SGLA LARE Grading, Drainage and Stormwater Management Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Don't worry about getting everything right, your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations, and take breaks to retain information better.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning.

7. Use Other Tools

Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly — adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. Which field of study focuses on how soils affect living things, especially plants?

A. Soil science

B. Edaphology

C. Hydrology

D. Botany

2. What refers to runoff that is temporarily held to manage flow rates and enhance water quality?

A. Detention

B. Conveyance

C. Storage

D. Retention

3. What term is used to describe the outer edge of a sloped surface?

A. Slope

B. Grade

C. Angle

D. Elevation

4. What term is used for a location that provides earth fill materials for construction projects?

A. Borrow area

B. Catch basin

C. Brush layering

D. Cluster development

5. What condition indicates a low runoff coefficient from an area?

A. Hard surfaces such as concrete

B. High vegetation cover

C. Highly compacted soil

D. Urban development

6. Features that are dimensioned using flexible dimensions typically include which of the following?

A. Fixed walls and boundaries

B. Curvilinear walks and planting beds

C. Property line markers

D. Structural elements only

7. Which term describes the immediate pre-storm rainfall relevant for analysis?

A. Antecedent precipitation

B. Bioretention

C. Angle of repose

D. Bench

8. What is the term for the reference point that serves as the beginning for site dimensioning?

A. Starting Point

B. Benchmark

C. Point of Beginning (POB)

D. Datum Point

9. What are vegetative cuttings in landscaping?

A. Seeds that can grow into new plants

B. Branches that will root when inserted into the ground

C. Leaves that can clone a plant

D. Flowers used for ornamental purposes

10. What method uses live, woody vegetative cuttings to improve slope stability?

A. Slope stabilization

B. Soil bioengineering

C. Planting

D. Erosion control

Answers

1. B
2. C
3. A
4. A
5. B
6. B
7. A
8. C
9. B
10. B

Explanations

1. Which field of study focuses on how soils affect living things, especially plants?

A. Soil science

B. Edaphology

C. Hydrology

D. Botany

The focus of edaphology is on the relationship between soil and living organisms, particularly how soil properties affect the growth and development of plants. This branch of soil science examines various factors, including soil composition, structure, and water retention, and their implications for plant health and productivity. Edaphologists study the interaction between soils and biological systems to understand how different soil types can support or inhibit plant growth. While soil science encompasses the broader study of soils, including their physical, chemical, and biological properties, edaphology specifically narrows in on the biological aspect, particularly plants. The other disciplines listed, such as hydrology and botany, play roles in understanding water movement or plant life, respectively, but do not emphasize the specific interactions between soils and living organisms to the extent that edaphology does. Thus, edaphology serves as the more precise field of study regarding how soils impact living things, especially plants.

2. What refers to runoff that is temporarily held to manage flow rates and enhance water quality?

A. Detention

B. Conveyance

C. Storage

D. Retention

The term that refers to runoff that is temporarily held to manage flow rates and enhance water quality is detention. Detention systems capture stormwater runoff and store it for a short period, allowing for controlled release. This process helps to reduce peak flow rates during rainfall events, which can prevent downstream flooding and erosion. Additionally, by holding the water temporarily, detention facilities can enhance water quality through sedimentation and biological processes, ultimately allowing cleaner water to be discharged into receiving bodies. In contrast, retention refers to practices that store water permanently, maintaining a pool of water year-round, which is different from the temporary holding implied in the question. Conveyance pertains to the transportation of water through systems such as pipes and channels rather than holding it. Storage could be used in a more general sense, but it does not specify the temporary aspect that is crucial for effective stormwater management.

