Drupal 9/10 & Drupal 10+ Exam Preparation Guide

Drupal 7 vs Drupal 10 System Comparison (Code Block Style)

```
+---------------+------------------------+------------------------+
| Feature       | Drupal 7               | Drupal 10              |
+---------------+------------------------+------------------------+
| Core          | Procedural hooks       | Symfony + OOP + services |
| Themes        | PHPTemplate + tpl.php   | Twig + libraries.yml     |
| Routing       | hook_menu()            | routing.yml + controllers |
| Modules       | Pure hooks             | Plugins + services + events |
| DB API        | db_query()             | Entity API + DBAL        |
| Views         | Contrib module         | Core module              |
| Panels        | Contrib module         | Layout Builder (manual)  |
| Blocks        | hook_block()           | Block Content Entities   |
| Files         | file_managed           | file_managed             |
| Fields        | Field API + collections | Field API + Paragraphs   |
| Paragraphs    | Field collections (contrib) | Paragraphs module + Entities |
| Users         | users table            | users_field_data + config |
+---------------+------------------------+------------------------+
```

Migrate Commands + Data Effects + MySQL Examples

```
Command: drush migrate-status
Effect:
- Lists all available migrations
- Shows current status (idle, imported, etc.)

Command: drush migrate-import example_migration
Effect:
- Runs specified migration
- Imports data from D7 DB into D10 entities
- Example MySQL table to check: SELECT * FROM node_field_data;

Command: drush migrate-rollback example_migration
Effect:
- Deletes all imported content from D10
- Returns to pre-import state

Command: drush cr
Effect:
- Clears all Drupal caches
- Required after config changes or migrations
```

Theme Creation & Reuse from Drupal 7 to 10 (With Code)

```
To reuse Drupal 7 CSS/images/fonts in D10:

1. Create sub-theme folder under /themes/custom/my_subtheme
2. Create my_subtheme.info.yml

my_subtheme.info.yml:
name: My SubTheme
type: theme
```

```
base theme: classy
libraries:
  - my_subtheme/global

3. Create my_subtheme.libraries.yml


my_subtheme.libraries.yml:
my_subtheme/global:
  css:
    theme:
      css/style.css: {}

4. Copy css/, js/, images/ from D7 theme to D10 sub-theme

5. Example file structure:
themes/custom/my_subtheme/
 css/
    style.css
 js/
 images/
 templates/
    node--article.html.twig
 my_subtheme.info.yml
 my_subtheme.libraries.yml


Twig template example:
{# node--article.html.twig #}
<article>
  <h2>{{ label }}</h2>
  <div>{{ content.body }}</div>
</article>
```

Migration Process Steps

```
1. Audit your Drupal 7 site
2. Backup D7 database and files
3. Install fresh Drupal 10 site using Composer
4. Enable migrate modules:
   drush en migrate migrate_drupal migrate_drupal_ui -y
5. Connect D7 database in D10 settings.php
6. Run Upgrade UI OR prepare Migrate API YAML configs
7. Execute migrations using drush migrate-import
8. Validate content and files in D10
9. Rebuild views and themes manually
```

What Can Be Migrated Automatically

```
- Content Types
- Nodes
- Users
- Files (basic file fields)
- Taxonomy Terms
- Menus
```

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What Cannot Be Migrated & Requires Rebuild

```
- Views (must rebuild manually via admin)
- Panels/Panelizer (use Layout Builder)
- Field Collections (convert to Paragraphs)
- Themes (must create D10 sub-theme)
- Custom Contrib Modules (re-develop for D9/D10)
```

Post-Migration Validation Checklist

```
1. Check migrated users at /admin/people
2. Validate nodes at /admin/content
3. Verify taxonomy terms at /admin/structure/taxonomy
4. Confirm file attachments under /admin/content/files
5. Test menus and URL aliases
6. Run drush migrate-status for missed migrations
7. Clear all caches with drush cr
```

Additional Migration Commands (drush)

```
Check migration status:
drush migrate-status

Import specific migration:
drush migrate-import example_migration

Rollback migration:
drush migrate-rollback example_migration

Export configuration (recommended):
drush config:export
```

Consultant Tips

```
 Always document Views + Panels structure in D7 before starting.
 Estimate 20-30% of time for manual Views and Theme rebuild.
 Never copy tpl.php templates into D10 themes.
 Always create staging environment to test migrations.
 Backup D10 database before running drush migrate-import.
 Validate every migration batch before proceeding.
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Installing Drupal 10

```
1. Install Drupal 10 using Composer (recommended):
composer create-project drupal/recommended-project mysite

2. Navigate to project folder:
cd mysite

3. Install site with Drush:
drush site:install

4. Set file permissions as required.
5. Enable required modules using:
drush en module_name
```

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Using the Drupal 10 UI for Upgrade (Upgrade Path)

```
1. Install Drupal 10 site using Composer.
2. Enable migration modules:
drush en migrate migrate_drupal migrate_drupal_ui -y

3. Copy Drupal 7 database to local MySQL.
4. Copy sites/default/files from D7 into D10 sites/default/files.

5. Navigate to:
http://yourD10site/upgrade

6. Enter D7 database connection details in UI.
7. Select components (Users, Nodes, Taxonomy etc.)
8. Run migration from Upgrade UI wizard.
9. Review log messages and test imported data.
```

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Common Migration Issues + Solutions

```
Issue: Missing D7 file links after migration.
Solution: Copy entire /sites/default/files/ folder from D7 to D10.

Issue: Migrate tool reports missing source plugin.
Solution: Enable migrate_drupal and migrate_drupal_ui modules.

Issue: D7 custom fields not migrated.
Solution: Create equivalent fields manually in D10 and map data.

Issue: Views missing after migration.
Solution: Views must be rebuilt manually in D10 at /admin/structure/views.

Issue: Performance slow on large migrations.
Solution: Break migration into smaller batches; use Drush for command-line processing.
```