

GEC 003 – MIDTERM EXAMINATION

DATE: _____

1. It is a relatively young field that combines traditional and older disciplines, such as the history of science, philosophy of science and sociology of science.
 - a.) Science, Technology, and Human Interaction
 - b.) Sociotechnical Systems
 - c.) Science, Technology, and Society
 - d.) Technology, Science, and Social Context
2. It is the application of scientific knowledge, laws, and principles to produce services, materials, tools and machines aimed at solving real-world problems.
 - a.) Machinery
 - b.) Technology
 - c.) Innovation
 - d.) Electronics
3. Technology comes from the Greek root word _____ meaning “art, skill, or cunning of hand”.
 - a.) Techie
 - b.) Techno
 - c.) Teche
 - d.) Techne
4. It is a discovery as well as an invention, according to the famous American science historian, John Heilbron (2003).
 - a.) Modern Science
 - b.) Contemporary Science
 - c.) Innovative Science
 - d.) Applied Science
5. One of its historical definition is that, it is something that takes a human’s sense or ability and augments it and makes it more powerful.
 - a.) Digital Tool
 - b.) Technological Tool
 - c.) Mechanical Device
 - d.) Industrial Tool
6. It was discovered in 1902 and this mechanism is similar to a mantel clock in the way that the case has a circular face and rotating hands.
 - a.) Heavy Plough
 - b.) Shadoof
 - c.) Antikythera Mechanism
 - d.) Mechanical Clock
7. Through this invention, it became possible to harness clay soil and it stirred an agricultural revolution in Northern Europe marked by higher and healthier agricultural yields and more efficient agricultural practices.
 - a.) Antikythera Mechanism
 - b.) Heavy Plough
 - c.) Shadoof
 - d.) Mechanical Clock
8. The Ilonggo scientist who invented the antibiotic out of a strain of bacterium called Streptomyces erythreus, from which this drug derived its name.
 - a.) Rolando Dela Cruz
 - b.) Maria Orosa
 - c.) Rodolfo C. Aquino
 - d.) Abelardo Aguilar
9. The ancient Egyptians began writing on this material which is similar to thick paper and it is made from the pith of the papyrus plant cyperus papyrus.
 - a.) Heavy Plough
 - b.) Shadoof
 - c.) Papyrus
 - d.) Mechanical Clock
10. Filipino food technologist who is credited for the invention of banana ketchup, a variety of ketchup different from the commonly known tomato ketchup.
 - a.) Rolando Dela Cruz
 - b.) Maria Orosa
 - c.) Rodolfo C. Aquino
 - d.) Abelardo Aguilar
11. Its development paved the way for accurately keeping track of time.
 - a.) Antikythera Mechanism
 - b.) Heavy Plough
 - c.) Shadoof
 - d.) Mechanical Clocks

12. It was an early tool invented and used by ancient Egyptians to irrigate land. It is a hand-operated device used for lifting things using counterweights.
 - a.) Antikythera Mechanism
 - b.) Heavy Plough
 - c.) Shadoof
 - d.) Mechanical Clocks
13. Invented by Galileo Galilei, this invention could magnify objects 20 times larger than the Dutch perspective glasses.
 - a.) Shadoof
 - b.) Telescope
 - c.) Aeolipile
 - d.) Compound Microscope
14. He is credited for the invention of a local mole remover that made use of extracts of cashew nuts (*Anacardium occidentale*), which are very common in the Philippines.
 - a.) Rolando Dela Cruz
 - b.) Edgardo Gomez
 - c.) Rodolfo C. Aquino
 - d.) Abelardo Aguilar
15. Its first known versions could be traced back to the Chinese in 17th century AD as an offshoot of the invention of block printing, which is similar to stamping.
 - a.) Shadoof
 - b.) Spinning Wheel
 - c.) Aeolipile
 - d.) Paper Money
16. In the late 19th century, he was able to change people's perception of psychology with his revolutionary theory of psychoanalysis.
 - a.) Sigmund Freud
 - b.) Charles Darwin
 - c.) Claudius Ptolemy
 - d.) Nicolaus Copernicus
17. This concept suggested that the center of the Solar System was not the Earth but actually the sun.
 - a.) Geocentrism
 - b.) Suncentrism
 - c.) Heliocentrism
 - d.) Unicentrism
18. He is a famous philosopher and astronomer who stated that the planets, as well as the sun and the moon, moved in a circular motion around the Earth.
 - a.) Sigmund Freud
 - b.) Charles Darwin
 - c.) Claudius Ptolemy
 - d.) Nicolaus Copernicus
19. In this book, he introduced the theory of evolution, which posited that populations pass through a process of natural selection in which only the fittest would survive.
 - a.) Sigmund Freud
 - b.) Charles Darwin
 - c.) Claudius Ptolemy
 - d.) Nicolaus Copernicus
20. In the past, this field was always classified under philosophy and it was considered more of an art rather than a science.
 - a.) Psychology
 - b.) Behavioral Science
 - c.) Emotional Science
 - d.) Social Studies
21. It is a Greek word commonly translated as 'happiness' or 'welfare'
 - a.) Phronesis
 - b.) Eudaimonia
 - c.) Alethia
 - d.) Poiesis
22. It arises as a result of different components such as Phronesis, Friendship, Wealth and Power.
 - a.) Human flourishing
 - b.) Human thriving
 - c.) Human prospering
 - d.) Human advancing
23. It is an ancient Greek word for a type of wisdom or intelligence.
 - a.) Alethia
 - b.) Poiesis
 - c.) Eudaimonia
 - d.) Phronesis
24. It is a way of revealing in modern technology.
 - a.) Encapsulating
 - b.) Structuring
 - c.) Enframing
 - d.) Enclosing
25. According to Aristotle, it is the ultimate end and purpose of human existence.
 - a.) Happiness
 - b.) Contentment
 - c.) Satisfaction
 - d.) Pleasure

