Instructions:

• Do not detach any pages and do not write on the QR codes

• There are a total of 60 points on this exam.

• If you require more space to answer a question, there is a blank page at the end you may use instead, but you must clearly indicate in the provided answer space that you have done so.

• All of your answers should be written in the version of C provided by the Seashell environment†.

• You may only use C language features discussed in Sections 01 through 07 of the course†.

• You do not need to consider overflow in any of the code you write†.

• When asked to provide an interface, you are required to provide the appropriate documentation.

• When you are only asked to write (implement) a function, you are not required to provide any additional documentation†, but any helper functions must include a brief purpose statement.

• Helper functions do not need to be declared before they are used†.

• Your functions do not have to check for invalid parameters but must assert any restrictions†.

• For array and pointer parameters, you must use const when appropriate.

• You do not have to #include any of the standard libraries (e.g., stdio.h) in your code†.

• For any code we provide you may assume that the necessary libraries have been included even if the code provided does not explicitly do so.

• If you believe there is an error in the exam, notify a proctor. An announcement will be made if a significant error is found.

• It is your responsibility to properly interpret a question. Do not ask questions regarding the interpretation of a question; they will not be answered and you will only disrupt your neighbours. If there is a non-technical term you do not understand you may ask for a definition. If you are confused about a question, state your assumptions and proceed to the best of your abilities.

† (unless otherwise specified in the question)