

**APEGGA**

The Association of
Professional Engineers, Geologists
and Geophysicists of Alberta

THE NATIONAL PROFESSIONAL PRACTICE EXAMINATION

Regulations 13(c) and 77(c) accompanying the Engineering, Geological and Geophysical Professions Act require that applicants pass an examination on the Act and professional practice. The examination is administered in January, April, July and October in major centres throughout the province and in other centres in North America by special consent. Since October 1998, the APEGGA examination has served as a Pilot National Professional Practice Examination.

SCOPE AND SYLLABUS OF THE EXAMINATION

APEGGA has identified the major subject areas as follows:

A. Professionalism (30%)

- 1) Definition and interpretation of professional status
- 2) The role and responsibilities of a professional in society
- 3) The role and responsibilities of a professional to management
- 4) Professional conduct, ethical standards and codes
- 5) Safety and loss management - the professional's duties
- 6) Environmental responsibilities

B. Professional Practice (20%)

- 1) Professional accountability for work, workplace issues, job responsibilities and standards of practice
- 2) Continuing competence
- 3) Quality management and standards of skill in practice
- 4) Business practices as a professional
- 5) Insurance and risk management
- 6) Professional and technical societies
- 7) Non-statutory standards and codes of practice

C. Regulatory Authority Requirements (9%)

- 1) Safety and loss management - regulatory aspects
- 2) Environmental regulations
- 3) Occupational health and safety
- 4) Workers compensation
- 5) Other statutory standards of practice

D. Law and Legal Concepts (25%)

- 1) Canadian legal system and international considerations, basics of business organizations
- 2) Contract Law - elements, principles, types, discharge, breach, interpretation etc.
- 3) Tort Law - Elements, application of principles, interpretation, liabilities of various kinds
- 4) Intellectual Property - patents, trademarks, software issues, copyright
- 5) Arbitration and Alternative Dispute Resolution (ADR)
- 6) Expert Witness

E. The Act (16%)

- 1) Definitions of the professions and scopes of practice
- 2) Structure and functions of a Provincial Association
- 3) Regulations and By-Laws
- 4) Registration
- 5) Discipline and enforcement
- 6) Use of seals and stamps

The examination is closed book and two hours in duration. The 100 multiple-choice questions are broken down into the above distribution. All questions are common to the professions of engineering, geology, geophysics and geoscience. The pass mark is 65%*. The examination is graded as a "pass" or "fail" with a report available in each area on your specific performance in the event of failure. You are not penalized for wrong answers. The grade is final.

**Pass marks may be slightly adjusted for individual sessions based on valid psychometric factors designed to ensure that over time, and among groups of candidates, pass-fail decisions are made on a consistent basis.*

APPLYING TO WRITE THE EXAMINATION

The form, Application To Write The National Professional Practice Examination must be used when applying. It provides more information on fees, deadline dates, examination dates etc., must be accompanied with the appropriate fees and must be received on or before the deadline date as indicated on the application..

Approximately two weeks after the deadline you will receive a letter advising you of the time, location and an admission slip which must be brought to the examination with one piece of photo-identification eg. Driver's License.

Four to six weeks after the examination you will be advised of the results by mail. For many, a pass may be the last step in the registration process. For others, there may be additional requirements before registration is granted. Failure will require that the examination be repeated. Another application to write will be required along with another examination fee. In the unlikely event that the examination is failed 4 times, the right to write the examination will be suspended for 12 months.

ELIGIBILITY/EXCEPTIONS

APEGGA feels that it is beneficial for applicants to have at least two years of work experience after completion of their formal education before the examination is attempted. To be eligible to write The National Professional Practice Examination, you must also have an active application for Professional Membership, Registered Professional Technologist (Engineering), or be enrolled as a Member-In-Training, Examination Candidate or Student. An exemption may be granted to applicants who have passed a similar examination in another jurisdiction or who have been registered by another Canadian Association for over 5 years, but such applicants are still required to read, and confirm in writing that they have read, and agree to practice their profession, in Alberta in accordance with the Engineering, Geological and Geophysical Professions Act, Regulations, By-laws and Code of Ethics.

LITERATURE

The following is a list of the material required which can be obtained through the Association offices in Calgary and Edmonton by using The National Professional Practice Examination Literature Order Form.