II. IDENTIFICATION. Select the appropriate term(s) from the box which correspond to your answer in each item below.

Nicolaus Copernicus	Textalyzer	Psychoanalysis
Spinning Wheel	Sentencing Software	Happiness
Gunpowder	Aeolipile	Potter's Wheel
Evolution	BlessU-2 and Pepper	On the Origin of Species
Google Clips	Emotion-Sensing Facial Recognition	Geocentrism

- _____ 26. It is a device that analyzes whether a driver was using his or her phone during an accident.
- _____ 27. It is a hands-free camera that lets the user capture every moment effortlessly.
- _____ 28. It is the first robot priest and monk.
- _____ 29. It is a mysterious algorithm designed to aid courts in sentencing decisions.
- _____ 30. It is a software being developed to assess your reactions to anything such as shopping and playing games.
- _____ 31. It is an important invention of the Middle Ages which is a machine used for transforming fiber into thread or yarn and eventually woven into cloth on a loom.
- _____ 32. It is also known as the *Hero's engine* and is widely believed to be the ancient precursor of the steam engine.
- _____ 33. Around 850 AD, when this was accidentally invented by Chinese alchemists. Since its invention, it has allowed for more advanced warfare.
- _____ 34. It is a heavy flat disk made of hardened clay which was spun horizontally on an axis.
- _____ 35. This concept believed that the Earth was at the center.
- _____ 36. It is the process in which organisms have the ability to adapt to their environment and would gradually change into something that would be more competitive to survive.
- _____ 37. It is the study that explains human behavior.
- _____ 38. He's a Polish mathematician and astronomer who challenged the Ptolemaic Model in the 16th century, and introduced a new concept known as Heliocentrism.
- _____ 39. This book was published by an English naturalist, biologist, and geologist, Charles Darwin in 1859.
- _____ 40. It refers to that feeling that comes over you when you know life is good and you can't help but smile. It's the opposite of sadness. (Happiness)

III. TRUE OR FALSE. Write TRUE if the statement is correct and FALSE if the statement is incorrect.

- _____ 41. Science comes from the Latin word *scientia*, meaning "power".
- _____ 42. Lebron considered science as a discovery of regularity in nature, enough for natural phenomena to be described by principles and laws.
- _____ 43. How the different aspects of society shape and influence the progression and further development of science and technology is the area of concern of a relatively new academic discipline called Science, Technology, and Society.
- _____ 44. Nowadays, advancements in science and technology have become pervasive. They are manifested in the activities that humans pursue and the tools they use every day.
- _____ 45. Humans today live less productive and less exciting lives than their predecessors.
- _____ 46. The developments during the Intellectual Revolution showed how society was transformed by science and technology.
- _____ 47. Copernicus's geocentric model was widely accepted by the people and was one of the greatest discoveries of that time.
- _____ 48. It has been established that most, if not all, of the discoveries and inventions in science and technology during each time period were due to human needs and wants.
- _____ 49. It was only after some time that people came to understand that Darwin's theory of evolution was in fact against the teachings of the church and both can coexist.
- _____ 50. Through scientific research and experimentations, people will continue to deepen their understanding of the world and the universe.
- _____ 51. The Philippine government introduced and implemented several programs, projects, and policies to boost the area of science and technology.
- _____ 52. The Philippine government through DOST Provides scholarships for undergraduate and graduate studies of students in the field of Science and Technology.

- _____ 53. The Balik Scientist Program encourage Filipino scientists abroad to come home and work in the Philippines or conduct research and projects in collaboration with Philippine-based scientists.
- _____ 54. One of the projects of the government through the DOST is establishment of more branches of the Philippine Science High School System for training young Filipinos in the field of science and technology.
- _____ 55. The current K to 12 education program included Science, Technology, Engineering, and Mathematics (STEM) as one of its major tracks in the senior high school program to encourage more students to enroll in science-related fields in College

IV. MATCHING TYPE. Match Column A with Column B. Write only the letter which corresponds to your answer before the number.

COLUMN A	COLUMN B
_____ 56. It is a system of scoring citizens through their actions by placing them under constant surveillance.	a. Jacquard Loom
_____ 57. It is a digital app store designed to read genomes.	b. Ransomware
_____ 58. It is an app that stores the deceased's digital footprint so one can still chat with them.	c. modern television
_____ 59. It is a way of holding data hostage through hacking and requiring a ransom to be paid.	d. Citizen App
_____ 60. It is an app that notifies users of ongoing crimes or major events in a specific area.	e. Social Credit System
_____ 61. The Scottish engineer John Logie Baird is largely credited for this invention.	f. e-jeepney
_____ 62. It was built by French weaver Joseph Marie Jacquard, which simplifies textile manufacturing.	g. Helix
_____ 63. It is the inventive response to criticisms to the traditional jeepney that belched smoke, directly causing air pollution which made it unsustainable and uneconomical. These are designed to be environment-friendly, eliminating noise and air pollution as they run on electricity.	h. Fe del Mundo
_____ 64. This was invented by Zacharias Janssen in which when an object placed near the end of the tube, it can be magnified far larger than what a simple magnifying lens can do.	i. Friendbot
_____ 65. A World-renowned Filipino pediatrician and national scientist, she is credited for the invention of the incubator and jaundice relieving device.	j. Compound Microscope

V. ESSAY

1. Explain the impact of Science and Technology on Society.
2. Discuss the contributions and revolutionary ideas of the scientists: Nicolaus Copernicus, Charles Darwin and Sigmund Freud.
3. Share your thoughts on Science, Technology and Human Flourishing.

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