Arch 464 ECS Final Take-Home Exam Spring 2020

Five Multiple Choice Questions that require complete essay answers. Explain (1) why the chosen answer in *italic boldface* type is correct and (2) why the others are not. Each question is worth 4 points, if answered correctly and completely. **Due Wednesday, May 13 at noon.** 

- 1. The most constant and available source of site-generated energy is
  - A. the sun
  - B. the wind
  - C. running water (e.g., brook, stream, river)
  - D. none of the above is constant and available for all sites
- 7. You hear a sound from a dinner bell that measures 5dBA. How much further from the bell can you roam and still be able to hear it?
  - A. not one step further
  - B. not quite twice as far
  - C. twice as far
  - D. four times as far
- 14. The type of room that is most likely to have a significant free field
  - A. is a lively room for symphonic performance
  - B. is a classroom for elementary school
  - C. is a large dead space
  - D. a fast food restaurant
- 19. A technique to accurately predict the quality of a planned auditorium is
  - A. by auralization
  - B. by using a small physical scale model
  - C. by simple ray tracing
- D. by using a sophisticated 3-D computer model
- 20. What acoustic issue properly explains the cartoon to the right?
  - A. structure-borne sound
  - B. free field acoustics
  - C. acoustic independence
  - D. sound absorption and reflection

