your choice with notations listed on the margins etc. are permitted for each section/part, but no loose notes are permitted into the exam.
16-Chem-A2, Unit Operations and Separation Processes	2	OPEN	Candidates can bring ONE textbook of their choice. The textbook can have notations listed on the margins but no loose notes are permitted.
16-Chem-A3, Heat and Mass Transfer	2	OPEN	One textbook of choice with notations listed on the margins but no loose notes are permitted.
16-Chem-A4, Chemical Reactor Engineering	2	OPEN	Candidates can bring ONE textbook of their choice. The textbook can have notations listed on the margins but no loose notes/or solved problems are permitted. Candidates should have unit conversion tables and/or mathematical tables such as a CRC handbook.
16-Chem-A5, Chemical Plant Design and Economics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Chem-A6, Process Dynamics & Control	2	OPEN	NONE
16-Chem-B1, Transport Phenomena	2	OPEN	One textbook of your choice with notations listed on the margins etc., but no loose notes are permitted into the exam.
16-Chem-B2, Environmental Engineering	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Chem-B4, Biochemical Engineering	2	CLOSED	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

16-Chem-B5, Pulp and Paper Technology	2	OPEN	NONE
16-Chem-B6, Petroleum Refining and Petrochemicals	2	CLOSED	NONE
16-Chem-B8, Polymer Engineering	2	OPEN	NONE
16-Chem-B10, Life Cycle Assessment	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Name of Subject Civil	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
16-Civ-A1, Elementary Structural Analysis	2	CLOSED	NONE
16-Civ-A2, Elementary Structural Design	2	CLOSED	Handbooks and textbooks are permitted. <u>NO notes or loose sheets are allowed.</u> Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book. Note: The solutions for Standards of Steel, Concrete & Timber must come from the latest manual editions.
16-Civ-A3, Municipal and Environmental Engineering	2	OPEN	NONE
16-Civ-A3, Elementary Environmental Engineering (National Only)	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Civ-A4, Geotechnical Materials and Analysis	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Civ-A5, Hydraulic Engineering	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Civ-A6, Highway Design, Construction and Maintenance	2	CLOSED	NONE
16-Civ-B1, Advanced Structural Analysis	2	CLOSED	NONE
16-Civ-B2, Advanced Structural Design	2	CLOSED	Design handbooks and textbooks are permitted. <u>NO notes or loose sheets are allowed.</u> Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book.

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

16-Civ-B3, Geotechnical Design	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Civ-B4, Engineering Hydrology	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Civ-B5, Water Supply & Wastewater Treatment	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Civ-B6, Urban & Regional Planning	2	CLOSED	NONE
16-Civ-B7, Transportation Planning and Engineering	2	CLOSED	Aid sheet is NOT permitted.
16-Civ-B8, Management of Construction	2	CLOSED	NONE
16-Civ-B9, The Finite Element Method	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Civ-B10, Traffic Engineering	2	OPEN	NONE
16-Civ-B11, Structural Materials	2	CLOSED	Aid sheet with formula only. One semi-log and two normal GRAPH papers needs to be printed.
16-Civ-B12, Risk & Safety in Civil Engineering	2	OPEN	NONE

Name of Subject Computer	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
17-Comp-A3, Computer Architecture	2	OPEN	NONE
17-Comp-A4, Program Design and Data Structures	1	CLOSED	NONE
17-Comp-B1, Advanced Computer Architecture	2	OPEN	NONE
17-Comp-B10, Distributed Systems	2	CLOSED	NONE
17-Comp-B11, Advanced Software Design	1	CLOSED	Candidates are allowed to bring TWO aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

17-Comp-B12, Computer Security	1	CLOSED	NONE
--------------------------------	---	--------	------

Name of Subject Electrical	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
16-Elec-A1, Circuits	2	CLOSED	NONE
16-Elec-A2, Systems and Control	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. Aid sheet must be signed and submitted with exam.
16-Elec-A3, Signals and Communications	2	CLOSED	NONE
16-Elec-A4, Digital Systems and Computers	2	CLOSED	NONE
16-Elec-A5, Electronics	2	CLOSED	NONE
16-Elec-A6, Power Systems and Machines	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. <u>No worked out solutions are allowed on this sheet.</u>
16-Elec-A7, Electromagnetics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. <u>No worked out solutions are allowed on this sheet.</u>
16-Elec-B1, Digital Signal Processing	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing tables & formulas written both sides. No textbook excerpts or examples solved.
16-Elec-B2, Advanced Control Systems	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Elec-B3, Digital Communications Systems	2	CLOSED	NONE
16-Elec-B4, Information Technology Networks	2	CLOSED	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

