Rochester Institute of Technology
Department of Computer Science

Advanced C++ Programming and Design

Fall 2013

Travis E. Brown # Midterm

Score: _____ / 105

Name: _____ DCE Login: _____

Long Answers Questions

Answer the questions in the spaces provided on the question sheets. If you run out of room for an answer, continue on the back page.

1. (8 points) Question 2

2. (10 points) If you had to maintain an unsorted collection of data, and you had to insert and remove elements from the middle of the collection, what container would you chose, and why?

3. (10 points) What if there were no air?
   (a) (5 points) Describe the effect on the balloon industry

   (b) (5 points) Describe the effect on the aircraft industry

4. (10 points) Foooo

5. (14 points) Complete the following truth table

P	Q	P&&Q	P||Q	!P	!(P&&Q)	!P||!Q	!(P||Q)	!P&&Q
T	T							
T	F							
T	T							
F	F							

6. (20 points) delete

Short Answer Questions

Write the correct answer in the space provided next to the question. Answers that are not legible or not made in the space provided will result in a 0 for that question.

7. (2 points) When did the Cretaceous peroid end?

7. _____

8. (2 points) What is the answer to life, the universe, and everything?

8. _____

9. (2 points) In what year did Apollo 11 go to the moon?

9. _____

10. (2 points) What... is the air-speed velocity of an unladen swallow?

10. _____

11. (2 points) How long does it take for light to travel from the Sun to the Earth?

11. _____

12. (2 points) How old do you have to be to drink (legally) in the US? In Canada?

12. _____

12. _____

True/False Questions

Circle either 'True' or 'False' at the begging of the line. If you make an incorrect mark, erase your mark and clearly mark the correct answer. If the intended mark is not clear, you will receive a 0 for that question

13. (1 point) [**True / False**] Dogs are better than cats in every way.

14. (1 point) [**True / False**] The sun appears bigger in the sky because it is closer than the moon.

15. (1 point) [**True / False**] A woodchuck CAN chuck wood.

Matching Questions

Match the selection on the left with the best answer on the right. Answers that are not legible or not made in the space provided will result in a 0 for that question.

16. (8 points) Match the captical city to the state

    A. Harrisburg   _____   New Jersey

    B. Albany   _____   Massachusetts

    C. Boston   _____   New York

    D. Trenton   _____   Pennsylvania

Multiple Choice Questions

Write the *best* answer in the space provided next to the question. Answer that are not legible or not made in the space provided will result in a 0 for that question.

17. (2 points) What class would you use to read data from stdin?

    A. istream

    B. ffstream

    C. ifstream

    D. ostream

    E. ofstream

17. _____

18. (2 points) What class would you use to read data from a file?

    A. ofstream

    B. ifstream

    C. ostream

    D. ffstream

    E. istream

18. _____

19. (2 points) When is it ok to use enemy functions in a class definition?

    A. always

    B. when you feel like it

    C. sometimes

    D. on occasion

    E. when the moon is full

19. _____

20. (2 points) When is it ok to use friends functions in a class definition?

    A. not right

    B. Never

    C. other

    D. still wrong

    E. wrong

20. _____

21. (2 points) What class would you use to write data from stdout?

      A. ostream

      B. ffstream

      C. ifstream

      D. istream

      E. ofstream

21. _____

Bonus Questions

22. (2 bonus points) The city of Tumbuktu is in what country?

      A. Mali

      B. There is no such city

      C. France

      D. Morocco

      E. Mauitania

22. ⎯⎯⎯⎯⎯⎯⎯⎯

23. (2 bonus points) A library gained fame by moving which celebrity's book from non-fiction to fiction in 2012?

      A. Lance Armstrong

      B. Beyonce

      C. Mitt Romney

      D. Crocodile Dundee

      E. Rupert Murdoch

23. ⎯⎯⎯⎯⎯⎯⎯⎯

24. (2 bonus points) What is the answer to life, the universe and everything?

24. ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