Agricultural Education/FFA

Jr Agricultural Mechanics

Career Development Event

I. OVERVIEW
The Jr. Agricultural Mechanics Career Development Event is a team event with three parts: Skill Practicum/Problem Solving Activity, Tool/Equipment/Part Identification and Multiple Choice Written Exam, following the procedures outlined in the GA FFA Association Career Development Guideline as created by the State Agricultural Mechanics Career Development Committee.

II. PURPOSE
The purpose of the Jr. Agricultural Mechanics Career Development Event is to provide an opportunity for students in grades 6-9 to practice those skills and abilities developed as a regular part of the agricultural education curriculum. The CDE is designed as an introductory event that will provide experience in agricultural mechanics and assess the knowledge gained from classroom instruction.

III. ELIGIBILITY
This event is open to students in grades 6-9 who are agricultural education students, and are paid members of a chartered FFA chapter. Each member of the team must be a member of the chapter registering them, and each student's name must appear on the chapter's FFA roster at least 10 days prior to competition above the chapter level.

Chapters are limited to one (1) CDE team per chapter.

IV. RULES
Each event participant must adhere to the safe practices and work habits appropriate when performing required activities. Participants are responsible and must provide all personal safety equipment and other tools and equipment as assigned by state committee.

V. EVENT FORMAT
Teams will consist of four members. Each team member will complete a single skill/problem solving activity from one of five areas of Energy Systems, Electrical Systems, Machinery Systems, Structural Systems, and Environmental/Natural Resource Systems. Problem Solving and/or skills will be a part of each area. There will be an identification test containing twenty five to fifty items. Items will be drawn from reference materials listed below. There will also be a written test (25 questions) based on information from the designated skill area and basic safety information taken from the references designated by the state committee.

VI. SCORING

Team Ranking is determined by combining the scores of all four students from each team.

Skill Areas: (One of the following areas will be identified annually) 50 points 20 minutes

Energy Systems
Electrical Systems
Structural Systems
Machinery Systems
ENR Systems

Tool/Equipment/Part Identification: (List to be developed by the Ag. Mechanics Technical Team and Submitted to the CDE Review Committee for Review and Approval)

25 Items 50 points 30 minutes

Written Test:

25 Items 50 points 30 minutes

50 Skill Practicum/Problem solving points + 50 Id points + 50 Test points= 150 possible individual points

4 individuals x 150 possible individual points = 600 possible team points

VII. TIE BREAKERS

In the Possibility of a tie in team score, the team with the highest total score on the tool identification activity will be declared the winner. In the case of a tie at this point, the total of the top four individual scores on the problem solving/skill will be used to determine the winner. In case of a tie in total scores, the team with the highest individual score will be declared the winner.

VIII. AWARDS

Awards shall be determined each year by the state committee.

IX. REFERENCES

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The goal of the FFA Jr Agricultural Mechanics Career Development Event is to guide and promote quality instructional programs in agricultural mechanics. The following list contains references that may prove helpful during event preparation.

FFA Jr Agricultural Mechanics CDE Reference List:

- *Modern Carpentry* by Wagner & Smith (Goodheart-Wilcox) – Current Edition
- *Agricultural Mechanics Fundamentals and Applications* by Ray Herren, (Delmar Publishers) - Current Edition
- *Small gas Engines* by Alfred C. Roth, Blake J. Fisher, W. Scott Gauthier (American Technical Publishers) – Current Edition

- *Agricultural Technical Systems and Mechanics* by Leonard Koel, Glen A. Mazur, B. J. Moniz, R. Bruce Radcliff (American Technical Publishers) - Current Edition
- AAVIM Electrical Wiring – Current Edition
- AAVIM Arc Welding – Current Edition
- AAVIM GMAW/GTAW Welding – Current Edition
- *Small Engines*, R. Bruce Radcliff (American Technical Publishers) – Current Edition