16-Elec-B5, Advanced Electronics	2	CLOSED	NONE
16-Elec-B6, Integrated Circuit Engineering	2	CLOSED	NONE
16-Elec-B7, Power Systems Engineering	2	OPEN	ONE Power System textbook permitted. No loose notes permitted.
16-Elec-B8, Power Electronics and Drives	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. <u>No worked out solutions are allowed on this sheet.</u>
16-Elec-B9, Electromagnetic Field, Transmission Lines, Antennas, and Radiation	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Elec-B10, Electro-Optical Engineering	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Name of Subject Environmental	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
18-Env-A4, Water and Wastewater Engineering	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
18-Env-A6, Solid Waste Engineering & Management	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
18-Env-B3, Contaminant Transport	2	CLOSED	NONE

Name of Subject Geological	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
18-Geol-A1, Mineralogy and Petrology	1	CLOSED	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

18-Geol-A2, Hydrogeology	2	OPEN	NONE
18-Geol-A3, Sedimentation and Stratigraphy	1	CLOSED	NONE
18-Geol-A4, Structural Geology	2	CLOSED	Protractor, drawing compass and ruler are permitted.
18-Geol-A5, Rock Mechanics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. Graphing paper can be printed at: https://www.egbc.ca/getmedia/6033438e-2ea2-434f-b216-2073fd83219a/Graphing-Paper.aspx
18-Geol-A6, Soil Mechanics	2	CLOSED	Compass and ruler required
18-Geol-A7, Applied Geophysics	2	CLOSED	NONE
18-Geol-B4, Geomorphology and Pleistocene Geology	1	CLOSED	NONE

Name of Subject Geology, Environmental Geoscience & Geophysics	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
20-Gfund- 2b, General Physics II	2	OPEN	You may bring any type of calculator, textbook and reference materials.
20-Gfund-4, Advanced Mathematics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
20-Gfund-5, Mathematics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae
20-Gfund-8, Biology	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
20-Gfund-10, Organic Chemistry	2	CLOSED	NONE
20-Gfund-12, Probability and Statistics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. Note; statistical tables of the

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

			normal, t, chi-square and F distributions are provided
20-Glgy-1, Mineralogy and Petrology	1	CLOSED	NONE
20-Glgy-2, Sedimentation and Stratigraphy	1	CLOSED	NONE
20-Glgy-4, Sedimentary Petrology	1	CLOSED	NONE
20-Glgy-6, Structural Geology	2	CLOSED	Protractor, drawing compass and ruler are permitted.
20-Glgy-7, Geochemistry	2	CLOSED	NONE
20-Glgy-8, Global Geophysics	2	OPEN	You may bring any type of calculator. You may bring any textbook and any reference materials.
20-Glgy-9, Geomorphology and Pleistocene Geology	1	CLOSED	NONE
20- Glgy-10, Glacial and Quaternary Geology	2	CLOSED	NONE
20-Glgy-11, Hydrogeology	2	OPEN	NONE
20-Glgy-13, Petroleum and Natural Gas	1	CLOSED	You may not bring any reference materials of any kind into the examination room, including calculators with text memory, cellular telephones or PDAs
20-Glgy-14, Economic Geology	1	CLOSED	You may bring a non-programmable calculator. You may not bring any other reference materials
20-Goph-2b-2a, Global Geophysics	2	OPEN	You may bring any type of calculator. You may bring any textbook and any reference materials.

