Name: Lito J. Libradilla	**Yr. & Sec.:** Grade 12 – STEM Asclepius
Subject Code: APLD05	**Subject Title**: Inquiries, Investigations, and Immersion
Module No: 1	**Topic**: Brainstorming for Research Topics

V. HOW FAR HAVE WE GONE?

Quiz no. 1.2 –MULTIPLE CHOICE
Direction: Read the following questions carefully. Choose the letter of the BEST answer.

<u>C</u> 1. The topic is relevant if it yields results that are instrumental in societal improvement. It is timely if it is related to the present. What guideline is being described in the statement above.
A. Highly Technical Topics
B. Check references from the library.
C. Pick a topic that is timely and relevant.
D. Master the skill of finding the right research topic

<u>D</u> 2. This means finding a topic that is discussed not just on website or blogs, but more so on books, articles or even encyclopedia references. Find a topic that is both interesting and has plenty of published materials. What guideline is being described in the statement above.
A. Identify problem situations.
B. Consider your passion or interest.
C. Be ready with your personal resources.
D. Make sure you have enough resources for your topic.

<u>C</u> 3. When confronted on what research paper topics to do, find a broad subject first, then narrow it down. What guideline is being described in the statement above.
A. Consider your passion or interest.
B. Check references from the library.
C. Master the skill of finding the right research topic.
D. Make sure you have enough resources for your topic.

<u>A</u> 4. Your real interest in a subject push you to research, investigate, or inquire about it with full enthusiasm, motivation, and energy. What guideline is being described in the statement above.
A. Consider your passion or interest.
B. Check references from the library.
C. Master the skill of finding the right research topic.
D. Make sure you have enough resources for your topic.

<u>B</u> 5. Visit your library to check the availability of reading materials on your chosen topic. Do not hesitate to ask your librarian for assistance. What guideline is being described in the statement above.
A. Consider your passion or interest.
B. Check references from the library.
C. Master the skill of finding the right research topic.
D. Make sure you have enough resources for your topic.

VI. WALKING THE EXTRA MILE

RESEARCH TOPIC PROPOSAL
Goal: Propose five (5) Research Topics related with your SHS Strand.
Role: Researcher
Audience: Research Teacher
Situation: With your group members, list down five (5) Research topics related with your SHS Strand. Give a 1 paragraph explanation each on why you chose that topic. Create a PowerPoint Presentation and present it to your Research teacher for approval.
Product: Research Topic Proposal

1. Optimizing Renewable Energy Sources in a Smart Grid System:
   Investigate methods to enhance the integration of renewable energy sources, like solar and wind, into a smart grid infrastructure. Explore technologies for efficient energy storage and distribution.

2. CRISPR-Cas9 Gene Editing: Ethical Considerations and Future Implications:
   Examine the ethical implications of CRISPR-Cas9 gene-editing technology. Evaluate its potential benefits in healthcare and agriculture, while also addressing concerns related to ethics, privacy, and unintended consequences.

3. Augmented Reality in Education: Enhancing Learning Experiences:
   Explore the application of augmented reality (AR) in educational settings. Assess how AR can improve student engagement, understanding, and retention of STEM subjects.

4. Design and Optimization of an Eco-Friendly Urban Transportation System:
   Develop and analyze a sustainable urban transportation system that minimizes environmental impact. Consider factors such as electric vehicles, efficient traffic management, and public transportation integration.

5. Quantum Cryptography: Next-Level Security for Communication Networks:
   Investigate the principles and applications of quantum cryptography for secure communication. Explore how quantum key distribution can enhance the security of data transmission in networks.