

Answer the following questions.

(A)- Mark the following statements true or false (*According to the lessons you studied throughout this semester*). (10Marks)

- 1- Engineering has nothing to do with thinking, analyzing, and solving problems.
- 2- Engineering is just about Math and Science. It does not include any other communication skills.
- 3- Engineering is a flexible field where there are lots of different job opportunities.
- 4- Engineering is not a good field for women because there are so many barriers in practice and academics.
- 5- Biomedical engineers neither analyze nor design solutions to problems in biology and medicine.
- 6- Biomedical engineers do care about improving the quality and effectiveness of patient care.
- 7- Civil engineers work with life scientists, chemists, and medical scientists to research the engineering aspects of biological systems of humans and animals.
- 8- Facebook was only offered to Harvard students and it did not expand to Stanford, Columbia, Yale and many other universities across the U.S and Canada.
- 9- Social media cannot enable students to easily contact each other with regards to school projects and assignments.
- 10- Technology has caused a major reduce in waste, and lower costs for the consumers.

(B)- Read the following passage then answer the questions below.(10 Marks)

There has been much debate on whether the effects of technology on society as a whole have been beneficial or not. Arguments are heated on both sides, but in order to truly develop your own opinion, you have to hear them both out.

The Pros of Technology

1. Improves Efficiency For Business:

Things like computers, email, and the internet have all greatly impacted society, but perhaps most of all, business. Things can be done almost instantly with the use of technology.

2. More Job Opportunities:

Technology has created an immense amount of new jobs in our world's economy. An entirely new group of people are needed to work with, develop, and maintain all of the new technology in homes and the workplace.

3. Better Communication:

Staying in contact is easier now than it has ever been. You can talk to, video chat with, or collaborate with anybody in the entire world. This has created amazing things, and a better understanding of other cultures.

4. Incredible Medical Care:

A lot of new technology is constantly being developed for the medical field. Surgical procedures and every day functions have been made so simple and efficient that the level of sickness and accidents have decreased significantly.

The Cons of Technology

1. A Social Divide:

Technology is expensive, and keeping up with the latest trends is almost impossible for someone who isn't in the upper class. This has caused a major social divide among the population of people who can and cannot afford these technologies.

2. A Generation of Laziness:

With everything made easier, or completely done for us, through the use of technology, people are slowly but surely forgetting how to do things the old fashioned way...good old hard work. You no longer have to pull out the dictionary or visit the library if you want information, you can simply type in a question and get an answer. This is also true for children, they are becoming more and more focused on things like the internet and video games that they are spending much less time outside and being active.

3. Quickly Becomes Obsolete:

The more that technology advances, the faster new and more efficient versions are designed. This is a

problem because you may have the newest and best piece of technology, but it will become obsolete in very little time. It is causing our landfills to be filled up with no longer used computers, cell phones, and other things that are damaging to the environment.

- 1- What is the main idea discussed in this passage?
- 2- What do the terms Pros and Cons mean?
- 3- According to this passage what could be the most beneficial effects of technology on society? What could be its worst effects?
- 4- Please, give some examples of modern means of technology.

(C):Choose the correct answer for each sentence of the following(10 Marks)

- 1- What you see here is obviously an occupying space. Therefore, it is some form of..... (material-matter-object).
- 2- It is neither animal nor vegetable. Therefore, it must be (organic- Unorganic- inorganic).
- 3- It has no ability to perform work. It has no(energy- capacity-force).
- 4- To study the effects of this action, we will employ the branch of Physics and Engineering known as.....(Mechanics- Mathematics- Arithmetics).
- 5- A quantity which may have numerous different values is known as.....(variable-vector-infinite series).
- 6- Dynamics is a branch of(Mathematics- Physics- Mechanics).
- 7- Both gases and liquids are classified as.....(solid bodies- Fluids- deformable bodies).
- 8- Thermodynamics is science that studies the relationship between heat and(mechanical work - electrical power- chemical energy).
- 9- Our(turnover- operations- workers) this year will be about 500 dollars.
- 10- We are thinking of changing our raw material (suppliers- operators- craftsmen).

(D)- Write short notes on the following(5 Marks)

- 1- A definition of the term Engineering.
- 2- The different fields of Engineering.
- 3- Other skills besides Math and Science any engineer should have.
- 4- The common characteristic feature between the different fields of Engineering.

(E)- Write an essay on ONLY TWO of the following topics(15 Marks)

- 1- What are the qualifications any student needs to become a biomedical engineer? Make a job description of Biomedical Engineering profession.
- 2- Like any other technological innovation social media has its own share of advantages and disadvantages. How far do you agree with this statement? Support your answer with a specific reference to the pros and cons of social media for students.
- 3- How did facebook develop historically till it became the one we know today? Who is Zuckerberg? What was the main accusation launched against him? By whom? Are you familiar with other "social networks?" Would you please give examples? Which one do you think is as popular as Facebook? Why? Why not? On a personal level, how is the story inspiring for you?

All The Best! ☺