# 2019/20 candidate record form, production log and assessment record

## Level 3 Extended Project (7993)

Please attach the form to your candidate’s work and keep it at the centre or send it to the moderator as required. The declarations should be completed as indicated.

|  |  |  |
| --- | --- | --- |
| **Centre number** |  | **Centre name** |
| Click here to enter. |  | Click here to enter text. |
|  |  |  |

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| --- | --- | --- |
| **Candidate number** |  | **Candidate’s full name** |
| Click here to enter. |  | Vimal Vinod |
|  |  |  |

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| --- |
| Work submitted for assessment **must** be the candidate’s own. If candidates copy work, allow candidates to copy from them, or cheat in any other way, they may be disqualified. |

**Candidate declaration**

Have you received help/information from anyone **other than** subject teacher(s) to produce this work?

No  Yes *(give details below or on a separate sheet if necessary).*

|  |
| --- |
| Click here to enter text. |

Please list below any books, leaflets or other materials (for example DVDs, software packages, internet information) used to complete this work **no**t acknowledged in the work itself. Presenting materials copied from other sources **without acknowledgement** is regarded as deliberate deception.

|  |
| --- |
| Click here to enter text. |

We may use examples of candidate’s work for standardisation or training purposes.  Please see our privacy notice for more information on how we use assessment data and on your rights under data privacy legislation.

I have read and understood the above. I confirm I produced the attached work without assistance other than that which is acceptable under the scheme of assessment.

|  |  |  |
| --- | --- | --- |
| Vimal Vinod | Date | 08 October 2020 |
|  |  |

**Supervisor declaration**

I confirm the candidate’s work was conducted under the conditions laid out by the specification. I have authenticated the candidate’s work and am satisfied, (to the best of my knowledge) that the work produced is solely that of the candidate.

|  |  |  |
| --- | --- | --- |
| Supervisor signature. | Date | Click here to enter a date. |
|  |  |

Submission checklist

**To be completed by the supervisor**

|  |  |
| --- | --- |
| Extended Project **working** title | Problems in Graph Colouring |
|  |  |

|  |  |
| --- | --- |
| Extended Project **final** title | Click here to enter text. |
|  |  |

Form of project

|  |  |  |  |
| --- | --- | --- | --- |
|  | Either | written report | |
|  | Or | Click here to enter text. | and accompanying written report |
|  |  |  |  |

Is this project part of a group project?

|  |  |  |
| --- | --- | --- |
|  | No |  |
|  | Yes | If ‘Yes’, give brief details Click here to enter text. |

|  |
| --- |
| **Please note** that failure to complete or submit a compulsory element may result in a mark of zero being awarded. |

|  |  |  |
| --- | --- | --- |
| Select/tick | Items that **must** be included | Notes |
|  | 1. A signed and completed *Candidate record form, production log and assessment record* | This document. All pages must be completed. |
|  | 1. Research based written report | If the project product is an artefact or a production, an accompanying research based written report is also required. |
|  | 1. Evidence of the project product | Eg photographs of artefact, investigation or production; a piece of creative writing (artefact); research based written report. |
|  | 1. Evidence of a presentation within the production log | Presentation on the project process. Where the project product is itself a presentation (for a specified audience), a presentation on the project process must also be delivered to a non-specialist audience |

The taught skills element

**To be completed by the supervisor**

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| --- |
| **Outline details of taught skills**  Record here details of relevant skills taught in a class/group and details of relevant skills taught individually to this candidate as described in the specification. Continue on a separate sheet if necessary.  Click here to enter text. |

Record of marks

**To be completed by the supervisor**

Marks must be awarded in accordance with the instructions and criteria in the specification.

