Research methods

1. What influences the choice of study directions and subjects in scientific and engineering research?

- o Only the researcher's personal interests
- o Only current research trends
- o The researcher's personal interests, previous knowledge, and current research trends
- o Advice from peers and friends

2. Why is it essential to follow key research trends?

- o Research trends change very fast
- o Trends are easy to predict
- o To avoid outdated knowledge
- o Because trends do not impact the research field

3. If you join a research lab, what question is likely to be answered for you?

- o "How will I conduct my research?"
- o "What will I study?"
- o "Who will supervise my research?"
- o "What resources will I use?"

4. What is the most challenging part when working in research?

- o Conducting experiments
- o Writing a report
- o Selecting the topic
- o Presenting findings

5. What are reasons why choosing a topic that interests you is important?

- o You will work on it for a long time
- o Will help accelerating your progress
- o Help you learning something valuable during your research process
- o All of this

6. Which of the following is a recommended step to narrow down your topic?

- o Make it as broad as possible
- o Focus only on the latest trends

o   Select a manageable scope for the topic
o   Choose a topic unrelated to the background literature

7. Why is reading background literature helpful in topic selection?

o   It helps to make the topic broader
o   It allows for skipping unnecessary details
o   It helps limit the scope of the chosen topic
o   It discourages new ideas

8. Which of the following is a helpful step in choosing your first research topic?

o   Relying only on your personal interest.
o   Refreshing your knowledge by reviewing relevant texts and lecture notes.
o   Choosing a topic that is not supported by scientific texts.
o   Ignoring different opinions on the topic.

9. Why is it recommended to discuss research ideas with a friend?

o   Because it makes the topic less challenging.
o   Because it helps avoid complex topics.
o   Because it can help resolve issues that were not previously apparent.
o   Because it ensures faster publication of the research.

10. Which question should you ask yourself when choosing a research topic?

o   Who will be affected by the chosen topic
o   Why did you choose the topic
o   What are the major question that arises in this topic
o   Where will your topic be important
o   When the topic will be important
o   All of this

11. What role does reading abstracts play in literature research?

o   It provides a detailed review of all previous studies.
o   It helps identify what has been studied and what hasn't.
o   It gives you instant access to the full text of all articles.
o   It only gives you a general idea without details.

12. Why is reading abstracts useful during the research idea selection stage?

- o Because it helps you ignore irrelevant studies.
- o Because it provides all the detailed information needed.
- o Because it gives you an overview of the topic and directs you to the full text if needed.
- o Because it eliminates the need to read full articles.

13. What is the role of reading general or encyclopedia articles in research?

- o Gaining a deep and detailed understanding of the topic.
- o Understanding the relationship between your chosen idea and related issues.
- o Only helping to choose common words.
- o Accessing ready-made results for publication.

14. If you can't find articles related to your target topic, what is recommended?

- o Use narrower terms.
- o Use broader terms.
- o Ignore the topic.
- o Change the research field entirely.

15. Who can you ask for help if you're unable to find articles related to the topic?

- o A non-specialist friend.
- o The librarian.
- o The journal editor.
- o A math tutor.

16. Which of the following is a recommended way to find required literature in your targeted topic?

- o Use a personal blog for research.
- o Use article databases that most famous in your field.
- o Rely solely on books for background information.
- o Avoid using search engines as they are not reliable.

17. What is an example of an article database mentioned in the slides that is useful in the computer science field?

- o Google scholar
- o arxiv
- o iEEE explore

o   all of this

18. Which of the following can help you find suitable websites for your research topic?

o   Using online dictionaries.
o   Using web search engines.
o   Using general news websites.
o   Asking friends for website suggestions.

متنساش تصلي علي سيدنا محمد ﷺ