

Examination PCPP

Thursday December 10, 8:00 - Friday December 11, 14:00

Last update 2020-09-18

These exam questions comprise ?? pages; check immediately that you have them all.

The exam questions are handed out in digital form from LearnIT.

Your solution must be handed in no later than **Friday, December 11th 2020 at 14:00** according to these rules:

- Your solution must be handed in through LearnIT.
- Your solution must be handed in as a single PDF file, including cited source code, written explanations in English, tables, charts and so on, as further specified below.
- Your solution must have a standard ITU front page as described at [Exam-assignment](#).
- Additionally, your complete source code is to be handed in as one zip file. *Notice, we will not read your source code under normal circumstances.*

There are a number of questions and sub-questions. These are colour coded in a way similar to the weekly exercises.

If you find unclarities, inconsistencies or misprints in the exam questions, then you must describe these in your answers and describe what interpretation you applied when answering the questions.

Your solutions and answers must be made by you and you only. This applies to program code, examples, tables, charts, and explanatory text (in English) that answer the exam questions. You are not allowed to create the exam solutions as group work, nor to consult with fellow students, pose questions on internet fora, or the like. You are allowed to ask for clarification of possible mistakes, misprints, and so on, by private email to kasper@itu.dk with a CC: to sap@itu.dk. Expect the answer in the course LearnIT news forum. You should occasionally check the forum for news about clarifications to the exam set.

Your solution must contain the following declaration:

I hereby declare that I have answered these exam questions myself without any outside help.

(name) (date)

When creating your solution you are welcome to use all books, lecture notes, lecture slides, exercises from the course, your own solutions to these exercises, internet resources, pocket calculators, text editors, office software, compilers, and so on.

You are **of course not allowed to plagiarize** from other sources in your solutions. You must not attempt to take credit for work that is not your own. Your solutions must not contain text, program code, figures, charts, tables or the like that are created by others, unless you give a complete reference, describing the source in a complete and satisfactory manner. This holds also if the included text is not an identical copy, but adapted from text or program code in an external source.

You need not give a reference when using code from these exam questions or from the mandatory course literature, but even in that case, your solution may be easier to understand and evaluate if you do so.

If an exam question requires you to define a particular method, you are welcome to define any auxiliary methods that will make your solution clearer, provided the requested method has exactly the result type and parameter types required by the question. Similarly, when defining a particular class, you are welcome to define auxiliary classes and methods.

What to hand in Your solution should be a short report in PDF consisting of text (in English) that answers the exam questions, with *relevant* program fragments shown inline. You may need to use tables and charts and possibly other figures. Take care that the program code keeps a sensible layout and indentation in the report so that it is readable. Additionally, you must hand in your operational source code in a directory structure that shows which question the code is relevant for as one zip file on Learnit.