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| **Name:** Camba, Michael C. | **STS – FINAL EXAM PART B** |
| **Course/Yr/Section:** BSIT 4-2 | **Instructor:** Ezekiel U. Manuel |

1. **Analyze the impact of Science and Technology on the lives of Filipinos.**

Science and technology have had a significant impact on the lives of Filipinos, particularly when the pandemic began and the country was placed on lockdown. Many things have changed as the pandemic has progressed, including how Filipinos work and live, as well as how technology has rapidly improved over time.

Science and technology have made Filipinos' lives easier by improving communications, developing new medical technology that can treat anyone more quickly, providing easier access to instructional materials and resources via online learning platforms, opening up a lot of opportunity in the technology industry, which has greatly helped a lot of Filipinos to make their own living and expenses, and much more. These factors have resulted in numerous developments throughout the country, as well as increased productivity and profits in the industry and economy. Aside from that, science and technology have helped not only the industry and economy, but also agriculture in the Philippines. Farmers can now use agricultural techniques to increase crop yields and reduce waste. Furthermore, with the assistance of new technology, weather forecasts and other data can now be used to make smart planting and harvesting decisions, assisting farmers in determining what or when the best conditions are for them to produce good crops. As a result of these developments, productivity and profitability have increased not only in industry and the economy, but also in agriculture in the Philippines, which is an important sector of the economy.

On the other hand, it’s undeniable that science and technology also help not only the workers here in the Philippines but also a lot of students, in which science and technology had a significant impact on Filipino education, wherein the instructional materials and resources are much easier to access by students right now thanks to online learning platforms and educational apps, which were implemented all over the country when the pandemic started. Remote learning became the key for the students to learn, allowing every student to receive a great education without having to travel large distances, allowing them to not only exhaust themselves but also protect themselves from the COVID-19 virus.

**2. What role does humanity have in anticipating the future?**

As technology advances in the present, some humans are relying on their lives to predict what will happen by the end of the day with the help of new technologies. Aside from that, humanity plays an important role in anticipating the future. Though no one can predict the future with certainty, humans can use their insight, expertise, or intelligence to anticipate possible scenarios and prepare themselves accordingly. Also, humans might anticipate the future by imagining alternative futures that they could think of and exploring the implications of different scenarios.

In addition to foresight thinking and developing a unified vision for the future, humans play a role in future preaparation. This includes building resilience and adapting to change. As the world becomes more complicated and interconnected, we must be prepared for unexpected events and disruptions. By investing in education, innovation, and infrastructure, we can create a more flexible and resilient society that is better prepared to face future challenges

Aside from that, humanity plays an important role, especially since natural disasters are unpredictable and can cause widespread devastation. Humans should be prepared for underlying dangers that might happen in the future. When such disasters occur, humanity should develop technologies that can predict the future and save many lives in order to lessen the damage.

Finally, humanity’s role in future predictionn is to be proactive and deliberate in our decision-making. We can improve the world for ourselves and future generations by considering the cosequences of our actions, developing a shared vision for the future, and planning for change so that we can survive any future disasters. Furthermore, every decision humans make has a significant impact on the world, from personal decisions to social policies. As a result, we must anticipate the likely consequences of our actions and make decisions that will lead to a brighter future.

**3. What effects does the information age have on society?**

As the pandemic began, technologies also began to advance, making it easier to access information from anywhere around the world. Technology has transformed the way individuals communicate, work, and interact with one another. Therefore, the information age has had a tremendous impact on society.

People started to have deeper knowledge and use some technology to its fullest potential, which made them able to access information from anywhere in the world, communicate with others across borders and time zones without worrying about the methods of how they convey their messages, and also create a lot of opportunities for humanity because of the availability of information and also with the help of technologies.

Also, one of the biggest effects of the Information Age has been the democratization of knowledge. More people now have access to information than ever before because to the internet and other digital technologies. Massive amounts of information on any subject are now available to anybody at any time and from anywhere in the world. The way we learn has been transformed as a result, and new forms of education and learning, like online classes and virtual classrooms, have emerged.

