|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Grade | TG. | Breadth | Depth | Presentation | Understanding |
| A/A\* |  | ALL | **LINK / FORMULATE**  Create, Generate, Hypothesis, Reflect, Theorise, Consider | Quad  Core | Quad  Core |
| B/C |  | MOST | **EXPLAIN / ANALYSE**  Apply, Argue, Compare, Contrast, Criticise, Relate, Justify | Dual  Core | Dual  Core |
| D/E |  | SOME | **DESCRIBE / IDENTIFY**  Name, Follow Simple Procedure, Combine, List, Outline | Single  Core | Single  Core |
| U |  | FEW | Very little depth of understanding shown |  |  |
|  |  | **MY ASSESSMENT GRADE IN THIS TOPIC IS:** | | | |



**6 – Software development (AS / A Level)**

**UNIT 1**

Specification Points / Learning Objectives: **Core text book page ref: 116-123, 49-82**

|  |  |  |
| --- | --- | --- |
| **AS Level** | **A Level** | **Specification point description** |
| 2.2.2a | 1.2.3a | Understand the waterfall lifecycle, agile methodologies, extreme programming, the spiral model and rapid application development |
| 2.2.2b | 1.2.3b | The relative merits and drawbacks of different methodologies and when they might be used |
| 2.2.2c | 1.2.3c | Writing and following algorithms |
| 2.2.2d |  | Different test strategies, including black and white box testing and alpha and beta testing |
| 2.2.2e |  | Test programs that solve problems using suitable test data and end user feedback, justify a test strategy for a givens situation |

**Note:** The AS Software development techniques 2.2.2d & 2.2.2e which are examined at the end of AS are not re-examined at the end of the full A level. Instead they are assessed as part of the A Level computing project which is started in your second year.

**Examination Questions**

1. A software company has been commissioned to produce a new sales solution for a supermarket. This is a major piece of work for the company and the solution will span many stores as well as serving the needs of their head offices. It is estimated the problem with take up to 14 months to develop fully and it is essential it is developed on time, to budget and to the users requirements.

The software teams first major decision is if they should use the extreme programming, spiral, agile or waterfall methodology for development.

State **two** methodologies you would recommend **and** provide justification of your choices.

**Methodology 1:** …….……………………………………………………………………………………………………......

**Justification:** ………..……………………………………………………………………………………………………......

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**Methodology 2:** …….……………………………………………………………………………………………………......

**Justification:** ………..……………………………………………………………………………………………………......

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How To Improve:

**My Response Is:** (Set yourself specific targets / objectives as to how you will achieve your HTI)

Expectations / Learning Outcomes:

* Terms 75-80 from your **A Level Key Terminology** PowerPoint should be included and underlined.
* You must include some diagrammatic depictions of the various SDLC models.
* You must include a comparison (e.g. in a table) of the Adv. & Dis. of the various SDLC methodologies.
* You must include a section which outlines the main testing strategies and describes when these test strategies might occur during the software development process.