**PART A**

**11.) List the areas of knowledge necessary to practice biomedical engineering.**

Successful biomedical engineers have a firm mental grasp and understanding in the fields of biology, chemistry, robotics, mathematics, statistics, and data analysis, as well as engineering disciplines in the fields of chemistry, mechanics, electric behavior, and software, among others.

**Identify where in the normal educational process one can acquire knowledge.**

Although many pursue higher education as the primary means for obtaining directed knowledge, it can be acquired at any part of the normal educational process, so long as there is interest.

**How best can administrative skills be acquired.**

Administrative skills are best acquired through social interaction, observation of those in current administrative positions, and experience in managing people in project-directed groups.

**19.) What is your view regarding the role biomedical engineers will play in the health care system of tomorrow?**

Constant progress in biomedical engineering and the utilities produced thereby will lead to a decrease in human error in terms of medical treatment, as well as more reliable medical care services brought about by the relative lack of upkeep necessary to keep machines running. It will also lead to those permanently impaired having more equity with their peers because of advanced prosthetics.

**PART B**

1. **Using the search engine http://www.indeed.com search for a biomedical engineering job in a region of your choosing.**

I searched in New York City.

1. **Select a job you find interesting. What is the job title, which company is it with, and where is it?**

Contracted Biomedical Design Engineer for Engineering Resource Group, Inc. in Mahwah, New Jersey.

1. **What is the position description?**

Contract position for a biomedical engineer or mechanical engineer to expedite work related to medical device DHF remediation.

1. **What are the position responsibilities?**  
   Review, build and edit technical files and design control documents for medical devices with integrated hardware and software in accordance with QMS system.   
   Prepare and review design verification test protocols, procedures and reports.   
   Drive risk management file activities and updates inclusive of hazard analysis and DFMEAs and the inform risk management approach for engineering.   
   Assist engineering in the compilation of design history files to align with ISO 13485, ISO14971 Risk Management and IEC 60601 or other applicable USFDA and EUMDD regulations.   
   Assure all applicable quality decisions are derived from the appropriate risk management document in accordance to the QMS Qualifications.
2. **What are the basic requirements/qualifications for this job?**

BS in Mechanical Engineering or Biomedical Engineering   
Minimum 5 years of experience working in medical device DHF (design history file) assurance.   
Experience in product & process development.   
Proficient with medical device product and process risk management as well as regulations and standards under USFDA and EUMDD.   
Technical skills in test method development and validation.

1. **What (if any) are the desired or preferred qualifications for this job?**

**N/A**