Basic Kit (for all applicants)

All applicants with the exceptions noted will be tested on the primary literature but the secondary literature will be of interest.

Primary Literature

1. Canadian Professional Engineering and Geoscience: Practice and Ethics — G.C. Andrews.
2. Law for Professional Engineers — D.L. Marston; McGraw-Hill Ryerson Ltd. Third Edition, 1996.
3. Industry Booklets:
 - A Guide to Patents
 - A Guide to Trade-Marks
 - A Guide to Industrial Designs
 - A Guide to Copyrights
4. The Engineering, Geological and Geophysical Professions Act, Regulations and By-laws including the Code of Ethics, April 2003.
5. Guideline for Ethical Practice v2.0 — March 2003.
6. The Concepts of Professionalism — An APEGGA Statement.

Secondary Literature

1. Occupational Health and Safety Act of Alberta, Revised Statutes of Alberta 2000, Chapter 0-2, effective December 4, 2002.
2. Royal Bank Letter — "The Soul of Professionalism" Vol. 71, No. 6, December 1990.
3. Basic Learnings in Industrial Safety and Loss Management — ISLMP & APEGGA Publication — January 1998.

Available textbooks focus on engineering but the concepts are also common to the geosciences. The following publication, however, is specific to the practice of geology and geophysics and is available free of charge to geology and geophysics candidates.

The Practice of the Professions of Geology and Geophysics — APEGGA Publication, Second Edition, March 1990

Portions of the Kit are also available for those who can borrow some of the material and are trying to save some money.

SAMPLE QUESTIONS

Each question is multiple-choice with four possible answers. Old examinations are not available, however, sample test questions are provided below:

For Engineers, Geologists and Geophysicists

1. According to the Code of Ethics, which of the following activities by a professional member would be considered UNETHICAL?
 - A. Not charging a fee for presenting a speech.
 - B. Signing plans prepared by an unknown person.
 - C. Reviewing the work of another member with that member's consent.
 - D. Providing professional services as a consultant.

B. is correct. It is unethical for professionals to sign plans not prepared by themselves or under their direct supervision.

2. Which of the following is an example of a fraudulent, contractual misrepresentation?
 - A. A party is coerced into signing a contract by means of intimidation.
 - B. A party knowingly makes false statements to induce another party into a contract.
 - C. A party induces his son-in-law to sign an unfair contract.
 - D. A party unknowingly provides false information about a portion of a contract.

B. is correct. Knowingly providing false information to induce a contract is fraudulent misrepresentation.

3. Contractual disputes of a technical nature may be most expeditiously and effectively solved through:
 - A. a lawsuit.
 - B. court appeals.
 - C. contract renegotiations.
 - D. arbitration.

D. is correct. Arbitration provides an effective, expeditious resolution to technical disputes.

4. Which type of original work below is automatically protected by copyright upon creation?

- A. Paintings.
- B. Inventions.
- C. Clothing designs.
- D. Signatures.

A. is correct. Of the works listed, only a painting is protected by copyright law.

5. In order for compensation to be awarded to a plaintiff in a tort liability case, the defendant must have:

- A. Caused injury to the plaintiff.
- B. Been wilfully negligent.
- C. Signed a contract of performance.
- D. performed under supervision.

A. is correct. Injury is one of three criteria that must be met for compensation to be awarded in a tort liability case.

6. Which of the following is the most common job activity of top-level managers?

- A. Writing and reading corporate financial reports.
- B. Developing and testing new products.
- C. Designing and implementing production systems
- D. Directing and interacting with people.

D. is correct. Most top managers spend most of their time interacting with other people.

7. The professional's standard of care and skill establishes the point at which a professional:

- A. may or may not charge a fee for services
- B. has the duty to apply "reasonable care".
- C. may be judged negligent in the performance of services.
- D. has met the minimum requirements for registration.

C. is correct. The standard of care is used to judge whether or not a professional has been negligent in the performance of services.

8. To effectively reduce liability exposure the professional engineer, geologist or geophysicist should:

- A. pursue continuing educational opportunities.
- B. work under the supervision of a senior engineer, geologist or geophysicist.
- C. maintain professional standards in practice.
- D. provide clients with frequent progress reports.

C. is correct. Maintaining professional standards of practice is the most effective way of reducing liability exposure.

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