3. What term is used to describe the outer edge of a sloped surface?

A. Slope

B. Grade

C. Angle

D. Elevation

The term that accurately describes the outer edge of a sloped surface is known as "slope." This term indicates the inclination or gradient of a surface in reference to a horizontal plane. It is commonly used in various fields, including grading and stormwater management, where understanding the slope is crucial for directing water flow and ensuring proper drainage. In contrast, "grade" often refers to the specific measurement of the slope itself, which can express the steepness or angle of inclination in the context of topographical changes. "Angle" generally pertains to the degree of inclination between two intersecting lines or planes, rather than the surface itself. "Elevation" describes the height of a point in relation to a reference level, typically sea level, and does not specifically refer to the outer edge. Understanding these distinctions helps clarify the terminology used when discussing graded surfaces and ensures effective communication in related projects.

4. What term is used for a location that provides earth fill materials for construction projects?

A. Borrow area

B. Catch basin

C. Brush layering

D. Cluster development

The term used for a location that provides earth fill materials for construction projects is a borrow area. This is specifically designated land from which soil, sand, gravel, or other earthen materials are excavated and transported to a construction site where they are needed as fill. Borrow areas are crucial in grading and drainage projects, as they ensure that the necessary materials are available to meet design requirements and maintain proper site elevations. In contrast, a catch basin refers to a type of drainage structure that collects stormwater runoff, helping to prevent flooding and manage surface water. Brush layering involves a landscaping technique used for erosion control and habitat enhancement, while cluster development describes a land use planning approach that groups buildings closer together to preserve open space. Understanding the specific definitions and purposes of these terms helps clarify why a borrow area is the correct answer for sourcing fill materials.

5. What condition indicates a low runoff coefficient from an area?

A. Hard surfaces such as concrete

B. High vegetation cover

C. Highly compacted soil

D. Urban development

A low runoff coefficient indicates that a smaller portion of rainfall will convert to surface runoff, while a larger portion is either absorbed by the ground or evaporates. High vegetation cover is crucial in this context because vegetation increases infiltration rates and promotes soil moisture retention. Plants and their root systems create a permeable surface that allows water to soak into the ground, reducing the amount of water that runs off into drainage systems. In contrast, hard surfaces like concrete are impermeable and significantly increase the runoff coefficient since they do not allow water to penetrate. Similarly, highly compacted soil also limits the infiltration capacity, leading to higher runoff. Urban development typically involves extensive areas of impervious surfaces, further contributing to increased runoff. Therefore, high vegetation cover stands out as the characteristic condition that facilitates lower runoff coefficients.

6. Features that are dimensioned using flexible dimensions typically include which of the following?

A. Fixed walls and boundaries

B. Curvilinear walks and planting beds

C. Property line markers

D. Structural elements only

Flexible dimensions are particularly suited for features that are not strictly linear or defined by rigid geometric shapes. Curvilinear walks and planting beds often require adaptable dimensioning because their forms can be organic and flowing, making it essential for designers to convey accurate lengths and radii that may not conform to standard straight lines or angles. This allows for a more natural integration of these features into the overall landscape design. In contrast, fixed walls and boundaries tend to be dimensioned using rigid dimensions because they have defined, unchanging elements. Property line markers also involve fixed points that are typically determined based on legal or survey data, necessitating precise and unyielding measurements. Structural elements often have strict requirements for dimensions due to building codes and engineering specifications, which require clear, inflexible dimensions to ensure safety and compliance. Thus, flexible dimensions are most beneficial in applications where adaptability and organic forms are present, reinforcing the appropriateness of curvilinear walks and planting beds as the correct choice.

