Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
College of Industrial Technology
Isulan Campus, Isulan, Sultan Kudarat

NAME:_____ GEC 003 Midterm Exam DATE:_____

YEAR AND SECTION:_____

GENERAL DIRECTION:

- READ AND ANSWER CAREFULLY
- YOU MUST CLEARLY ENCIRCLE THE LETTER (A, B, C, OR D) CORRESPONDING TO YOUR CHOSEN ANSWER DIRECTLY ON THIS EXAM PAPER.
- IF YOU CHANGE YOUR MIND, COMPLETELY CROSS OUT THE ORIGINAL CIRCLE AND THEN CLEARLY ENCIRCLE YOUR NEW CHOICE. DO NOT LEAVE TWO CHOICES CIRCLED.

Test I: multiple choice:

1. Which of the following best defines science?
   a. The art of applying tools and machines
   b. The human attempt to understand the natural world
   c. The act of creating technology for society
   d. The process of designing experiments for business
2. Science relies on which of the following to provide accurate information about the universe?
   a. Social interactions
   b. Belief systems
   c. Human senses and instruments
   d. Political authority
3. Why science is considered a systematic body of knowledge?
   a. Because it produces gadgets and machines
   b. Because it follows unbiased observation and experimentation
   c. Because it focuses only on human society
   d. Because it is a result of imagination alone
4. What distinguishes science from technology?
   a. Science seeks understanding; technology applies knowledge for use
   b. Science makes tools; technology builds theories
   c. Science is practical; technology is theoretical
   d. Science is creativity; technology is imagination
5. If a student observes plant growth under sunlight and records the changes daily, which scientific step is being applied?
   a. Testing a prediction
   b. Forming a hypothesis
   c. Making an observation
   d. Drawing a conclusion
6. A researcher measures temperature with a thermometer to study climate patterns. Which principle of science is being applied?
   a. Reliance on human beliefs
   b. Use of extended senses through instruments
   c. Social consensus on truth
   d. Economic development
7. Which of the following statements shows how science and creativity work together?
   a. Science excludes creativity because it is rule-based.
   b. Creativity is only useful in art, not science.
   c. Even with strict rules, science benefits from imagination in forming hypotheses.
   d. Science is purely experimental and does not need creativity.
8. Compare the role of science and society:
   a. Science determines ethics, while society ignores it.
   b. Science provides knowledge; society shapes its application.
   c. Society controls all scientific findings without influence.
   d. Science and society have no interconnection.
9. Which of the following best explains why scientific knowledge is subject to revision?
   a. Science changes with political influence.
   b. Science relies only on imagination.
   c. New evidence and testing may modify earlier conclusions.
   d. Social priorities never affect scientific findings.

10. A government is deciding whether to fund space exploration or medical research. From the perspective of science's purpose, which choice is more justifiable?
    a. Space exploration, because it is more exciting
    b. Medical research, because it directly improves human life
    c. Neither, because science should not be publicly funded
    d. Both are equally valid as science seeks knowledge regardless of use
11. If you were asked to design a simple classroom experiment that shows how science works, which option would BEST reflect the scientific method?
    a. Asking students to draw the solar system from imagination
    b. Observing how water evaporates in sunlight and predicting changes at different times of the day
    c. Listing all inventions made in the 21st century
    d. Writing an essay about famous scientists
12. Which of the following is the correct first step in the scientific method?
    a. Form a hypothesis
    b. Make an observation
    c. Test the prediction
    d. Draw a conclusion
13. Why is forming a hypothesis an important part of the scientific method?
    a. It ensures that experiments will always succeed
    b. It provides a testable explanation that guides investigation
    c. It eliminates the need for further observations
    d. It prevents mistakes in data collection
14. A student notices that a plant grows faster when placed near sunlight and predicts that "plants exposed to more light will grow taller." Which step of the scientific method is the student demonstrating?
    a. Making an observation
    b. Testing a prediction
    c. Forming a hypothesis
    d. Recording results
15. Which of the following best shows the difference between making an observation and forming a hypothesis?
    a. Observation explains results, while hypothesis only records data
    b. Observation gathers facts, while hypothesis provides a possible explanation
    c. Observation uses imagination, while hypothesis is based on creativity
    d. Observation is optional, while hypothesis is always required
16. A researcher conducted an experiment, but the results did not support the original hypothesis. What is the BEST scientific response?
    a. Ignore the results and keep the original hypothesis
    b. Stop experimenting and consider the research a failure
    c. Revise the hypothesis based on the new evidence
    d. Change the data to fit the hypothesis
17. If you were tasked to design a simple experiment using the scientific method, which option would BEST reflect its steps?
    a. Guessing why ice melts and writing an essay about it
    b. Observing how sugar dissolves in water, predicting what happens with hot vs. cold water, then testing it
    c. Listing the names of famous scientists
    d. Drawing a diagram of the planets from memory
18. The term technology comes from the Greek words techne and logos. What do they mean?
    a. Nature and law
    b. Art/craft and subject/interest
    c. Science and application
    d. Tool and process
19. Which of the following is NOT an example of technology?
    a) Smartphone
    b) Laptop
    c) Photosynthesis
    d) Electrical appliances
20. What is the primary purpose of technology?
    a) To understand the natural world
    b) To apply knowledge for practical use and improve life
    c) To replace science completely

