### Division I - Egg Production and Quality (700 points) (7 rings)

Time: 14 minutes for placing each ring of birds.

Coops shall be numbered from 1 to 5.

#### A. Yearling hens:

There shall be two rings (classes) of egg-type yearling hens.

The rings of yearling hens shall be placed in order of total egg production. Use pigmentation as far as possible and then go to handling qualities. The contest manager shall provide at least seven birds for each ring. These must conform to the following specifications insofar as possible:

#### Each class:

a. Shall be from the same hatch.

- b. Shall have started to lay within a range of one month.
- c. Shall have been given the same rations and housing conditions.
- d. Each pair of yearling hens should differ by a minimum of 20 eggs and preferably 25 eggs total production.
- e. Birds of poor health must be avoided.

The judging committee shall select five birds from the seven to make up a ring.

#### B. Pullets:

There shall be two rings (classes) of egg-type pullets 18 to 22 weeks of age to be placed on their future performance as layers.

The pullet classes shall be made up of individuals of the same age, and kept under the same environmental conditions.

Placement and judging of the production pullets should be governed by the following characteristics and qualities.

# I. Health and Vigor

No pullets will be used which show any symptoms of disease. Vigor should be shown through evidences of early body size, comb development, and bright alert eyes with feminine head.

#### II. Head

The head should show the following characteristics: strong, moderately long, and well-filled in forward of the eyes to avoid any appearance of crow headedness, with the skull inclined to be somewhat flat on top rather than round. The face should be clean cut, smooth, and free from wrinkles, the skin fine grain and soft in texture, the comb of good substance and size and of good color. The eye should be large, bright, and prominent, and iris rich in color, the pupil distinctly and perfectly formed.

#### III. Sexual Maturity

Sexual maturity should be expressed in the development of comb and head. Early sexual maturity should not be encouraged at the expense of growthiness and ruggedness in skeletal development. Size of development should be preferable to sexual maturity. For example, a rather small, poorly developed pullet that showed advanced sexual maturity might possibly be placed down second or third in a class of well developed pullets.

### IV. Body Conformation

Pullets in these classes should have an angular form as depicted in section "Interpretation of Standard for Judges - Flock Inspectors - Breeders" (American Standard of Perfection, 4<sup>th</sup> ed.). Body should be deep, broad, and well developed. The heart girth should be of ample circumference. Back should be broad and flat with the keel of go od length.

### V. Plumage Condition and Skin Color

Pullets should be fully feathered with plumage of good quality. The shanks should show a good healthy color with no emphasis on intensity.

#### VI. Feet and Toes

A pullets should be well balanced on her legs, being neither knock-kneed nor bow-legged. The feet and toes should be completely normal.

### C. Egg Grading - (200 points)

Part I. Conventional Egg Candling (100 points) (25 eggs)

Time: 22 Minutes

Only white-shelled eggs shall be used Eggs shall be numbered from 1 to 25

The market eggs shall be graded according to the U.S. Standards for Quality of Individual Shell Eggs (interior quality only). The latest edition of the Agriculture Handbook No. 75 "Egg Grading Manual" (currently revised July 1969) will be used as the guide for judging. Use of eggs with blood and meat spots too small to reject the egg, bubbly air cells, movable air cells, and stuck egg yolks shall be avoided in setting up the shell egg classes. However, should any of these conditions exist, they are to be disregarded by contestants.

Letter grades AA, A, B will be used. Classes may contain rejects. Reject will refer to any egg having a blood or meat spot larger than one-eighth inch.

Each contestant shall indicate by "check symbol" *only* in correct columns on the card the grade in which he believes each egg should fall.

Speed King candlers will be used. The eggs will be place on filler-flats. Eggs will be numbered from 1 to 25 on large end of egg and placed in flats with #1 in top left and #25 in bottom right (as in reading a book).

Members of each team will grade the same lot of eggs. A comparable lot will be set up for each team.

Shell Eggs - Interior Quality (Candled)

	AA	A	В	Reject
Air cell	1/8 inch or less in depth. May show unlimited movement and may be free or bubbly.	1/8 to 3/16 inch in depth. May show unlimited movement and may be free or bubbly.	More than 3/16 inch in depth. May show unlimited movement. May be free or bubbly.	Blood or meat spots over 1/8 inch in diameter.
White	Clear, firm	Clear, reasonably firm	Clean. May be weak and watery (when broken-out a Haugh unit below 60).	Any mold or embryo growth
Yolk	Out line slightly defined. Practically free from defects.	Out line fairly well defined. Practically free from defects.	Out line plainly visible. Yolk may appear dark, enlarged and flattened. Small blood spots (appear not more than 1/8 inch in diameter) may be present.	

### D. Grading Broken-Out Egg Quality (100 points ) (25 eggs)

Time: 22 minutes

The broken-out eggs will be displayed on 10-inch diameter off-white melmac dinner plates. These will be numbered on the bottom from 1 to 25.

These broken-out eggs will be scored according to the USDA scored (broken-out egg chart) as AA<sub>1</sub>, AA<sub>2</sub>, AA<sub>3</sub>, A<sub>4</sub>, A<sub>5</sub>, A<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, and B<sub>9</sub>.

There shall be no reject eggs used in broken-out eggs.

Eggs containing meat and blood spots and ones with yolk blemishes will not be used in setting up this part of the contest.

Each contestant shall indicate by "check symbol" *only* in correct columns on the card the grade in which he believes each egg should fall.

A comparable set of broken-out eggs will be used for each group of contestants.

## E. Exterior Eggs

Time: 15 minutes

These market eggs shall be graded according to the U.S. Standards of Quality for individual eggs and recorded as A, B, or dirty. Each egg will be placed on its side on an egg flat on a table in such a manner that any defect will be in full view of the contestant. These eggs must not be handled by contestants. The eggs will be numbered from 1 to 25, the number being written on the egg or on a card just below the egg; and each contestant shall indicate the grade in which he believes each egg should fall. Only white shelled eggs will be used. No checks, cracked, or smashed eggs will be used. "The Egg Grading Manual," Agricultural Handbook No. 75, Revised April, 1983, will be used as the guide for judges.

Shell Eggs - Exterior Quality Eggs

	A	В	Dirty
Soundness	Unbroken	Unbroken	
Shell	Approximately the usual shape and is sound and free from thin spots. Ridges and rough areas that do not materially affect the shape and strength of the shell are permitted. A shell that is free from foreign material and from stains or discolorations that are readily visible. Small specks, stains, or cage marks are permitted if not of sufficient number or intensity to detract from the generally clean appearance of the egg.	May be unusual or decidedly misshapen, or faulty in soundness or strength. May show pronounced ridges or thin spots. May have slightly or moderately stained areas covering less than 1/32 of the shell surface if localized, or 1/16 of the shell surface if scattered.	An egg with an unbroken shell with adhering dirt or foreign material, prominent stains or moderate stain covering more than 1/32 of shell surface if localized, or more than 1/16 of shell surface if scattered.