

## 2022 Virginia FFA Dairy Cattle Evaluation & Management CDE Written Exam

Name: \_\_\_\_\_

Chapter: \_\_\_\_\_

**Instructions:** Record your answers in the "Exam" section on your Scantron form. Select the single best answer for each question. Each question is worth 3 points. Total points possible = 150. The time limit is 30 minutes.

- 1. What type of mastitis-causing pathogens grow in the cow's surroundings and contact the udder and teat causing infection?**
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  - D. Environmental
- 2. How many days after calving does it usually take for a cow's reproductive tract to return to normal?**
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**36. What is the name of the waxy substance produced by cells lining the teat canal that serves as a plug between milkings and aids in reducing penetration by microorganisms?**

- A. Keratin
- B. Milk stone
- C. Myoepithelium
- D. Oxytocin

**37. What contagious disease is caused by a fungus and can be easily spread to other animals?**

- A. Blackleg
- B. Pinkeye
- C. Ringworm
- D. Warts

**38. What is the use of technologies to measure physiological, behavioral, and production indicators on individual animals to improve management strategies and farm performance called?**

- A. Advanced farm management
- B. Biosecurity
- C. Precision dairy farming
- D. Robotics

**39. What is the name of the respiratory disease that cattle often develop after being transported by rail?**

- A. Bang's disease
- B. Bovine viral diarrhea
- C. Infectious bovine rhinotracheitis
- D. Shipping fever

**40. How much does a bushel of corn weigh?**

- A. 23 pounds
- B. 32 pounds
- C. 48 pounds
- D. 56 pounds

*For questions 41-50, use the cow information provided for the exam. The last test day was July 20, 2022. The report was generated on July 25, 2022.*