But, on the other hand, the Information Age has also introduced new challenges and dangers. Fake news and misinformation have become widespread due to the abundance of information available on the internet, and they can have a significant impact on individuals and society as a whole. New forms of cyberbullying and online harassment have emerged as a result of the expansion of social media, and these behaviors can significantly affect mental health and wellbeing.

Although technology helps many individuals in various ways, such as by making communication easier, possibilities are now more available and make it simpler for students to study as a result. Every person should be aware of the repercussions of accessing all available information, and it is essential that people or organizations collaborate in order to resolve these problems and ensure that no one is harmed by the benefits and potential of technology.

**4. In what ways do the information age and social media affect the lives of humans?**

With the rise of social media, modern technology have altered how people engage and communicate with one another, making it simpler for people to express themselves. There is no denying that the rise of social media and the digital age have significantly impacted human life.

Many people today rely on social media to create a living because it is the popular platform for showcasing their abilities, expertise, and skills. Because of innovations like smartphones and social media platforms, a lot of doors have opened and people can now communicate with others from anywhere in the world. This caused the majority of people to become dependent on modern technology, base their daily activities on the knowledge they can read and receive, and use social media to stay in touch with friends and family.

On the other hand, the constant connectivity and flood of information can be overwhelming, resulting in exhaustion and information overload. It might be tough to focus and be present in the moment when there are constant messages and updates wherein social media and the Information Age have affected communication as well as mental health and wellbeing. Social media can increase a person's sense of support and belonging, but it can also make them feel more alone and isolated. According to research, excessive social media use is associated with mental health illnesses like anxiety, depression, and others.

Overall, the phrase "anything in excess may be bad sometimes" also applies to our usage of social media and the information age, which could negatively impact our lives in a variety of ways if we misuse them. Everyone needs to be mindful of the effects of every choice they make and action they take, especially while utilizing any information or social media platforms, even if the information age and social media have had a significant impact on people's lives, whether in a positive or negative way.

**5. In the past, mass extinction facilitated new growth, including the evolution of our species. Do we presume that a second mass extinction would be undesirable? Could it potentially be advantageous for us? to the globe?**

Throughout Earth's history, mass extinctions have been a crucial factor in the evolution of life. They have opened up space for new development and provided chances for species to adapt and change. Yet, it is still unclear if a second mass extinction would be preferable or advantageous for us and the planet.

A second major extinction event would almost probably be disastrous for many species and ecosystems as technology develops and new research are released that can be beneficial to people and the environment. If we look across the world, when one nation had unforeseen natural disasters, many lives were lost and it will take a long time for the nation to recover, such as for example, the latest natural disaster that have happened in Turkey-Syria wherein a magnitude of 7.8 earthquake occurred which killed three people and injured 213 in southern Turkey. This kind of natural disaster could lead to a decrease in the availability of crucial ecosystem services like air and water purification.

A significant extinction catastrophe could also have a negative effect on human welfare. The provision of food, medicine, and other necessities for human survival may be affected by the loss of biodiversity. It might also lead to the spread of illnesses and the disintegration of social and economic systems. Additionally, ecosystems that have been destroyed by human activities may be restored as a result of a major extinction event. A global extinction event may encourage the emergence of new species that are better suited to the transforming environmental conditions by creating new biological niches.

Yet, it is important to emphasize that a second big extinction catastrophe is not desired. Even though there’s a lot of new technologies and advance science which might help the humanity to go extinct, the ecosystem may still collapse and biodiversity loss would have a significant negative impact on both human and environmental well-being. The primary causes of biodiversity loss and climate change, such as habitat degradation, pollution, and climate change, should be focused on instead. By taking steps to address these issues, we can build a future that is more resilient and sustainable for both ourselves and the world.

**6. List and discuss the uses and effects of genetically modified organisms (GMOs) and gene therapy on society, focusing on health and the economics.**

Gene therapy and genetically modified organisms (GMOs) have grown in popularity in recent years, with a variety of applications and social impacts. In agriculture, genetically modified crops have been designed to boost crop yields, resistance to pests and diseases, and the need for toxic pesticides. This is one prominent application of GMOs. Gene therapy has been used in the medical field to cure a number of genetic illnesses by replacing or changing deficient genes, giving hope to those who previously had few treatment options.

