



# WALKING THE ARE 50

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## PcM Practice Exam

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- 1.) The Principle of an architecture firm in the state of Alaska has learned that one of his new employees has been moonlighting to make some extra money. Upon learning this information, he has since terminated that employee. What form of agreement did that employee violate to warrant their termination? (Pick one)
  - a. The firm's non-compete clause
  - b. An employment contract
  - c. Alaska's employment law
  - d. The AIA code of ethics
- 2.) An architecture firm has just hired new tech staff to join their growing team and they have to determine what the billing rate for this new employee needs to be in order to maintain their current overhead rate. The current salaries in the office are as follows: Principal Architect: \$120,000 @ 65% billable, Project Architect: \$80,000 @ 70% billable, Cad Tech 1: \$55,000 @ 90% billable, and an Administrative Assistant: \$41,000 @ 18% billable. The current overhead for the office is \$253,870, what is the firm's current overhead rate? Round to the nearest tenth. (Fill in the Blank)
- 3.) Of the following, which four types of insurance are required by the AIA Document B101, Standard form of agreement between Owner and Architect? (Pick four)
  - a. Worker's Compensation
  - b. Life Insurance
  - c. Limited Liability Insurance
  - d. General Liability Insurance
  - e. Errors and Omissions Insurance
  - f. Automobile Liability Insurance
- 4.) A ten-person architecture firm is re-doing its application for employment to gain a better understanding of their applicants before potentially bringing them in for an interview. In doing so, they have added a small questionnaire section to their application. Which of the following questions listed are they not allowed to ask?
  - a. What projects did you work on while working for our competitor?
  - b. What software did you use while working for our competitor?
  - c. Are you married?
  - d. Do you have any physical limitations that could prevent you from doing this job?
- 5.) An audio/visual subcontractor is in the process of installing a new projector in a classroom but notices that the projector is not shown on the electrical drawings. Which AIA document is the subcontractor going to need to submit to the architect for approval?
  - a. G701
  - b. G702
  - c. G703
  - d. G704
- 6.) An architect acting as an agent for their client on a tight-budgeted, multi-family housing project was reviewing the design architect's drawings and noticed that the counter tops were high-density laminate instead of solid surface advising the owner that the design architect is being negligent in his duties. Which one of the following would be a sound justification for the design architect's material selection?
  - a. Standard of Care
  - b. Agency
  - c. Duty
  - d. Negligence

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- 1.) **Answer B.** A non-compete clause is a device that many, if not all, firms use when people are leaving their firm to pursue other opportunities or create their own. Non-compete clauses usually prohibit a leaving-employee from setting up a competing business in the same geographical area or accept work from their previous employer's clients and would usually result after a termination, therefore answer A is incorrect. Answers C is incorrect because employment law would not explicitly state that a person may or may not moonlight, and Answer D is incorrect because, while it may be unethical to moonlight it still is not a governing document that could result in termination. The employment contract is where employers can spell out things like moonlighting and prohibiting employees from taking jobs outside the firm. In this instance, the violation of this employment contract would be grounds for termination.
- 2.) **Answer 1.33.** There are a few terms in this question that might have thrown you off, but the underlying question is to determine what the **overhead rate** is with the information given. The term 'billing rate' was thrown in there to throw you off track, but that comes as a result of calculating what a firm's overhead rate actually is. Here is the calculation to determine the overhead rate for this question:

<u>Total Indirect Expenses</u>	=	<u>Total Direct Labor</u>	=Overhead Rate
<b>Total Indirect Expenses: \$253,870</b> – This was given in the question			
<b>Total Direct Labor:</b>			
<b>Principal:</b>	\$120,000(0.65) =		<b>\$78,000</b>
<b>Architect:</b>	\$80,000(0.70) =		<b>\$56,000</b>
<b>Cad Tech 1:</b>	\$55,000(0.90) =		<b>\$49,500</b>
<b><u>Administrative Assistant</u></b>	<b><u>\$41,000(0.18) =</u></b>		<b><u>\$7,380</u></b>
<b>Total:</b>			<b>\$190,880</b>

Plug the Total Indirect Expense and Total Direct Labor into the original equation:

$$\frac{\$253,870}{\$190,880} = 1.3299$$

Rounding to the nearest tenth, the answer is **1.33**.

- 3.) **Answer A, D, E, F.** While all of the answers listed for this question could potentially help protect an architecture firm, the correct answer is explicitly stated in Section 2.5 of the AIA Document B101, Standard Form of Agreement between Owner and Architect, which lists General liability, Automobile Liability, Worker's Compensation, and Professional Liability insurances. You may be asking where 'errors and omissions insurance' is on this list- it is another name commonly used for Professional Liability Insurance. A question like this with that type of answer thrown into the mix is designed to test your understanding of each listed instead of just listing what is given in the B101 document.
- 4.) **Answer C.** This might appear as a trick question because on some levels answer 'D' is also correct except for the fact that in the question it states that it is only a 'ten-person' architecture firm. The American's with Disabilities Act states that it is illegal for firms of

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15-people or more to discriminate on the basis of disabilities, and while it is highly unethical to do so even for a ten-person firm the correct answer is 'C'. A potential employer is free to ask any questions with regard to experience from a competitor. Equal employment opportunity laws prohibit employers from asking questions about age, marital status, race, or national origin.

- 5.) **Answer A.** This question would be one of the easier U/A questions on a potential exam but you still need to have an understanding of which AIA document to use in which circumstance and listing documents in order forces you to know the right answer and not be able to use the exam to find the correct answer. In the G-series of AIA documents G702 is the Application for Payment, G703 is a Continuation Sheet, and G704 is the Certificate of Substantial Completion. G701 is the for used for Change Orders on a project governed by an AIA contract. In this instance, the subcontractor is going to need to submit the change order to the architect for approval to complete the work.
- 6.) **Answer A.** There are a lot of terms intertwined into this question- agency and duty, combined with the concept of the client hiring an outside architect to act as an agent on his behalf when working with the design architect for his multi-family housing project. Answer B is incorrect because 'agency' only applies to the architect working on behalf of the client, Answer C is incorrect because the question does not state specifically which duties were defined, and Answer D is incorrect because negligence is not a plausible justification for making decisions. The standard of care defines what any prudent architect would do in a similar circumstance. Since the project is under a tight budget the architect decided to go with a more cost effect high-density laminate instead of the solid surface. The laminate is lacking a couple of qualities that the solid-surface counters would have, but it is still a sufficient application of the material under these circumstances. The correct answer is A.