**41. How many cows are currently dry?**

- A. 3
- B. 5
- C. 7
- D. 8

**42. How many cows have been diagnosed open?**

- A. 2
- B. 3
- C. 16
- D. 21

**43. Which cow has the highest Mature Equivalent (ME) milk?**

- A. 1
- B. 17
- C. 19
- D. 24

**44. Which cow has the most desirable Estimated Relative Producing Ability (ERPA)?**

- A. 1
- B. 2
- C. 23
- D. 24

**45. How many cows have been labeled as cows not to be bred?**

- A. 1
- B. 3
- C. 11
- D. 12

**46. How many cows are expected to calve in September?**

- A. 4
- B. 5
- C. 6
- D. 8

**2022 Virginia FFA Dairy Cattle Evaluation & Management CDE Written Exam**

**47. How many cows had somatic cell count scores of 6.0 or higher on the most recent test?**

- A. 2
- B. 3
- C. 5
- D. 8

**48. Which cow had the highest fat percent on the most recent test day?**

- A. 4
- B. 6
- C. 12
- D. 34

**49. Which lactating cow has produced the most milk during the current lactation to date?**

- A. 4
- B. 8
- C. 13
- D. 27

**50. How many pregnant cows required three or more services to become pregnant?**

- A. 0
- B. 3
- C. 4
- D. 9

2022 Virginia FFA Dairy Cattle Evaluation and Management CDE  
 Written Exam: Cow Information for Questions 41-50

Date of Test: 07/20/2022  
 Reference Date: 07/25/2022

Cow ID	Breed	Sire ID	Lact No.	Status		Age (mo.)	DIM	Test month				Prev. SCS	Lactation to Date						ME Milk	ERPA Milk	No. Breedings	Repro Code	Last Bred	Date Due	Days Dry	Days Open
				Code	Date			Milk	Fat%	Pro%	SCS		Milk	Fat%	Pro%	Fat	Pro	Rating								
1	HO	PLANET	7	3	06/30/22	119	364					2.8	39084	2.9	2.6	1132	1001	B	38938	4086	3	P	12/01	09/09	26	155
2	HO	HALOGEN	5	2	12/02/21	82	236	80.6	3.2	2.9	1.6	1.4	24086	3.3	3.0	806	721	D	28304	-4658	1	P	02/18	11/25		78
3	HO	TROY	5	2	12/25/21	78	213	96.0	2.5	3.5	1.4	3.0	22683	3.1	3.2	699	731	D	29604	116	1	P	03/18	12/23		83
4	HO	DAMARIS	4	3	07/09/22	75	404					2.9	46051	3.4	3.1	1551	1420	A	37993	2611	3	P	12/01	09/09	17	186
5	HO	PESO	4	3	07/09/22	74	299					4.4	31320	3.1	2.9	983	908	C	33501	2530	1	P	12/01	09/09	17	81
6	HO	DAMARIS	4	2	09/26/21	72	303	60.2	5.0	3.7	3.9		25727	3.4	3.3	886	838	D	27871	-932	2	P	01/28	11/04		124
7	HO	DAMARIS	4	2	02/10/22	70	166	119.2	2.3	2.8	6.2	6.6	16663	3.1	2.7	518	449	E	28532	-1565	2	N	06/17			166
8	HO	TROY	4	2	05/15/22	68	72	129.4	1.9	2.9	4.4	6.6	7972	3.7	3.0	298	237	D	28929	-1179						72
9	HO	DAMARIS	4	2	12/04/21	68	234	114.6	3.1	3.3	4.6	5.7	28620	3.6	3.1	1028	889	A	35835	393	1	P	02/25	12/02		83
10	HO	SUPERSIRE	4	2	02/18/22	63	158	120.2	3.2	3.1	0.1	0.1	19167	3.4	3.0	644	576	C	32104	-492	2		07/08	04/14		140
11	HO	DAMARIS	3	2	09/07/21	60	322	60.6	3.0	3.2	3.2	3.5	31342	2.6	3.0	806	942	C	33861	1463	2	P	01/28	11/04		143
12	HO	SUPERSIRE	4	2	07/12/22	59	14	88.9	5.5	3.6	1.6		396	5.6	3.8	22	15			1173						14
13	HO	SUPERSIRE	3	2	10/10/21	59	289	68.2	2.5	3.3	3.6	4.2	31725	2.9	3.1	913	975	C	35553	733	1	P	12/31	10/07		82
14	HO	DAMARIS	3	3	05/22/22	59	289						30030	2.9	2.9	874	881	C	34966	2225	1	P	10/29	08/05	65	84
15	HO	MEGAMAN	2	3	05/22/22	55	289						25035	4.3	3.6	1081	899	B	30215	-2753	1	P	10/29	08/05	65	84
16	HO	SUPERSIRE	3	2	12/28/21	55	210	99.4	2.9	3.1	8.6	7.3	22933	2.8	3.0	645	687	D	31854	1623	4		07/01	04/07		185
17	HO	IRONMAN	2	3	07/09/22	53	289					2.1	31407	3.6	2.8	1136	872	A	37214	729	1	P	12/10	09/16	17	78
18	HO	MONTROSS	3	2	03/10/22	53	138	115.6	3.0	2.9	2.5		15289	4.5	2.9	681	442	C	30287	-907	2		07/15	04/21		127
19	HO	SUPERSIRE	3	2	11/30/21	52	238	121.6	2.8	3.2	2.8	2.0	29824	2.9	2.9	870	878	A	40248	-677	1	P	02/18	11/25		80
20	HO	JEDI	3	2	07/15/22	50	11													363						11
21	HO	MODESTY	2	3	07/09/22	47	359					3.2	34841	3.4	3.2	1170	1116	A	38030	902	3	P	12/01	09/09	17	141
22	HO	SUPERSIRE	2	2	09/26/21	46	303	36.0	4.0	3.9	3.0	3.2	30723	3.6	3.1	1097	948	A	37254	3015	1	P	12/17	09/23		82
23	HO	FRAZZLED	2	2	09/30/21	45	299	53.6	3.1	3.2	6.4	7.1	29373	3.3	3.1	963	914	B	36397	4115	1	P	12/17	09/23		78
24	HO	MONTROSS	2	2	10/14/21	41	285	107.8	2.7	3.1	1.6	1.8	31439	3.0	3.0	931	928	A	41227	3552		C				285
25	HO	RESOLVE	2	2	11/04/21	41	264	77.2	3.3	3.4	2.7	3.1	25555	3.1	3.3	797	832	C	33562	26	1	P	01/21	10/28		78
26	HO	MONTROSS	2	2	03/12/22	39	136	111.4	2.4	3.1	1.0	0.7	15344	3.5	3.1	539	474	B	35376	1507	2		07/14	04/20		124
27	HO	JEDI	2	2	02/28/22	39	148	129.6	2.7	3.3	3.2	3.5	18588	3.0	3.1	558	585	A	39915	3787	1	P	05/20	02/24		81
28	HO	RESOLVE	2	2	03/30/22	38	118	103.8	2.4	3.3	2.7	1.2	10604	4.6	3.2	484	339	C	30384	-2932	2		07/09	04/15		101
29	HO	RESOLVE	2	2	04/06/22	38	111	101.8	2.2	3.0	0.1	0.6	11610	3.4	3.0	393	352	C	32084	1216	1		06/24	03/31		79
30	HO	RESOLVE	2	2	05/22/22	34	65	115.4	3.8	2.9	0.7	0.1	5967	4.0	3.1	237	184	B	32177	-446						65
31	HO	FRAZZLED	1	6	09/26/21	32	303	54.2	4.7	3.6	0.1		20123	4.0	3.3	814	667	C	28275	-2595	1	P	12/15	09/21		80
32	HO	FRAZZLED	1	6	12/25/21	30	213	80.2	3.2	3.7	0.7	0.1	17721	4.0	3.2	707	573	C	30721	-505	1	P	03/18	12/23		83
33	HO	YODER	1	6	01/26/22	30	181	78.0	1.8	3.4	1.0	0.7	12909	3.2	3.2	416	418	E	26698	-2104	1	P	04/14	01/19		78
34	HO	RESOLVE	1	6	02/07/22	30	169	68.0	3.1	4.2	1.3	0.8	12953	3.6	3.3	467	425	D	26155	-2762	2	N	06/16			169
35	HO	YODER	1	6	06/17/22	27	39	101.2	3.4	2.9	1.0		2658	3.8	3.2	100	85									39
36	HO	YODER	1	6	04/12/22	26	105	95.2	5.1	3.3	4.3	4.2	8313	4.1	3.1	337	254	A	31856	453	1		07/01	04/07		80
37	HO	TAHITI	1	6	06/13/22	24	43	102.0	3.7	3.0	1.6	5.5	2589	4.3	3.2	111	82	B	33287	1077						43
38	HO	TAHITI	1	6	05/09/22	23	78	94.2	3.7	3.2	3.3	0.9	6792	4.6	3.1	310	208	B	32652	1039						78
39	HO	TAHITI	1	6	06/09/22	22	47	51.0	4.7	3.4	0.6	1.6	1506	4.4	3.5	67	53	E	22305	-2987						47
40	HO	FRAZZLED	1	6	06/08/22	22	48	82.4	3.2	3.0	3.2	6.5	2695	3.9	3.2	106	87	C	30052	-120						48

