Useful Thoughts in Preparing for the Qualifying Exam: Common Issues
(Prepared January 2014)

1. Not including enough references - in my opinion you should list at least 10 (or more if you have time). This shows you've read enough about the field.
2. Using references that are too old - it's OK to include old papers if they are relevant, but you should include several papers from the last year or two
3. Not proposing a sufficiently NOVEL project (sometimes they propose things that have been done years ago).
4. Not proposing a sufficiently LARGE project (the proposed project should be sufficient for a PhD degree)
5. Not thinking thoroughly about how the proposed project will be completed (i.e., what are the milestones, how long it would take, what resources might be needed, what the expected outcomes might be, etc.). The committee generally expects an outline of experimental and theoretical research steps, as detailed as you can make it.
6. Not being familiar with the "BIG PICTURE" of the field - the student should know what things are going on in the field, which universities are leading the work, and where the proposed project fits (i.e., what gap it fills and ESPECIALLY why it is relevant and worth your time).
7. Not taking time to think during the exam - Often students believe that examiners expect them to know all the answers right away, but this is not the case. It is better to ask for a minute to think and then come up with a really good, well-thought answer than to just blurt out what we have on our mind without thinking.
8. Going down the wrong path and not making a U-turn - sometimes one can start going down a path that is not very good. Many students feel they have to keep going and defend what they have already said even if it is wrong, but this is also not the case. If you have made a mistake it's OK to point it out intelligently and to fix it with a better idea
9. Becoming intimidated by the tone in which the questions are asked - examiners are just that: examiners. Therefore they will try to test you and push you and you should expect that and not be afraid. It's part of the exam. The important thing is that you think.
10. Not including the citations for the pictures you use for your powerpoint
11. Having slides that are too busy and hard to read
12. Not keeping within the time allowed
13. Not explaining carefully the topic - your goal should be that the audience understands and gets excited about what you are talking about
14. Giving answers that are not technical enough - if there are theories or equations that support your answers, you should mention them because they show you understand the underlying theory well and know how to use it
15. Not being excited about your proposal - you must BELIEVE that your proposal is good and you must show that you are excited about it. If you don't believe in your project, you cannot expect others to believe in it!
16. Getting too nervous and worried - the exam is not that hard. The principles one should keep in mind to do well are very simple: (a) do your homework well, (b)

Dr. Santiago Solares & Babak Eslami

put in all the time that is necessary, (c) do not assume they will not ask you things you don't know - if there is something where you feel you are weak you should make sure to address it, (d) do an outstanding job so that there is no question about the quality of your job, (e) go the extra mile and really impress the committee, (f) PRACTICE your presentation several times, (g) be confident that you have done everything you could have done, and (h) smile!

17. The paper given for your exam is just a starting point for your exam. Focusing on small details of the paper during exam might not be a good approach.

18. When a committee members interrupts you while you are answering someone else's question, let them talk and listen to them. Most probably they are trying to help you to answer the main question correctly!

19. When your committee members are assigned, do a general search on the research they are doing and their background. By that, you can guess most of their questions!

20. These 10 days are similar to a marathon. So try to eat and sleep well. Keep your body as healthy as possible.

21. For the 10days period, I had written a following schedule ahead and followed it:

    1st Day) Be Confused!

    2nd Day) Be Confused but less than yesterday!

    3rd Day) Start understanding the paper and start doing some literature review.

    4th Day) Read the main cited references of the paper and for each paper write a short summary in your own words so you can come back to them if needed.

    5th Day) CAUTIOUS: Today and tomorrow will be the most important days!!!Define the gap and write a paragraph about it:

      Back of your mind: How can I solve this issue?

    6th Day) How to solve the gap? Propose your project. Write a paragraph about it.

    7th Day) Proof Read your proposal and Submit it!

    8th Day) Reread the given paper and make an outline for your presentation!

    9th Day) Make the power point presentation. For every single item on your slides ask yourself: "WHY? HOW?"

    10th Day) Review your slides, relax and enjoy!

Dr. Santiago Solares & Babak Eslami