7. Which term describes the immediate pre-storm rainfall relevant for analysis?

A. Antecedent precipitation

B. Bioretention

C. Angle of repose

D. Bench

Antecedent precipitation refers to the amount of rain that has occurred in the days or weeks leading up to a storm event. This term is significant in hydrology and stormwater management because it helps determine the soil moisture levels and the capacity of the ground to absorb additional rainfall during a storm. Understanding antecedent conditions is crucial for predicting runoff, erosion potential, and the overall effectiveness of stormwater management strategies. The relevance of antecedent precipitation in analysis allows engineers and planners to anticipate how much additional water the landscape can handle before saturation occurs, which is essential for designing effective drainage systems and managing stormwater flows. This analysis is foundational for planning measures to mitigate flooding and manage water quality. The other terms do not specifically relate to pre-storm rainfall. Bioretention refers to a stormwater management practice that involves the use of plants and soil to treat and manage runoff. The angle of repose is a term used to describe the steepest angle at which a sloped surface formed of a particular material is stable, which is unrelated to rainfall. A bench refers to a flat or level area, often in the context of grading or slope stabilization, but does not have a direct connection to rainfall events.

8. What is the term for the reference point that serves as the beginning for site dimensioning?

A. Starting Point

B. Benchmark

C. Point of Beginning (POB)

D. Datum Point

The term that serves as the reference point for site dimensioning is known as the Point of Beginning (POB). This concept originates from property law and surveying, where it refers to the specific location that defines the starting point for land surveys and property descriptions. Using a Point of Beginning allows surveyors and designers to accurately measure boundaries and create a reliable framework for the layout of the site. It is crucial for establishing dimensions, ensuring that measurements are consistent and precise, which is foundational in grading, site planning, and other aspects of land development. While other terms such as Benchmark and Datum Point are also related to reference in surveying and engineering, they serve different purposes. A Benchmark serves as an established reference point for elevation and is used primarily to convey vertical measurements, whereas a Datum Point is a reference from which vertical or horizontal measurements are taken. Starting Point is a more generalized term and does not embody the specific surveying context that Point of Beginning does. Thus, the POB is distinct and specifically tailored for initiating site measurements, which is why it is the correct term for the reference point in site dimensioning.

9. What are vegetative cuttings in landscaping?

A. Seeds that can grow into new plants

B. Branches that will root when inserted into the ground

C. Leaves that can clone a plant

D. Flowers used for ornamental purposes

Vegetative cuttings in landscaping refer to branches or stems that can develop roots when placed into the soil or another growing medium. This method of propagation takes advantage of a plant's ability to regenerate. When a cutting is made, it should ideally include a section of a stem with one or more nodes, which are the points from which roots can develop. These cuttings can efficiently produce new, genetically identical plants without the need for seeds, making them a popular choice in horticulture and landscaping for maintaining specific plant characteristics. In contrast, seeds represent a different method of propagation that involves germination and growth from reproductive parts of plants. Leaves, while they can sometimes be used in propagation through techniques like leaf cuttings, do not typically root as readily as stem cuttings. Additionally, flowers serve aesthetic purposes and do not play a role in the propagation of plants. This understanding highlights the unique role that vegetative cuttings have in plant propagation practices.

10. What method uses live, woody vegetative cuttings to improve slope stability?

A. Slope stabilization

B. Soil bioengineering

C. Planting

D. Erosion control

The use of live, woody vegetative cuttings to improve slope stability falls under soil bioengineering. This method integrates living plant materials and engineering techniques to create resilient and stable structures. By using the natural characteristics of the plants, such as root growth and the ability to absorb water, soil bioengineering helps to reinforce slopes, reduce erosion, and enhance the overall stability of the landscape. These vegetative cuttings can establish roots in the soil, promoting further growth and providing an effective means of anchoring the soil, ultimately reducing the risk of landslides or slope failure. While slope stabilization is a related concept, it may not specifically involve the use of live plant materials. Planting, though pertinent, generally refers to the act of placing plants into the soil without emphasizing the engineering aspects that come with soil bioengineering. Erosion control is a broader term that encompasses various techniques for preventing soil loss, which may or may not involve the strategic use of vegetative cuttings. Therefore, soil bioengineering specifically highlights the method of utilizing live, woody cuttings to enhance stability through vegetation.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://sglalarestormwatermgmt.examzify.com

We wish you the very best on your exam journey. You've got this!