



BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

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CALIFORNIA PROFESSIONAL ENGINEERS STATE LAWS AND BOARD RULES EXAMINATION (TAKE HOME EXAMINATION)

The Board must ensure that California licensed Professional Engineers are familiar with the provisions of the *Professional Engineers Act* (Business and Professions Code sections 6700-6799) and the *Board Rules* (Title 16, California Code of Regulations sections 400-476). Business and Professional Code section 6755.1 requires the Board to administer a test on the State Laws and Board Rules to all Professional Engineer applicants as a separate portion of the second division examination. For all Professional Engineer applicants except Civil Engineer applicants, the second division examination consists of the National Council of Examiners for Engineering and Surveying (NCEES) examination (Part I) and this Take Home examination (Part II). Civil Engineer applicants must pass the California Special Civil Examinations, consisting of the Seismic Principles examination (Part III) and the Engineering Surveying examination (Part IV), as well as Part I and Part II.

To be licensed as a Professional Engineer in California, you must take and pass this Take Home examination. Your completed Take Home examination should be submitted with your original application to avoid any delays in receiving your license. While the Board will accept and score this examination if it is received after the submittal of your original application, the issuance of your license could be significantly delayed if you wait to submit this examination until after you receive your results on the other parts of the examination.

The *Professional Engineers Act* and the *Board Rules* contain the laws, rules, and regulations pertaining to the practice of professional engineering. They are to be used as a reference for the Take Home examination. The *Professional Engineers Act* and the *Board Rules* are available on the Board's web site or may be obtained by contacting the Board at the numbers listed above. You may use other reference material as well; however, the *Professional Engineers Act* and the *Board Rules* will prevail if there are any conflicts with other reference material.

All questions have equal weight. **You must achieve a minimum of 70% to pass this examination.** If you do not achieve a passing score, you will be notified in writing and allowed the opportunity to retake the examination. **You will not be issued a Professional Engineer license until you pass this Take Home examination.**

- 1. Which reference source may be consulted to answer questions regarding the Professional Engineers Act?**
 - (a) The Business and Professions Code
 - (b) The California Code of Regulations
 - (c) The Professional Engineers Act and Board Rules
 - (d) All of the above

- 2. M. Smith, a licensed Civil Engineer, offers to design a two-story office building. Which of the following statements regarding this offer to practice is true?**
 - (a) This offer is legal, because M. Smith is a licensed Civil Engineer.
 - (b) This offer is legal, as any person may do this type of design.
 - (c) This offer is illegal, unless M. Smith is a licensed Architect.
 - (d) This offer is illegal, because the structure is an office building.

- 3. A non-licensed person may be the SOLE owner of a civil, electrical, or mechanical engineering business under which of the following conditions?**
 - (a) A currently licensed California Civil, Electrical, or Mechanical Engineer, as appropriate, is in charge of the engineering practice of the business.
 - (b) All engineering plans and specifications are prepared by an appropriately licensed engineer.
 - (c) The name and business contains only the name of the licensed engineer.
 - (d) None. No provisions exist.

- 4. R. Davis, a licensed Civil Engineer, employs five unlicensed subordinate individuals who design buildings. Which of the following statements is true?**
 - (a) This is illegal, as only licensed individuals may do design work.
 - (b) This is legal, so long as Davis is in responsible charge of the work.
 - (c) This is legal, only if these individuals contract with Davis to perform such work.
 - (d) This is legal, only if the buildings are single-family dwellings.

- 5. How soon after an applicant or a licensee changes his or her address of record must the Board be notified?**
 - (a) 10 days
 - (b) 30 days
 - (c) 45 days
 - (d) 60 days

6. Which of the following is NOT a requirement to obtain licensure as a Professional Engineer?

- (a) Have passed all required examinations, or be exempt therefrom.
- (b) Show evidence of required experience.
- (c) Submit an application as required, including payment of fee.
- (d) Maintain membership in a professional organization.

7. Which of the following groups, under certain specific conditions, is exempt from the Professional Engineers Act?

- (a) Contractors
- (b) Real Estate Brokers
- (c) Federal Employees
- (d) All of the above

8. Which of the following persons is NOT exempt from the licensing provisions of the Professional Engineers Act?

- (a) An employee of a communications company under the jurisdiction of the Public Utilities Commission when preparing plans for communication lines
- (b) A private citizen who designs his own one-story wood frame residence, which complies with Title 24
- (c) A licensed contractor when designing an electrical or mechanical system that he or she is legally contracted to install
- (d) A licensed contractor designing complete commercial buildings that she or he has contracted to construct

9. In which of the following branches of engineering is the practice NOT restricted?

- (a) civil engineering
- (b) mechanical engineering
- (c) nuclear engineering
- (d) electrical engineering

10. Which of the following is NOT true? All licensed engineers may:

- (a) Practice industrial engineering
- (b) Use the title "Consulting Engineer"
- (c) Use the title "Professional Engineer"
- (d) Use any engineering title

11. The two title authorities licensed by the Board are:

- (a) Structural Engineer and Geotechnical Engineer.
- (b) Nuclear Engineer and Structural Engineer.
- (c) Chemical Engineer and Geotechnical Engineer.
- (d) Chemical Engineer and Nuclear Engineer.

12. An unlicensed person may prepare plans or specifications for single-family dwellings of conventional wood frame construction in compliance with Title 24, no more than _____ stories and basement in height.

- (a) One
- (b) Two
- (c) Three
- (d) Four

13. Which of the following is NOT considered a test to evaluate whether an engineer is in responsible charge of a project?

- (a) The project size as determined by its dollar value.
- (b) The engineer's technical knowledge of the work performed.
- (c) The geographical and organizational span of control exercised.
- (d) The engineer's ability to answer questions concerning the project.

