2023-24 Competitive Events Guidelines
Database Design & Applications

Database Design & Applications provides members with the opportunity to demonstrate knowledge around competencies in the organization of data and information in business. This competitive event consists of an objective test and production test. It aims to inspire members to learn about skills for understanding database usage and development in business.

Event Overview

Division: High School
Event Type: Individual
Event Category: Production
Event Elements: Objective Test, 100-multiple choice questions (breakdown of question by competencies below) and Production Test
Objective Test Time: *50 minutes*
***Production Test Time:*** *60 minutes, due May 14, 2024*
NACE Connections: Career & Self-Development

Equipment Competitor Must Provide: Pencil for Objective Test, Computer for Production Test
Equipment FBLA Provides: One piece of scratch paper per competitor for Objective Test, Production Test Tasks

Objective Test Competencies

- Data Definitions/Functions
- Query Development
- Table Relationships-Include Referential Integrity
- Reports and Forms-Sort, Group, Insert Graphics, Headers, Calculations
- Form Development

Test Composition

Category	Value
Data...	25
Query...	15
Table...	15
Form...	30
Reports &...	15
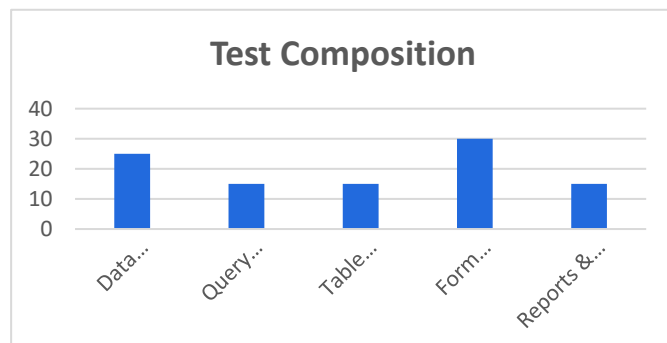
Production Test Competencies

- Multiple Table Database Design
- Table Creation, Inserting Data Into Tables
- Table SQL Statements
- Creation of Forms/Reports

District

Testing will take place prior to the District Leadership Conference. Check the Call to Conference for your District for specific instructions and deadlines. Production testing information will be emailed to the local adviser after registration closes.

State

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Production events are due using an online submission link prior to the State Leadership Conference. Instructions will be emailed to the local adviser after registration closes.

Any events with an objective test will have an online testing component on-site at the State Leadership Conference. Students will need to have access to a personal device (preferably a laptop) to be connected to the Internet for online testing.

National

Policy and Procedures Manual
- Competitors should be familiar with the Competitive Events Policy & Procedures Manual, found on the Competitive Events page on www.fbla.org.

Eligibility
- FBLA membership dues are paid by 11:59 pm Eastern Time on March 1 of the current program year.
- Members may compete in an event at the National Leadership Conference (NLC) more than once if they have not previously placed in the top 10 of that event at the NLC. If a member places in the top 10 of an event at the NLC, they are no longer eligible to compete in that event.
- Members must be registered for the NLC and pay the national conference registration fee in order to participate in competitive events.
- Members must stay in an official FBLA hotel to be eligible to compete.
- Each state may submit four entries per event.
- Each member can only compete in one individual/team event and one chapter event (American Enterprise Project, Community Service Project, Local Chapter Annual Business Report, Partnership with Business Project).
- Only competitors are allowed to plan, research, and prepare their production tests.
- Each competitor must compete in all parts of an event for award eligibility.
- Picture identification (physical or digital driver's license, passport, state-issued identification, or school-issued identification) is required when checking in for competitive events.
- If competitors are late for an objective test, they will be allowed to compete until such time that results are finalized, or the accommodation would impact the fairness and integrity of the event. Competitive event schedules cannot be changed. Competitive events start in the morning before the Opening Session of the NLC.

Recognition
- The number of competitors will determine the number of winners. The maximum number of winners for each competitive event is 10.

Event Administration
- This event has two parts: Objective Test and Production Test
- Objective Test
  - The objective test is administered online at the NLC.
  - No reference or study materials may be brought to the testing site.

