The Project Management portion of the examination will be administered daily in Computer Based Testing (CBT) format. The examination will consist of 60 equally weighted questions covering managing, controlling, and conducting a specific project.

The examination will have questions relating to the following content areas and necessary knowledge for each area includes:
- reading and interpreting plans and specifications
- reading and interpreting codes
- basic mathematics
  (addition, subtraction, multiplication, division, calculations of area and volume, fractions, decimals, percentages, calculating the sides of triangles, square roots, powers of numbers, and solving simple algebraic equations for unknown variables)

You should be prepared to respond to examination questions on any of the content areas listed. Questions asked and content areas tested on previous examinations should not be assumed to be the only possible questions to be asked or content areas to be tested on this examination.

The percentage of questions shown for each content area may vary by as much as plus or minus three (3) percent. Please refer to the Candidate Information Brochure and the Reference List for additional information.

### Content Area E 67%
**Construction Methods, Materials, Tools, and Equipment**

<table>
<thead>
<tr>
<th>1. Site layout</th>
<th>2. Soil conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>construction layout</td>
<td>types and characteristics of soils</td>
</tr>
<tr>
<td>benchmarks</td>
<td>compaction</td>
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<td>elevations</td>
<td>density</td>
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<tr>
<td>setbacks</td>
<td>proctor</td>
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<tr>
<td>site plan interpretation and knowledge</td>
<td>moisture content</td>
</tr>
<tr>
<td>knowledge of soil reports, soil test results</td>
<td>knowledge of appropriate foundation types</td>
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<tr>
<td>knowledge of soils given soil conditions</td>
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</tbody>
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<thead>
<tr>
<th>3. Characteristics and uses of survey instruments</th>
<th>4. Concrete</th>
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</thead>
<tbody>
<tr>
<td>builder's level</td>
<td>knowledge of shoring</td>
</tr>
<tr>
<td>transit and theodolite</td>
<td>knowledge of formwork including terminology</td>
</tr>
<tr>
<td>water bubble</td>
<td>and techniques</td>
</tr>
<tr>
<td>string line</td>
<td>knowledge of loads (e.g., volume, pressure)</td>
</tr>
<tr>
<td>laser level</td>
<td>knowledge of systems and methods for concrete</td>
</tr>
<tr>
<td>knowledge of soil reports, soil test results</td>
<td></td>
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<tr>
<td>knowledge of appropriate foundation types</td>
<td></td>
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<tr>
<td>knowledge of soils given soil conditions</td>
<td>knowledge of proper forming practices, bracing</td>
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<tr>
<td>knowledge of soils given soil conditions</td>
<td>and erection</td>
</tr>
<tr>
<td>knowledge of soils given soil conditions</td>
<td>knowledge of concrete reinforcement</td>
</tr>
<tr>
<td>knowledge of soils given soil conditions</td>
<td>knowledge of quality control related to concrete</td>
</tr>
<tr>
<td>knowledge of soils given soil conditions</td>
<td>knowledge of quality control related to concrete</td>
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</tbody>
</table>

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<thead>
<tr>
<th>5. Masonry</th>
<th>knowledge of erection and bracing</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge of masonry materials and handling</td>
<td>knowledge of quality control related to masonry</td>
</tr>
</tbody>
</table>
6. Earth-work
   knowledge of excavations
   ▪ cut and fill calculations
   ▪ calculating excavations and grades
   ▪ trenching
   preparation of site for foundation
   ▪ angle of repose
   ▪ soil compaction
   knowledge of sheeting, shoring for excavations and dewatering
   knowledge of erosion control
   knowledge of quality control related to earth-work

7. Wood framing
   knowledge of truss erection and bracing
   knowledge of rafters, floor joists and studs
   knowledge of and ability to use span tables
   knowledge of wind loads and fasteners
   knowledge of roofing and materials

8. Steel framing
   knowledge of erection and bracing techniques
   knowledge of metal studs, beams columns and bar joists
   knowledge of painting and fire protection of steel framing
   knowledge of welding and connections of steel framing

9. Energy efficient construction
   knowledge of R-values
   knowledge pertaining to energy efficiency

10. Miscellaneous materials
    knowledge of gypsum materials and methods
    knowledge of plaster materials and methods

11. Other tools
12. Other equipment

Content Area F 13%

Safety

1. Compliance with OSHA standards
   knowledge of site layout
   knowledge of soil conditions
   knowledge of shoring for concrete
   knowledge of bracing and erection
   knowledge of earth-work
   knowledge of formwork for concrete
   knowledge of framing
   knowledge of scaffolding
   knowledge of trench safety
   knowledge of ground fault interruption
   knowledge of record keeping
   knowledge of fall protection
   knowledge of other OSHA regulations

2. Other safety standards and practices
   knowledge of asbestos
   knowledge of lead paint
   knowledge of hazardous waste disposal

Content Area G 20%

Reading Plans and Specifications

1. Reading blueprints
   ability to read and understand plans and drawings
   basic math skills and calculations associated with reading blueprints
   knowledge of architectural and engineering symbols

2. Interpreting construction codes and standards
   ability to read, understand, and apply codes and standards including building codes
   knowledge of ADA requirements

3. Shop drawings and submittals
   ability to understand technical concepts
   product knowledge
   blueprint reading and interpretation (e.g., clearances, support clearances, openings)