<table>
<thead>
<tr>
<th>Question</th>
<th>Points</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 1        | 2/20   | -18 points: the answers for part a and part b of this question can be found using Knovel and finding chapter 9.10.4 in *Temporary Demountable Structures - Guidance on PProcurement, Design and Use* (using keywords like design, wheelchair, and ramp). The correct answers are:  
  a. Absolute maximum angle = 1:12, recommended angle = 1:15  
  b. Ideal width = Between 1.0m and 1.3m (check your units!)  
   +2 points: the citation for the source you did use is correct |
| 2        | 24/20  | +4 points: For additional info for question 2b. |
| 3        | 20/20  |       |
| 4        | 20/20  |       |
| 5        | 20/20  |       |

Extra Credit:  

Missed Points:  

Final Score: 86

Additional Comments:
Green Team Section A  
(Catalina Romero, Cody Moose, Cristian Martinez-Herrera, Daniel Chen, Janice Moya, Lila Wine, Matthew Stringfellow, Praj Tumkur Mahesh, Salma Islam, Sophia Cheung)

1. You are volunteering with a local group that is making a public park more accessible to wheelchair users during a community celebration. You’ve been tasked with building a temporary access ramp and need to be sure your ramp meets certain design requirements. You think a handbook may have information to help you answer the following questions:
   a. What is the maximum angle for ramp: 4.76 degrees (8.33% grade)  
   b. What is the recommended/ideal angle for ramp: 4.28 degrees (7.5% grade)  
   c. What is the ideal width for ramp: 36”

2. It would be helpful to get some statistics on the size of the online greeting card sales industry in the United States
   a. What is the revenue in $ of the online greeting card sales industry in the United States in 2021? $1.3 Billion  
   b. What specific company has the largest market share within this industry? Hallmark Cards Inc. has an 8.7% market share

3. You need to find a partner to help develop and commercialize (hopefully) your new idea for a civic organization. An industry expert has suggested to you that Rotary International might be a potential partner. Before contacting them, learn more about Rotary International.
   a. The year when the company was founded or incorporated (or changed ownership): 1905  
   b. The address of their headquarters: One Rotary Center 1560 Sherman Avenue, Evanston, IL 60201-3098  
   c. Total number of employees worldwide (i.e., all sites, if possible): 800  
   d. Latest revenue (sales) figures: $503,370,000 (USD, Fiscal Year End 06.30.2018)  
   e. What is US 8-Digit SIC (Standard Industrial Classification) code for their primary industry? 86410100

4. You would like to learn more about water treatment, and you know that the right book can provide a good summary on this topic. Use the resources found on the 2.009 Guide (https://libguides.mit.edu/2-009) to answer the following questions:
   a. Find a general book on water treatment, available in the MIT Libraries. Provide a good citation for the book, including the library call # at the end of the citation and which library has the item (Dewey, Rotch, Barker, etc.) or if it is an eBook.  
   b. To find more specific information, you want to read a scholarly article on the narrower topic of water treatment using solar energy.  
      1. Use a database to search for an English language journal article on this topic published in 2010-2021. Provide a good citation for the article, and include the bibliographic database you used to find the citation.  
2. Does MIT have a print subscription to this journal for the year that the article was published? If Yes, in which library is it held? Does MIT have access to an electronic version of this article?
   No print subscription, no electronic access.

5. You want to make sure your design or project idea is unique before you take it to a company or customer for production. Check the patent literature, and find one granted (not an application) United States utility patent for a captioned telephone system.
   a. What is the patent title? Captioned Telephone Service
   b. What is the patent number? (Tip: numbers starting with D, e.g. D593812, are design patents, not utility patents. Numbers starting with the year, e.g. US20060201950, are applications, not granted patents) 10 587 751 B2 (3)
   c. Who is the assignee? The inventor? Assignee: Ultratec, Inc. - Inventors: Engelke, Robert M; Colwell, Kevin R; Vitek, Troy D
   d. Provide at least one classification code assigned to this patent (number and name, example: 446/486: Amusement Devices: Toys/ Resilient toy or actuator, OR A63F9/00: Sports;Games;Amusements: Card, board or roulette games; indoor games using small moving playing bodies, miscellaneous games: games not otherwise provided for): USPC 379: Telephonic Communication
   e. Where did you find this patent/what database did you use? PatentScout through MIT Libraries
References:

(For Question 1:)
Available: https://www.access-board.gov/files/aba/guides/ramps-ABA.pdf

(For Question 2:)
[Accessed: 15-Sep-2021].

(For Question 3:)
D&B Hoovers, Rotary International, https://app.avention.com/company/7a99834a-9a93-3b86-a067-5b2e60d8f93a#report/company_summary
(Accessed 9/15/2021)

(For Question 4:)
TD430.W368 2010, Barker Library.

(For Question 5:)
[Accessed: 15-Sep-2021].