Summary information to show how the marks have been awarded should be given in the spaces below in addition to comments in other pages of this document and any supporting information in the form of annotations on the candidate’s work.

|  |  |  |  |
| --- | --- | --- | --- |
| Skill area | Maximum mark | Mark awarded | Supervisor’s supporting statement |
| 1. Manage | 10 | Click. | Click here to enter text. |
| 1. Use resources | 10 | Click. | Click here to enter text. |
| 1. Develop and realise | 20 | Click. | Click here to enter text. |
| 1. Review | 10 | Click. | Click here to enter text. |
| Total mark | 50 | Click. |  |

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| **Supervisor’s concluding comments**  Click here to enter text. |

|  |
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| **Internal moderation comments if appropriate**  Click here to enter text. |

**Supervisor declaration**

I confirm that no work assessed for the award of the marks above is also to be submitted, or has been submitted, for any other accredited qualification(s).

|  |  |  |
| --- | --- | --- |
| Supervisor signature. | Date | Click here to enter a date. |
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Record of initial ideas

**To be completed by the candidate**

This page records initial meeting(s) with your supervisor to agree your project ideas. Additional pages can be submitted if more than one idea has been explored.

|  |
| --- |
| My idea(s) for topic/title  Problems in Graph Colouring |
| My ideas for research and development of my project  I am researching the Four Colour Theorem and problems like it in Graph Colouring (a branch of Graph Theory which is part of a much broader subject known as Topology (the study of spaces)). I plan on writing about the methods for tackling these kinds of problems as well some proofs that I understand.  On the 23rd of October 1852, Francis Guthrie, a South African mathematician and botanist, noticed that he only needed 4 colours to colour a of the counties in England map so that no two counties that share a border, have the same colour. Francis had a brother called Fredrick who was a student of Augustus De Morgan (who is a big deal; you might have heard of De Morgan’s laws). Francis asked Fredrick about the problem and he didn’t know the answer, Fredrick told De Morgan, and he had no idea as well.  "A student of mine [Guthrie] asked me to day to give him a reason for a fact which I did not know was a fact—and do not yet.” – Augustus De Morgan  There were many failed attempts of the proof over the following years which lead De Morgan to believe that it must lead from an unknown axiom (something we assume to be true without proof) about regions in a map. However, this would turn out not to be the case, the fact was that the proof, at that point in time, was out of reach of the hands of mere mortals because as far as we know there is no way to simply write down, you needed a computer.  Is a proof really a proof if it is computer-aided? That was a highly controversial topic back in 1976 when Kenneth Appel and Wolfgang Haken introduced their solution to the mathematical community. But eventually they had to accept it – even now there is no simple proof to the deceptively simple problem. |
| My summary of the comments and advice from my supervisor  Click here to enter text. |
| Modifications I have made as a result of my discussion with my supervisor  Click here to enter text. |

|  |  |  |
| --- | --- | --- |
|  | Date | Click here to enter a date. |
|  |  |

Part A: Candidate proposal

**To be completed by the candidate**

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| --- |
| Working title of my Extended Project.  Present the topic to be researched in the form of a short statement/question/hypothesis with clear focus.  Problems in Graph Colouring |

|  |
| --- |
| * my initial resources will be   *An introduction to graph theory* by Richard J. Trudeau |
| * the courses of study or area(s) of personal interest to which the topic relates   Math and Computing |
| * my intended product   A research paper and perhaps some kind of program that demonstrates its practicality (in python). |

Provide details of the courses that you are currently studying

|  |  |
| --- | --- |
| **Qualification type** | **Awarding body & subject** |
| eg A-level, Modern Apprenticeship, BTEC | eg AQA Mathematics, OCR Computing, WJEC English |
| AS-level | AQA Further Maths |
| AS-level | AQA Mathematics |
| AS-level | OCR Computer Science |

|  |  |
| --- | --- |
| **Qualification type** | **Awarding body & subject** |
| AS-level | Physics |
| Click to enter text. | Click here to enter text. |
| Click to enter text. | Click here to enter text. |
| Click to enter text. | Click here to enter text. |
| Click to enter text. | Click here to enter text. |

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| **Notice to candidate** You must not take part in any unfair practice in the preparation of project work required for assessment and you must understand that to present material copied directly from any book or any other sources without acknowledgement will be regarded as deliberate deception. If you use or attempt to use any unfair practice you will be reported to AQA and you may be disqualified from **all** subjects. |