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Name of Subject Geomatics	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
18-Geom-A7, Geospatial Information Systems	2	CLOSED	NONE
18-Geom-B2, Satellite Navigation	2	CLOSED	NONE

Name of Subject Industrial	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
17-Ind-A1, Operations Research	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-A2, Analysis and Design of Work	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-A3, Facilities Planning	2	CLOSED	Candidates will need a ruler, pencil, eraser for sketching. Graph paper required. Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-A4, Production Management	2	CLOSED	NONE
17-Ind-A5, Quality Planning, Control, and Assurance	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-A6, Systems Simulation	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-B1, Applied Probability and Statistics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-B2, Manufacturing Processes	2	OPEN	NONE
17-Ind-B3, Computer Aided Design and Computer-Assisted Manufacturing	2	CLOSED	NONE
17-Ind-B5, Ergonomics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-B6, Workplace Design	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Ind-B10, Workplace Health and Safety	1	CLOSED	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

--	--	--	--

Name of Subject Marine	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
98-Mar-A1, Applied Thermodynamics and Heat Transfer	2	OPEN	Candidates are expected to have copies of both a thermodynamics text AND a heat transfer text in order to make use of the information presented in the tables and graphs. Candidates may consult any textbook but no previous examination solution or solved problems. Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book.
98-Mar-B5, Fluid Machinery	2	CLOSED	Drawing instruments (scale ruler, protractor and sharp pencil) are required for vector diagrams.

Name of Subject Mechanical	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
16-Mec-A1, Applied Thermodynamics and Heat Transfer	2	OPEN	Candidates are expected to have copies of both a thermodynamics text AND a heat transfer text in order to make use of the information presented in the tables and graphs. Candidates may consult any textbook but no previous examination solution or solved problems. No Notes are permitted. Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book.
16-Mec-A2, Kinematics and Dynamics of Machines	2	OPEN	NONE
16-Mec-A3, System Analysis and Control	2	CLOSED	semi-log graph papers needed
16-Mec-A4, Design and Manufacture of Machine Elements	2	OPEN	NONE
16-Mec-A5, Electrical and Electronics Engineering	2	CLOSED	NONE
16-Mec-A6, Advanced Fluid Mechanics (PEO Candidate only) Mec-B6 code for Nationals	2	OPEN	NONE
16-Mec-A7, Advanced Strength of Materials	2	OPEN	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

16-Mec-B1, Advanced Machine Design	2	OPEN	NONE
16-Mec-B2, Environmental Control in Buildings	2	CLOSED	Drawing instruments required (scale ruler, set square, sharp pencil) No other aids are permitted. Print charts and diagrams in advance of exam: https://www.egbc.ca/getmedia/e80aa7e6-bf1d-4e39-8146-8d730bc05a9d/PEO-Technical-Examinations-Required-Charts.pdf.aspx
16-Mec-B3, Energy Conversion and Power Generation	2	CLOSED	Drawing instruments (scale ruler) Print chart in advance of exam: https://www.egbc.ca/getmedia/e80aa7e6-bf1d-4e39-8146-8d730bc05a9d/PEO-Technical-Examinations-Required-Charts.pdf.aspx
16-Mec-B4, Integrated Manufacturing Systems	2	OPEN	NONE
16-Mec-B5, Product Design and Development	2	OPEN	NONE
16-Mec-B6, Fluid Machinery (PEO Candidate only) Mec-A6 code for Nationals	2	CLOSED	Drawing instruments (scale ruler, protractor and sharp pencil) are required for vector diagrams.
16-Mec-B7, Aero and Space Flight	2	OPEN	NONE
16-Mec-B8, Engineering Materials	2	OPEN	NONE
16-Mec-B9, Advanced Engineering Structures	2	OPEN	NONE
16-Mec-B10, Finite Element Analysis	2	OPEN	NONE
16-Mec-B12, Robot Mechanics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. No worked out solutions of examples and must be handed in with exam.
16-Mec-B13, Biomechanics	2	OPEN	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Name of Subject Metallurgical	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
10-Met-A3, Metal Extraction Processes	2	CLOSED	NONE
10-Met-A4/17-Phys-B7, Structure of Materials	2	CLOSED	NONE
10-Met-A6, Phase Transformation and Thermal Treatment of Metals and Alloys	2	CLOSED	NONE
10-Met-A7, Corrosion and Oxidation	2	OPEN	NONE
10-Met-B6, Physical Metallurgy of Iron and Steel	2	CLOSED	NONE
10-Met-B7, Physical Metallurgy of Non-Ferrous Metals and Alloys	2	CLOSED	NONE

Name of Subject Mechatronics	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
16-Mex-A1, System Analysis and Control	2	CLOSED	semi-log graph papers needed
16-Mex-A2, Circuits and Electronics	2	CLOSED	NONE
16-Mex-A3, Digital Systems Computers	2	CLOSED	NONE
16-Mex-A4, Applied Thermodynamics and Heat Transfer	2	OPEN	Candidates are expected to have copies of both a thermodynamics text AND a heat transfer text in order to make use of the information presented in the tables and graphs. Candidates may consult any textbook but no previous examination solution or solved problems. Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book.