d) To create imagination without application

21. How does technology differ from science?
    a) Technology seeks understanding; science makes products
    b) Science applies theories; technology builds laws
    c) Science discovers knowledge; technology applies it to create useful products
    d) Technology is experimental; science is imaginative
22. A farmer uses a water pump to irrigate rice fields. This is an example of:
    a) Science in theory
    b) Application of technology for practical use
    c) Observation in the scientific method
    d) Random use of resources
23. A student uses a microscope to study plant cells. This reflects technology because:
    a) It is a natural phenomenon
    b) It is a tool created to extend human senses
    c) It only explains scientific laws
    d) It is based on imagination alone
24. Which of the following best describes the relationship between technology and imagination?
    a) Technology ignores creativity and imagination.
    b) Technology is solely built on random imagination.
    c) Technology often begins with imagination that is redesigned into useful products.
    d) Imagination is unnecessary once technology exists.
25. Without science, technology would struggle to progress because:
    a) Science provides the knowledge that technology applies.
    b) Technology produces theories without science.
    c) Technology always works independently of knowledge.
    d) Science and technology are unrelated.
26. Which of the following best analyzes how technology influences society?
    a) Technology exists only for entertainment.
    b) Technology alters how people live, communicate, and transact.
    c) Technology makes society less dependent on science.
    d) Technology develops without shaping economic progress.
27. A country must choose between investing in advanced medical technologies or luxury consumer gadgets. Which option would be more justifiable for sustainable development?
    a) Luxury consumer gadgets, because they are profitable
    b) Medical technologies, because they directly enhance human well-being
    c) Neither, because technology should not be funded by government
    d) Both equally, since technology has no impact on quality of life
28. If you were asked to design a simple innovation to help students in remote areas, which would BEST represent technology's purpose?
    a) Building a low-cost solar-powered lamp for studying at night
    b) Drawing posters of existing inventions
    c) Writing a list of famous inventors in history
    d) Memorizing definitions of technology
29. Which statement best describes the basic relationship between science and technology?
    a) Science applies knowledge while technology discovers it
    b) Science provides knowledge; technology applies it for practical use
    c) Science and technology work independently of each other
    d) Technology always comes before scientific knowledge
30. Why can't science progress without technology?
    a) Technology creates imagination for experiments
    b) Technology provides tools and instruments needed for experiments and observations
    c) Science is only about products, not processes
    d) Technology makes science unnecessary
31. A scientist uses advanced computer simulations to test a new theory in physics. Which interaction between science and technology is being shown?
    a) Technology enabling scientific research
    b) Science shaping cultural values
    c) Technology limiting knowledge
    d) Science ignoring tools
32. Which of the following best compares how science and technology drive each other?
    a) Science only influences society; technology has no impact
    b) Science creates knowledge that inspires technologies, while new technologies allow further scientific discoveries

c) Technology creates art; science explains culture
d) Both science and technology always follow imagination alone

