NAME

Lab TA

Introduction to Oceanography, EPSS15, EXAM #111111 Practice Final Exam, Spring 2017

Instructions

- 1. PRINT your name on BOTH the cover sheet of this exam and on the SCANTRON form. Put your student ID # on the SCANTRON, and put the exam number from the top right corner of this page in the "Special Code" blanks as well.
- 2. PRINT your lab TA's name (or your section letter) on BOTH this exam and somewhere in the white space in the upper right-hand corner of your SCANTRON
- 3. You will have at least until 10:45am to answer the questions. For multiple choice questions, mark the best answer on the SCANTRON. Answer free-response questions directly in the exam booklet.
- 4. You must turn in the exam and SCANTRON form at the end of the exam period. You may be asked to show your ID.
- 5. Scores (already curved) will be posted on the online gradebook a week or so from now. Exams will be available to pick up from your TA after Finals Week.

## Oceanography EPSS15, Final Exam,

- 1. \_\_\_\_\_ has the highest heat capacity.
  - a) Air
  - b) Granite
  - c) Aluminum foil
  - d) Beach sand
  - e) Liquid water
- 2. The San Andreas Fault is an example of what type of plate boundary?
  - a) Divergent.
  - b) Transform.
  - c) Convergent.
  - d) All of the above.
  - e) None of the above.
- 3. Which of the following sediments precipitates directly from seawater?
  - a) Terrigenous sediments.
  - b) Biogenous sediments.
  - c) Androgenous sediments
  - d) Hydrogenous (or authigenic) sediments.
  - e) Cosmogenous sediments.
- 4. To avoid predation, plankton commonly \_\_\_\_\_\_ diurnally or seasonally.
  - a) cement themselves to the substrate
  - b) swim to polar latitudes
  - c) burrow into the sediment
  - d) migrate to deep water
  - e) rapidly change color
- 5. \_\_\_\_\_ form the base of the open ocean food chain.
  - a) Juvenile fishes
    - b) Primary consumers
    - c) Benthos
    - d) Phytoplankton
    - e) Zooplankton
- 6. Kelp forest ecosystems tend to be found
  - a) in cool, nutrient-rich coastal parts of the temperate oceans.
  - b) in cool, nutrient-poor coastal parts of the temperate oceans.
  - c) in warm, nutrient-rich coastal areas in the tropics.
  - d) in warm, nutrient-poor coastal areas in the tropics.
  - e) offshore of mangrove forest communities.
- 7. The average depth of the oceans below sea level is closest to
  - a) 660 km
  - b) 7 km
  - c) 3.7 km
  - d) 1,000 m
  - e) 150 m

- 8. Which of these is an important record of past climate?
  - a) Ice cores
  - b) Tree rings
  - c) Thermometer readings
  - d) Foraminifer shells
  - e) All of the above

## 9. The continental crust is typically \_\_\_\_\_ and \_\_\_\_\_ than oceanic crust.

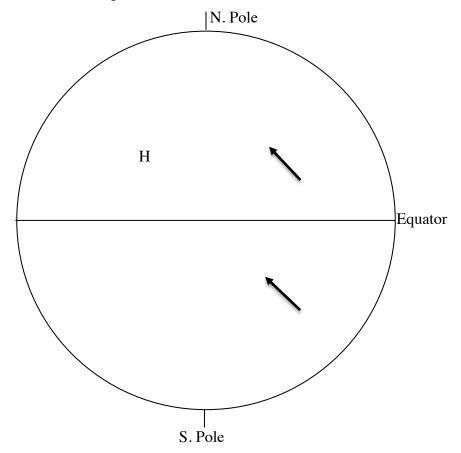
- a) thicker ... less dense
- b) thinner ... denser
- c) thinner ... less dense
- d) thicker ... denser
- e) lower in fat ... lower in carbohydrates
- 10. This kind of animal changes color to match its surroundings.
  - a) Tuna
  - b) Sea urchin
  - c) Bivalve
  - d) Sea otter
  - e) Octopus

11. The Earth's lithosphere is comprised of roughly \_\_\_\_\_ large-scale rigid plate(s).

- a) 2-4
- b) 10-20
- c) 300-500
- d) 5000-6000
- e)  $4.6 \times 10^9$

## Answer the remaining questions in the space provided below.

- 12. Name a major type of plankton that generates a toxin that affects other organisms in the ocean.
- 13. What types of organisms are most strongly affected by this toxin?
- 14. On the map, below, the arrows indicate currents heading in an arbitrary direction in each hemisphere. Draw an extension to the arrow in the *southern* hemisphere showing the effect of Coriolis acting on that current.



- 15. During a new moon, will we have a spring tide or neap tide?
- 16. In a few sentences, explain why is the tide unusually weak, or unusually strong, during the new moon.

Multiple choice answers: 1-e, 2-b, 3-d, 4-d, 5-d, 6-a, 7-c, 8-e, 9-a, 10-e, 11-b