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

16-Mex-A5, Kinematics and Dynamics of Machines	2	OPEN	NONE
16- Mex-A6, Systems Analysis and Simulation	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
16-Mex-A7, Instrumentation, Measurements, Sensors and Actuators	2	OPEN	NONE
16-Mex-B3, Advanced Control Systems	2	OPEN	NONE
16-Mex-B5, Robot Mechanics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. No worked out solutions of examples and must be handed in with exam.
16-Mex-B8, Product Design and Development	2	OPEN	NONE
16-Mex-B10, Power Systems and Machines	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. <u>No worked out solutions are allowed on this sheet.</u>

Name of Subject Manufacturing	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
08-Mfg-A1, Design and Manufacture of Machine Elements	2	OPEN	NONE
08-Mfg-A2, Manufacturing Processes	2	OPEN	NONE
08-Mfg-A3, Production Management	2	CLOSED	NONE
08-Mfg-A4, Analysis and Design of	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Work			
08-Mfg-A5, Facilities Planning	2	CLOSED	Candidates will need a ruler, pencil, eraser for sketching. Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
08-Mfg-A6, Quality Planning, Control and Assurance	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
08-Mfg-B1, Computer Aided Design and Computer-Assisted Manufacturing	2	CLOSED	NONE
08-Mfg-B3, System Simulation	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
08-Mfg-B4, Product Design and Development	2	OPEN	NONE
08-Mfg-B5, Engineering Materials	2	OPEN	NONE
08-Mfg-B6, Metrology	2	OPEN	NONE
08-Mfg-B8, Robot Mechanics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. No worked out solutions of examples and must be handed in with exam.
08-Mfg-B9, Workplace Health and Safety	1	CLOSED	NONE
08-Mfg-B10, Tooling, Jigs and Fixture Design	2	OPEN	NONE
08-Mfg-B11, Fluid Machinery (Mec-A6 national)	2	CLOSED	Drawing instruments (scale ruler, protractor and sharp pencil) are required for vector diagrams.
08-Mfg-B12, Ergonomics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Name of Subject Materials	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
18-MMP-A4, Mine Valuation and	2	OPEN	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Mineral Resource Estimation			
18-MMP-A6, Mining and the Environment	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
18-Mmp-B5, Mill Design and Operations	2	CLOSED	NONE

Name of Subject Materials	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
12-Mtl-A3, Structure & Characterization of Materials	2	OPEN	NONE
12-Mtl-A5, Phase Transformations of Metals, Glasses, and Ceramics	2	CLOSED	NONE
12-Mtl-B11, Corrosion and Oxidation	2	OPEN	NONE

Name of Subject Naval	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
16-Nav-B1, Applied Thermodynamics & Heat Transfer	2	OPEN	Candidates are expected to have copies of both a thermodynamics text AND a heat transfer text in order to make use of the information presented in the tables and graphs. Candidates may consult any textbook but no previous examination solution or solved problems. Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book.

Name of Subject Nuclear	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
09-Nuc-B9, Energy Conversion and Power Generation	2	CLOSED	Drawing instruments (scale ruler) Print chart in advance of exam: https://www.egbc.ca/getmedia/e80aa7e6-bf1d-4e39-8146-8d730bc05a9d/PEO-Technical-Examinations-Required-Charts.pdf.aspx

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Name of Subject Petroleum	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
17-Pet-A1, Principles of Stratigraphy and Sedimentation	2	CLOSED	NONE
17-Pet-A2, Petroleum Reservoir Fluids	2	CLOSED	A ruler is needed.
17-Pet-A3, Fundamental Reservoir Engineering	2	CLOSED	NONE
17-Pet-A6, Reservoir Mechanics	2	OPEN	NONE
17-Pet-B4, Petroleum Geology	2	CLOSED	NONE