On the other side, there are also worries over the dangers and unfavorable outcomes of gene therapy and GMOs. GMO detractors, for instance, contend that these organisms may have unforeseen effects including the emergence of superbugs and the transmission of resistance genes to other species. Potential dangers associated with gene therapy include immunological reactions to the inserted genes and off-target consequences.

Economically speaking, GMOs have benefited farmers by lowering crop losses and raising yields, which has resulted in increased earnings. Concerns have been expressed concerning small-scale farmers in underdeveloped nations having access to these technologies due to the high expense of R&D and patent protection for GMOs. On the other hand, gene therapy is a relatively young subject that involves expensive research and development expenditures as well as challenging regulatory approval procedures. Due of this, gene therapy has had a tough time becoming generally accessible to patients, especially in nations with poor healthcare resources.

In conclusion, gene therapy and GMOs have the potential to be very beneficial to society, especially in terms of enhancing agricultural production and curing genetic illnesses. However there are also possible hazards and worries, such unintended repercussions and restricted use of certain technologies by specific communities. As a result, it is critical to keep vigilantly assessing and regulating the usage of these technologies to guarantee their efficacy and safety for both human health and economic growth.

**7. Discuss the moral and bioethical issues of genetic engineering.**

Many moral and bioethical issues have been brought up by the area of genetic engineering, many of which center on the idea of "playing God" by altering the genetic make-up of living things. The possibility of unintended repercussions from the introduction of genetically modified organisms (GMOs) into the environment, such as the risk of upsetting native ecologies and posing new health hazards, is a significant problem. Concerns have also been raised about how genetic engineering can intensify already-existing societal injustices by inventing new types of prejudice or favoring some groups over others.

The use of CRISPR-Cas9 technology to alter the genomes of human embryos, the development of genetically altered mosquitoes to stop the spread of diseases like Zika and dengue fever, and the creation of crops that are resistant to pests or drought are just a few recent examples of genetic engineering that have sparked ethical debate. These instances emphasize the necessity of giving serious thought to the advantages and disadvantages of genetic engineering as well as the significance of ensuring that these technologies are applied in an ethical and responsible way.

The possibility for genetic engineering to be utilized for eugenic goals, such as selecting for particular features or attributes in human embryos, is another significant ethical concern. This calls into question the limits of reproductive liberty and the possibility of genetically-based prejudice towards particular people or groups. Concerns concerning the commercialization of genetic engineering also include the possibility of profit driving scientific advancement and the patenting of genetic material.

In general, genetic engineering raises complicated, wide-ranging ethical and bioethical challenges. Although these technologies have a lot of potential for solving a variety of social and environmental problems, it is crucial to take into account any dangers and unexpected effects and to make sure that their development and usage are guided by moral and ethical standards.

**8. How can the potential dangers of Nanotechnology in many fields be minimized?**

From electronics and health to manufacturing and energy, nanotechnology has the potential to change a wide range of industries. Yet, using nanomaterials might potentially be dangerous due to their toxicity and environmental effects. Thus, it is crucial to take action to reduce these hazards and guarantee that nanotechnology is created and applied in a safe and morally responsible way. Before releasing nanoparticles into the environment or utilizing them in goods, thorough testing is one strategy to reduce the possible risks of nanotechnology. To examine potential detrimental impacts on human health or the environment, this may involve conducting toxicity tests. Such testing allows scientists to find any possible dangers related to nanoparticles and seek to reduce them.

In order to guarantee that nanoparticles are utilized responsibly and safely, regulatory organizations can also create rules and recommendations. For instance, before chemicals, including nanomaterials, may be commercialized, producers are required under the European Union's REACH law to register and assess the safety of the substances. This makes certain that any possible dangers connected to nanoparticles are recognized and addressed before they are employed in goods or discharged into the environment. The U.S. is another illustration of governmental initiatives to reduce the possible risks of nanotechnology. Program for the Stewardship of Nanoscale Materials of the Environmental Protection Agency Data collection and appropriate usage of nanomaterials are the goals of this initiative. The initiative assists in ensuring that nanomaterials are created and utilized in a safe and ethical way by gathering information on possible concerns related to nanomaterials and collaborating with industry stakeholders to encourage responsible use.