14. Under which circumstances is a Professional Engineer NOT required to use a written contract?

- (a) When the client is referred to the Professional Engineer by a contractor, an Architect or another Professional Engineer.
- (b) When the total fee charged by the Professional Engineer is less than \$500.
- (c) When the client knowingly states in writing after being fully advised of the law that a written contract is not necessary.
- (d) When the total dollar value of the project is under \$1,000.

15. How may an engineer reinstate his or her license that has lapsed for more than three years?

- (a) By making a personal appearance before the Board asking for reinstatement.
- (b) By paying all appropriate renewal and penalty fees.
- (c) By submitting an application covering the period of non-renewal, paying all appropriate fees, and taking and passing an examination if required.
- (d) By petitioning the Executive Officer for reinstatement, providing the petition is signed by no less than four registered engineers who have no enforcement actions pending.

- 16. Once you are licensed and the Board discovers you falsified information on your application, which of the following disciplinary actions may be taken against you?**
- (a) Your license may be revoked.
 - (b) Your license may be suspended for a period not to exceed two years.
 - (c) A citation containing an order to pay an administrative fine may be issued to you.
 - (d) All of the above
- 17. Which of the following actions are grounds for disciplinary action by the Board?**
- (a) Aiding and abetting an unlicensed person, who does not qualify for an exemption, in the practice of engineering
 - (b) Using the title "Aerospace Engineer" when not licensed in California or in another state
 - (c) Failure to appear for a scheduled examination at the appropriate examination site
 - (d) Failure to renew licensure when not practicing in California
- 18. The renewal period for a Professional Engineer is every:**
- (a) Year
 - (b) Two years
 - (c) Four years
 - (d) Never
- 19. If a licensed engineer is convicted of a crime that was substantially related to the practice of engineering, the Board may take additional disciplinary action by:**
- (a) Imposing a 3-year suspension of the license
 - (b) Mandating a prison sentence
 - (c) Revoking the license
 - (d) All of the above
- 20. Which of the following is a violation of the Professional Engineers Act?**
- I. Negligence in the practice of Professional Engineering
 - II. Aid and/or abet a licensed Professional Engineer in violation of Professional Engineers Act
 - III. Provide false information to the Board on an application for licensure
 - IV. Fail to sign and seal/stamp final civil engineering reports
- (a) I only
 - (b) I and III
 - (c) I, III, and IV
 - (d) All of the above

21. An Engineer-in-Training may:

- (a) Practice and/or offer to practice civil engineering, mechanical engineering, and electrical engineering.
- (b) Prepare and sign civil, mechanical, and electrical engineering plans, specifications and reports.
- (c) Independently make civil, electrical, or mechanical engineering decisions.
- (d) None of the above.

22. Which of the following actions is necessary to be considered in responsible charge of professional engineering work?

- (a) Be physically present when the work is being performed or through the use of communication devices be available in a reasonable period of time.
- (b) Review and approve proposed decisions prior to their implementation.
- (c) Retain independent control and direction of the investigation or design of engineering work.
- (d) All of the above.

23. How may a Professional Engineer provide notice of licensure to clients?

- (a) By including his or her license number on all documents sent to clients
- (b) By including a statement that he or she is licensed by the Board for Professional Engineers and Land Surveyors immediately above the signature line in at least 12 point type on all contracts for services
- (c) By putting "P.E." after his or her name on all documents sent to clients
- (d) By hanging his or her wall certificate in a private office

24. Who must obtain a seal/stamp?

- (a) All licensed Professional Engineers
- (b) Engineer-in-Training
- (c) Licensed Civil, Electrical, and Mechanical Engineers only
- (d) None of the above

25. When must I use my seal/stamp?

- (a) When, as a Civil, Electrical, or Mechanical Engineer (respectively), you are in responsible charge of engineering plans, specification, and reports.
- (b) When, as a Fire Protection, Safety, or Traffic Engineer, you are in responsible charge of fire protection, safety, or traffic engineering plans, specifications and reports.
- (c) You never have to use your seal/stamp unless you want to.
- (d) You must use your seal/stamp when signing any document, whether it is an engineering document or not.

TAKE HOME EXAMINATION ANSWER SHEET

NAME	Last First	SSN	
ID		DATE	
BRANCH			

Complete 1-25 for Professional Engineer take-home Examination
Complete 1-25 for Professional Land Surveyor take-home Examination.

Please mark one answer per question with an X.

- | | | | | |
|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| 1. A <input type="checkbox"/> | 6. A <input type="checkbox"/> | 11. A <input type="checkbox"/> | 16. A <input type="checkbox"/> | 21. A <input type="checkbox"/> |
| B <input type="checkbox"/> | B <input type="checkbox"/> | B <input type="checkbox"/> | B <input type="checkbox"/> | B <input type="checkbox"/> |
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| 2. A <input type="checkbox"/> | 7. A <input type="checkbox"/> | 12. A <input type="checkbox"/> | 17. A <input type="checkbox"/> | 22. A <input type="checkbox"/> |
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| 3. A <input type="checkbox"/> | 8. A <input type="checkbox"/> | 13. A <input type="checkbox"/> | 18. A <input type="checkbox"/> | 23. A <input type="checkbox"/> |
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| 4. A <input type="checkbox"/> | 9. A <input type="checkbox"/> | 14. A <input type="checkbox"/> | 19. A <input type="checkbox"/> | 24. A <input type="checkbox"/> |
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| 5. A <input type="checkbox"/> | 10. A <input type="checkbox"/> | 15. A <input type="checkbox"/> | 20. A <input type="checkbox"/> | 25. A <input type="checkbox"/> |
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