- o No calculators may be brought into the testing site; online calculators will be provided.
  - o All electronic devices such as cell phones and smart watches must be turned off before competition begins.
- Production Test
  - o **Submission Deadline:** An accessible link to all the tasks must be uploaded in the conference registration system by May 14, 2024
  - o The production test is administered and proctored by an adult at a designed school-site prior to the NLC. Administration procedures for the production test are determined by the state chair/adviser.
  - o The production test is a set of tasks based on the competencies for the competitor to complete.
  - o Documents produced for this event must be prepared by the competitor without help from the adviser or any other person.
  - o Calculators cannot be used on the production test.

Scoring
- The rating sheet will be released with the production test.
- Production Test is 85% of the total score.
- Objective Test is 15% of the total score.
- The Production Test score will be used to break a tie.

Americans with Disabilities Act (ADA)
- FBLA meets the criteria specified in the Americans with Disabilities Act for all competitors with accommodations submitted through the conference registration system by the registration deadline.

Penalty Points
- Competitors may be disqualified if they violate the Competitive Event Guidelines or the Honor Code.
- Five points are deducted if competitors do not follow the Dress Code or are late to the testing site.

Electronic Devices
- All electronic devices such as cell phones and smart watches must be turned off before competition begins.

Study Guide: Competencies and Tasks

A. Data Definitions/Functions
1. Explain the principles of data analysis.
2. Evaluate and compare a variety of database programs for features and functions.
3. Determine when it is appropriate to use a database and identify the benefits derived.
4. Demonstrate correct use of database terminology.
5. Plan, design, and create a database file.
6. Construct database using appropriate inputting, formatting, and editing skills.
7. Set and modify field properties including limit field size, number formats, date/time formats, yes/no formats, validation rules, and input masks.
8. Distinguish between different field types.
9. Define and modify field names and data types.
10. Manipulate a database.
11. Import and export data into and from a database.
12. Save database objects as file types.
13. Use the Help feature of database software.
14. Compact and repair a database.
15. Produce documents integrating word processing, database, spreadsheet, and presentation files.

B. Query Development
1. Use the simple query wizard.
2. Create a query in design view.
3. Search, sort, index, merge, and manipulate database for specific information.
4. Filter data (sort, find specific records, and replace).
5. Create multi-table queries.
6. Design and create action queries (make-table, update, append, and delete).
7. Design and create advanced queries (setting top values, creating calculated field, creating function query, and creating parameter query).
8. Verify accuracy of output.

C. Table Relationships--Include Referential Integrity
1. Define and create table relationships.
2. Use table wizard and design view to create a table.
3. Add records to tables.
4. Apply the default values, input masks, validation rules, validation text, required fields, and lookup fields to field properties in a table in design view.
5. Understand the difference between a one-to-one, one-to-many, and many-to-many relationships.
6. Enforce referential integrity.
7. Create and modify a multi-table select inquiry.
8. Save a table, query, and forms as a Web page.
9. Import/export linked tables.

D. Reports and Forms--Sort, Group, Insert Graphics, Headers, Calculations
1. Design, create, save, and modify reports for data output.
2. Create a report with the Report Wizard.
3. Enhance reports using formatting features and graphics.
4. Preview and print a report.

5. Modify and format report properties (font, style font size, color, and caption).
6. Use report sections.
7. Perform grouping and sorting to a report.
8. Create reports using all types of controls including Active X and calculated totals.
9. Use advanced report design to create a running summary, insert a date/time control, and use label wizard.

E. Form Development
1. Design, create, and modify basic forms in database.
2. Create a form with the form wizard.
3. Create a form based on a query.
4. Modify Format Properties.
5. Enter and delete records using a datasheet or form.
6. Use the control Toolbox to add controls, move a control, and resize a control.
7. View and print records in a form.
8. Use design view to disable the snap to grid feature, display the field list, move, move part of a paired control, align and space controls, add a label or image, and to edit an unbound control.
9. Create and modify a subform.