Besides the hazards associated with using nanotechnology, there are several actions that can be taken to reduce them and make sure that the technology is created and applied in a safe and morally responsible manner. We can profit from nanotechnology while reducing the hazards by doing thorough testing, setting rules and regulations, encouraging responsible use, and working together amongst scientists, regulators, and industry stakeholders.

**9. Describe the significance of disaster preparedness in light of natural disasters.**

In order to reduce the number of lives lost and the material damage sustained during natural disasters, disaster preparedness is essential. Devastating natural catastrophes, including hurricanes, earthquakes, and wildfires, have recently struck the world, causing extensive damage and fatalities. It is impossible to exaggerate the significance of disaster preparedness since it helps communities respond to emergencies quickly and effectively, lessening the impact on lives and property.

Many natural catastrophes have already happened in 2022–2023, emphasizing the significance of disaster preparedness. If we look across the world, when one nation has unforeseen natural disasters, many lives are lost and it will take a long time for the nation to recover, such as, for example, the latest natural disaster that has happened in Turkey-Syria, wherein a magnitude 7.8 earthquake occurred, which killed three people and injured 213 in southern Turkey. Another example is that in September 2022, Hurricane Ida made landfall in Louisiana, causing widespread flooding and power outages. The hurricane resulted in at least 26 deaths and caused billions of dollars in damage. However, the state's disaster preparedness measures, including evacuations and emergency response teams, helped minimize the loss of life and property damage.

These current instances demonstrate the importance of disaster preparedness in ensuring that local populations are resilient in the face of natural catastrophes. Early warning systems, evacuation plans, emergency shelters, and emergency response teams are a few examples of disaster preparedness strategies. In the case of a crisis, it's also critical to have enough food, water, and medical supplies on hand. To sum up, disaster preparedness is essential for reducing the damage that natural catastrophes do to people's lives and property. Recent occurrences show that being well prepared may significantly impact the reduction of casualties and property damage. To guarantee that effective disaster preparedness measures are put in place to defend against natural catastrophes, governments, communities, and people must collaborate.

**10. How would you define a good life? What are three elements that constitute your definition of a good a life.**

Each person has their own unique definition of what constitutes a good life, which differs from person to person. Yet, in my perspective, the qualities of a good life may be summed up as being fruitful, meaningful, and joyful. My vision of a happy life includes three components: connection, purpose, and enjoyment, since these three are the most essential, especially since the pandemic began and a lot of changes have happened, such as the way we live each day simply to survive with the danger of the COVID-19 virus.

Happiness is a vital component of a happy existence. It entails discovering happiness and fulfillment in one's experiences, connections, and accomplishments. Achieving personal objectives, engaging in hobbies, spending time with loved ones, and other activities may all contribute to happiness. For instance, one recent incidence of 2022 pleasure occurred when, following the COVID-19 epidemic, individuals could assemble with friends and family and enjoy each other's company without worrying about getting sick.

Another crucial component of a healthy life is purpose. A thorough grasp of one's values, aims, and beliefs is necessary in order to pursue activities that are consistent with them and to have a sense of purpose. This might involve pursuing personal development goals, finding meaningful employment, or giving back to the community. Someone who chooses to volunteer in a neighborhood shelter to aid people impacted by a natural catastrophe might serve as a recent example of purpose in 2023.

Last but not least, having a successful life requires connection. It entails developing deep connections with other people, sensing a sense of community, and feeling a sense of belonging. Spending time with loved ones, taking part in group activities, or volunteering in the community may all help one feel more connected. To sum up, a good life is one that is happy, purposeful, and rewarding. Recent events in 2020–2023 have underlined the significance of three key components that contribute to this definition: connection, purpose, and enjoyment.