Name of Subject Engineering Physics	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
17-Phy-A3, Electromagnetics	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae. <u>No worked out solutions are allowed on this sheet.</u>
17-Phys-A6, Solid State Physics	2	CLOSED	NONE
17-Phys-B3, Digital Systems and Computers	2	CLOSED	NONE
17-Phys-B5, Systems and Control	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
17-Phys-B6, Applied Thermodynamics and Heat Transfer	2	OPEN	Candidates are expected to have copies of both a thermodynamics text AND a heat transfer text in order to make use of the information presented in the tables and graphs. Candidates may consult any textbook but no previous examination solution or solved problems. Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book.

Name of Subject Preliminary Studies	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
20-Prelim-1, Calculus	2	CLOSED	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

20-Prelim-2, Computing	2	CLOSED	You may bring a non-programmable calculator and two-page double-sided formula sheet. No other reference materials of any type.
20-Prelim-3, Physics	2	OPEN	You may bring any type of calculator, textbook and reference materials.
20-Prelim-4, Chemistry	2	CLOSED	You may bring a non-programmable calculator, Data sheets will be provided

Name of Subject Software	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
19-Soft-A2, Computing Architecture and Operating Systems	2	OPEN	NONE
19-Soft-B8, Distributed Systems	2	CLOSED	NONE

Name of Subject Structural	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
07-Str-A1, Elementary Structural Analysis	2	CLOSED	NONE
07-Str-A2, Elementary Structural Design	2	CLOSED	Handbooks and textbooks are permitted. <u>NO notes or loose sheets are allowed.</u> Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book. Note: The solutions for Standards of Steel, Concrete & Timber must come from the latest manual editions.
07-Str-A3, Geotechnical Materials and Analysis	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
07-Str-A4, Advanced Structural Analysis	2	CLOSED	NONE
07-Str-A5, Advanced Structural Design	2	CLOSED	Design handbooks and textbooks are permitted. <u>NO notes or loose sheets are allowed.</u> Candidates MUST write the name and model number of their calculator on the inside front cover of the exam book.
07-Str-A6-1, Applications of Finite Elements	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

07-Str-A6-3, Earthquake Engineering	2	OPEN	NONE
07-Str-B1, Geotechnical Design	2	OPEN	It is to the candidate's advantage to bring the Canadian Foundation Manual.
07-Str-B2, Management of Construction	2	CLOSED	NONE
07-Str-B5, Foundation Engineering	2	OPEN	NONE
07-Str-B11, Hydraulic Engineering	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Name of Subject Transportation	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
07-Tra-A5, Transportation Planning and Demand Analysis	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
07-Tra-A6, Geotechnical Materials and Analysis	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.

Name of Subject Water Resources	Format 1 or 2	Closed or Open Book	Aids/Instructions to the Candidates
07-Wrse-A2, Engineering Hydrology	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
07-Wrse-A5, Water Resources Planning & Systems	2	OPEN	NONE
07-Wrse-A6, Municipal and Environmental Engineering (PEO only)	2	OPEN	NONE
07-WRSE-B1, Geomorphology and Pleistocene Geology	1	CLOSED	NONE
07-Wrse-B3, Water Supply and Wastewater Treatment	2	CLOSED	Candidates are allowed to bring ONE aid sheet 8.5" X 11" hand-written on both sides containing notes and formulae.
07-Wrse-B6, Contaminant Transport	2	CLOSED	NONE

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)

EXAM FORMAT AND AIDS PERMITTED FOR SPRING/SUMMER 2025 NATIONAL TECHNICAL SESSION

Updated April 29, 2025

For open book exam, candidates may only use physical or printed copies of textbooks or notes. Digital copies of books or notes that require the use of a digital device are not permitted. We recommend candidates have eBooks or PDFs printed if they intend to use it for the examination(s)

Format 1, No Calculators Permitted.

Format 2, Any non-communicating, and non-programmable calculator is permitted. (Casio or Sharp models are more common, but you are not limited to these two brands as long as the calculator is non-programmable and non-communicating)