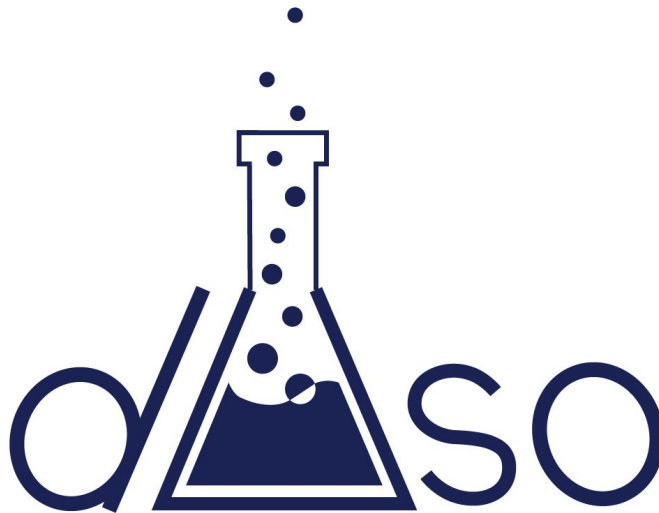


Anatomy and Physiology - Division C Answer Sheet

Duke University Science Olympiad Invitational 2020

January 18, 2020



Written by Sophia Velasco, University of Florida, B.S. Biochemistry 2023

Team Number: _____

Team Name: _____

Overall Score: _____/316

Ranking: _____

Instructions and Clarifications:

- You have **50** minutes to finish this exam.
- Each team may bring **one** 8.5" x 11" two-sided page of information in any form from any source and **two** non-programmable non-graphing calculators.
- You **may** split the exam but you are responsible for placing the exam in the proper order after the testing session.
- Anything written on the exam will **not** be graded. Only the **answer sheet** will be graded.
- Write your **team number** on every page of the **answer sheet**.
- There are **5** tiebreakers in this exam. They are denoted as **TB#**.
- If you have any questions or comments about the exam, feel free to reach me at velasco.scienceolympiad@gmail.com. **Happy testing!**



Team Number: _____

I. Integumentary System

Multiple Choice: Each question is worth **one** point.

- | | | |
|----------|-----------|-----------|
| 1. _____ | 8. _____ | 15. _____ |
| 2. _____ | 9. _____ | 16. _____ |
| 3. _____ | 10. _____ | 17. _____ |
| 4. _____ | 11. _____ | 18. _____ |
| 5. _____ | 12. _____ | 19. _____ |
| 6. _____ | 13. _____ | 20. _____ |
| 7. _____ | 14. _____ | |

Short Answer: Each question is worth **one** point.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Pathology Part I: Each question is worth **one** point unless otherwise stated.

1. _____ **TB#1**
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



Team Number: _____

Labeling: Each letter is worth **one** point.

1.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____

- I. _____
- J. _____
- K. _____
- L. _____
- M. _____
- N. _____
- O. _____
- P. _____

2.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____
- K. _____
- L. _____
- M. _____

- N. _____
- O. _____
- P. _____
- Q. _____
- R. _____
- S. _____
- T. _____
- U. _____
- V. _____
- W. _____
- X. _____
- Y. _____

Points in this page: _____



Team Number: _____

Diagram-based Questions: Each question is worth **one** point unless otherwise stated. **TB#2**

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Pathology: Each question is worth **one** point unless otherwise stated.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Points in this page: _____



Team Number: _____

II. Skeletal System

Multiple Choice: Each question is worth **one** point unless otherwise stated.

- | | | |
|----------|-----------|-----------|
| 1. _____ | 8. _____ | 15. _____ |
| 2. _____ | 9. _____ | 16. _____ |
| 3. _____ | 10. _____ | 17. _____ |
| 4. _____ | 11. _____ | 18. _____ |
| 5. _____ | 12. _____ | 19. _____ |
| 6. _____ | 13. _____ | 20. _____ |
| 7. _____ | 14. _____ | |

Short Answer: Each question is worth **one** point unless otherwise stated.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Pathology Part I: Each question is worth **one** point.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____



Team Number: _____

Pathology Part II: Each question is worth **one** point unless otherwise stated. **TB#3**

1. _____
2. _____
3. _____
4. _____
5. _____

6. _____
7. _____
8. _____
9. _____
10. _____

Labeling: Each letter is worth **one** point.

1.
A. _____
B. _____
C. _____
D. _____
E. _____
F. _____
G. _____
H. _____
I. _____
J. _____
K. _____

- L. _____
M. _____
N. _____
O. _____
P. _____
Q. _____
R. _____
S. _____
T. _____
U. _____

2.
A. _____
B. _____
C. _____
D. _____
E. _____
F. _____
G. _____
H. _____
I. _____
J. _____
K. _____
L. _____

- M. _____
N. _____
O. _____
P. _____
Q. _____
R. _____
S. _____
T. _____
U. _____
V. _____
W. _____
X. _____

Points in this page: _____



Team Number: _____

III. Muscular System

Multiple Choice: Each question is worth **one** point.

- | | | |
|----------|-----------|-----------|
| 1. _____ | 9. _____ | 17. _____ |
| 2. _____ | 10. _____ | 18. _____ |
| 3. _____ | 11. _____ | 19. _____ |
| 4. _____ | 12. _____ | 20. _____ |
| 5. _____ | 13. _____ | |
| 6. _____ | 14. _____ | |
| 7. _____ | 15. _____ | |
| 8. _____ | 16. _____ | |

Short Answer: Each question is worth **two** points. **TB#4**

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Classification: Each question is worth **one** point.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Points in this page: _____



Team Number: _____

Labeling

1.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____
- K. _____

- L. _____
- M. _____
- N. _____
- O. _____
- P. _____
- Q. _____
- R. _____
- S. _____
- T. _____
- U. _____

2.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____

- I. _____
- J. _____
- K. _____
- L. _____
- M. _____
- N. _____
- O. _____

3.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____



Team Number: _____

Diagram-based questions: Each question is worth **one** point unless otherwise stated. **TB#5**

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Pathology: Each question is worth **one** point.

Part A

1. _____
2. _____
3. _____
4. _____

Part B

5. _____
6. _____
7. _____
8. _____

Points in this page: _____