

UNIVERSITY OF ESSEX

Undergraduate Examinations 2018

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PROFESSIONAL DEVELOPMENT

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Time allowed: **TWO** hours

The following items are provided:

- OMR Form for answering multiple-choice questions
- Graph paper (available on invigilator's desk)

Candidates are permitted to bring into the examination room:

Casio FX-83GT Plus or Casio FX85-GT Plus **ONLY**

Candidates must answer **ALL QUESTIONS** in **SECTION A**  
and **ALL** parts of **SECTION B**

Answers to SECTION A must be written on the machine-readable form.

Answers to SECTION B must be written in the answer book provided.

The percentages in brackets provide an indication of the proportion of the total marks for the **PAPER** which will be allocated.

**Please do not leave your seat unless you are given permission by an Invigilator.**

**Do not communicate in any way with any other candidate in the examination room.**

**Do not open the question paper until told to do so.**

**All answers must be written in the answer book(s) provided.**

**All rough work must be written in the answer book(s) provided. A line should be drawn through any rough work to indicate to the examiner that it is not part of the work to be marked.**

**At the end of the examination, remain seated until your answer book(s) have been collected and you have been told you may leave.**

**SECTION A**

**Answers to Section A must be written on the multiple choice answer sheet (machine-readable form).** Note that there is only one choice that constitutes the correct answer to each question. The correct answer, in this context, is the most accurate and complete answer to the question, among those given.

***SECTION A IS UNAVAILABLE***

**SECTION B**

*Candidates must answer Section B in the answer book provided.*

**Question B1**

[40%]

Choose one of the following scenarios and then based on the IEEE specification model provide a first version of the purpose (section 1.1), the user characteristics (section 2.3), and the functional requirements of the system (section 3). Use your imagination and creativity to determine the functional requirements. Finally provide a description of how you would manage a project to deliver this product.

Scenario 1: A customer has requested you develop an app website that will provide access to customer support guides for users of new laptops on smartphones. They expect to support several usage scenarios / setups and a Frequently Asked Questions (FAQ) section within one app but wish to launch the app with a single guide, “Getting started”, which targets individuals that have purchased a new laptop and guide them through the initial setup process and they plan to expand the app with other processes and FAQs at a later stage.

Scenario 2: A customer has requested you develop a robotic vacuum cleaner. They are a well-established vacuum cleaner manufacturer but have no experience of robotics. They have only a basic idea of the product requirements such as wishing that the vacuum cleaner learns about the floor area that it is supposed to be cleaned.

**END OF SECTION B****END OF PAPER CE101-4-FY**