**Repro Codes**  
 C. Do not breed  
 N. Open  
 P. Diagnosed pregnant

**Status Codes**  
 1. In milk  
 2. Calved  
 3. Dry  
 5. Left herd  
 6. First lactation  
 7. Entered herd  
 8. Aborted  
 9. Induced lactation

**Rating Codes**  
 A. Top cows  
 B. Above average  
 C. Below average  
 D. Marginal cows  
 E. Bottom cows

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  - C. \$500.00
  - D. \$1,000.00

## 2022 Virginia FFA Dairy Cattle Evaluation & Management CDE Written Exam

**36. What is the name of the waxy substance produced by cells lining the teat canal that serves as a plug between milkings and aids in reducing penetration by microorganisms?**

- A. Keratin
- B. Milk stone
- C. Myoepithelium
- D. Oxytocin

**37. What contagious disease is caused by a fungus and can be easily spread to other animals?**

- A. Blackleg
- B. Pinkeye
- C. Ringworm
- D. Warts

**38. What is the use of technologies to measure physiological, behavioral, and production indicators on individual animals to improve management strategies and farm performance called?**

- A. Advanced farm management
- B. Biosecurity
- C. Precision dairy farming
- D. Robotics

**39. What is the name of the respiratory disease that cattle often develop after being transported by rail?**

- A. Bang's disease
- B. Bovine viral diarrhea
- C. Infectious bovine rhinotracheitis
- D. Shipping fever

**40. How much does a bushel of corn weigh?**

- A. 23 pounds
- B. 32 pounds
- C. 48 pounds
- D. 56 pounds

*For questions 41-50, use the cow information provided for the exam. The last test day was July 20, 2022. The report was generated on July 25, 2022.*

**41. How many cows are currently dry?**

- A. 3
- B. 5
- C. 7
- D. 8

**42. How many cows have been diagnosed open?**

- A. 2
- B. 3
- C. 16
- D. 21

**43. Which cow has the highest Mature Equivalent (ME) milk?**

- A. 1
- B. 17
- C. 19
- D. 24

**44. Which cow has the most desirable Estimated Relative Producing Ability (ERPA)?**

- A. 1
- B. 2
- C. 23
- D. 24

**45. How many cows have been labeled as cows not to be bred?**

- A. 1
- B. 3
- C. 11
- D. 12

**46. How many cows are expected to calve in September?**

- A. 4
- B. 5
- C. 6
- D. 8

**2022 Virginia FFA Dairy Cattle Evaluation & Management CDE Written Exam**

**47. How many cows had somatic cell count scores of 6.0 or higher on the most recent test?**

- A. 2
- B. 3
- C. 5
- D. 8

**48. Which cow had the highest fat percent on the most recent test day?**

- A. 4
- B. 6
- C. 12
- D. 34

**49. Which lactating cow has produced the most milk during the current lactation to date?**

- A. 4
- B. 8
- C. 13
- D. 27

**50. How many pregnant cows required three or more services to become pregnant?**

- A. 0
- B. 3
- C. 4
- D. 9