33. If resources are limited, should a government fund scientific research without investing in technology?
    a) Yes, because science can progress without tools
    b) No, because science often requires technology to test ideas effectively
    c) Yes, because technology will appear on its own
    d) No, because science has no connection with technology
34. Imagine you are designing a school project to demonstrate how science and technology interact. Which would be the BEST example?
    a) Writing an essay on famous scientists
    b) Observing natural phenomena without tools
    c) Using a microscope to study plant cells and linking the findings to theories of biology
    d) Memorizing the definition of technology
35. Which of the following is a key role of science and technology in society?
    a. Limiting creativity
    b. Improving quality of life and driving development
    c. Preventing communication between people
    d. Eliminating the need for education
36. Why are science and technology considered drivers of economic growth?
    a. They provide entertainment for people
    b. They underpin advances in health, education, and infrastructure
    c. They replace the need for cultural values
    d. They eliminate the role of governments
37. A rural community installs solar panels to provide electricity for schools. Which role of science and technology is being applied?
    a. Supporting education and sustainable development
    b. Limiting the use of natural resources
    c. Replacing scientific research with technology
    d. Ignoring the importance of society
38. Which statement best analyzes the impact of technological revolutions in the 21st century?
    a. They focus only on entertainment and leisure
    b. They emerge from advances in microprocessors, telecommunications, biotechnology, and nanotechnology
    c. They decrease opportunities for economic development
    d. They prevent societies from tackling poverty
39. A government must choose whether to invest in biotechnology for healthcare or luxury technology for consumer markets. Which is the BEST choice in terms of social benefit?
    a. Luxury technology, because it generates quick profit
    b. Healthcare biotechnology, because it directly enhances human well-being
    c. Both equally, because science and technology have no social impact
    d. Neither, because society develops without technology
40. Imagine you are tasked to propose a simple project showing the role of science and technology in improving society. Which idea would BEST demonstrate this?
    a. Designing a water filtration system to provide clean drinking water in communities
    b. Writing an essay on famous inventors
    c. Memorizing the definition of technology
    d. Drawing posters about science history
41. Which of the following is one major effect of science and technology on society?
    a) They only influence entertainment and leisure
    b) They shape the way people think, live, and interact with the environment
    c) They are independent of social values and priorities
    d) They exist without affecting human culture
42. Why can the effects of science and technology on society be described as both beneficial and detrimental?
    a) Because they always guarantee economic growth
    b) Because they can improve human conditions but also cause risks or challenges
    c) Because they affect only scientific communities, not people
    d) Because they are based on imagination and creativity
43. Which statement best explains the social influence on science and technology?
    a) Society determines what research and technologies should be prioritized
    b) Society has no effect on the direction of science and technology
    c) Technology is created without social need

d) Science develops only from imagination

44. A city adopts electric vehicles to reduce air pollution. Which effect of science and technology is being applied?
    a) Environmental improvement through technological innovation
    b) Limiting access to modern transportation
    c) Replacing science with culture
    d) Ignoring the role of innovation in society
45. Farmers use genetically modified crops to increase yield and feed more people. This demonstrates:
    a) Technology harming cultural traditions
    b) Application of science to solve food security issues
    c) Science focusing only on experiments
    d) Society influencing art and literature
46. Which of the following best compares the mutual relationship between science, technology, and society?
    a) Science and technology shape society, while society also influences their direction
    b) Science and technology only benefit governments, not individuals
    c) Society develops independently of science and technology
    d) Science provides theories, but society and technology ignore them
47. If social pressure groups demand research on renewable energy, what does this show?
    a) Society directing science and technology toward sustainable development
    b) Society having no impact on scientific decisions
    c) Technology shaping culture without influence from society
    d) Science progressing without community involvement
48. Why is it important to analyze the cultural effects of technology such as social media?
    a) Because it only entertains users
    b) Because it transforms communication, values, and even mental health in society
    c) Because it has no effect on the way people interact
    d) Because it is unrelated to science
49. A nation debates between investing in nuclear energy or renewable solar energy. From the perspective of long-term societal effects, which is more justifiable?
    a) Nuclear energy, because it is more powerful regardless of risks
    b) Solar energy, because it promotes sustainability and reduces environmental harm
    c) Neither, because energy production should not involve science
    d) Both equally, because effects on society are always the same
50. If you were tasked to design a community project to demonstrate the positive effects of science and technology, which would BEST fit?
    a) Building a low-cost water filtration system to provide clean drinking water
    b) Listing inventions that were discovered in the 20th century
    c) Memorizing the definition of society
    d) Drawing posters about electricity

END

Prepared by:

SHEIMER D. CARIGABA
Instructor

Checked/Reviewed by:

IRENE A. BINAGMAT
BTVTE/Program Chairman

Noted by:

CHARLIE J. MAGHANOY, EdD
Dean, College of Industrial Technology