**Candidate declaration**

I certify that I have read and understood AQA’s Regulations relating to unfair practice as set out in the notice to candidates above.

|  |  |  |
| --- | --- | --- |
| Vimal Vinod | Date | 08 October 2020 |
|  |  |

Part B: Supervisor’s comments on candidate proposal

**To be completed by the supervisor**

Please comment below on the validity and feasibility of the candidate proposal (Part A) as an Extended Project

|  |  |
| --- | --- |
|  | Supervisor’s comments |
| Indicate the relation to, and development/extension outside of, the main course(s) of study or interest | Click here to enter text. |
| Comment on the suitability of the proposed initial sources and research base | Click here to enter text. |
| Confirm that the project is feasible in the proposed timescale and/or indicate any potential difficulties that may prevent the candidate from meeting the assessment objectives | Click here to enter text. |

Indicate the expected format of the project product that will be submitted for assessment

Research based written report

Artefact (for example prototype, model, artwork, scientific investigation, creative writing) plus written report

Is the project a contribution to a group exercise?  YES  NO

If Yes, confirm that there is a defined individual contribution by the candidate  YES  NO

List the **other** group members below.

|  |  |
| --- | --- |
| Candidate No. Click. | Candidate Name Click here to enter text. |
| Candidate No. Click. | Candidate Name Click here to enter text. |
| Candidate No. Click. | Candidate Name Click here to enter text. |

|  |  |  |
| --- | --- | --- |
| Supervisor signature. | Date | Click here to enter a date. |
|  |  |

Part C: Centre coordinator’s approval of candidate proposal

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| --- |
| **Supervisor’s name** |
| Click here to enter text. |
|  |

**To be completed by the centre coordinator**

If you are acting as both the Centre coordinator and the supervisor, please seek counter signature from a senior colleague

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| --- |
| Centre coordinator’s comments on the feasibility and acceptability of the proposal (parts A & B) as an Extended Project  Click here to enter text. |

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| --- | --- | --- | --- | --- | --- |
|  | Approved |  | Approved subject to the implementation of  the centre coordinator’s recommendations |  | Resubmission required |

|  |
| --- |
| **Centre coordinator’s name** |
| Click here to enter text. |
|  |

|  |  |  |
| --- | --- | --- |
| Centre coordinator signature. | Date | Click here to enter a date. |
|  |  |

Planning review

**To be completed by the candidate**

This page records your outline plan once your proposal has been approved.

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| --- |
| My next steps in planning, researching and deadlines that I will set myself. What I intend to do, by when, what resources I will use and how I will implement the recommendations of the centre co-ordinator (where appropriate).  Click here to enter text. |
| My summary of the comments and advice from my supervisor  Click here to enter text. |
| Modifications I have made as a result of my discussion with my supervisor and/or the comments from my centre coordinator  Click here to enter text. |

|  |  |  |
| --- | --- | --- |
|  | Date | Click here to enter a date. |
|  |  |

Mid-project review

**To be completed by the candidate**

This page records your outline plan when you have completed your research.

|  |
| --- |
| Is my project following my original plan? How has my plan developed?  Click here to enter text. |
| My summary of the comments and advice from my supervisor  Click here to enter text. |
| Modifications I have made as a result of my discussion with my supervisor at this stage  Click here to enter text. |
| My final title and agreed form of project product  Click here to enter text. |
| My planned next steps to complete my project  Click here to enter text. |

|  |  |  |
| --- | --- | --- |
|  | Date | Click here to enter a date. |
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Project product review

**To be completed by the candidate**

This page records the (near) completion of your project product. Outline the successes, failures, additions and/or changes you made as you followed the plan in your mid-project review

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| --- |
| Did my project follow my revised plan (from the mid-project review)?  Click here to enter text. |
| My summary of the comments and advice from my supervisor at this final stage  Click here to enter text. |
| Modifications I have made as a result of discussion with my supervisor at this final stage  Do I need to do anything else to complete my product?  Click here to enter text. |

|  |  |  |
| --- | --- | --- |
|  | Date | Click here to enter a date. |
|  |  |

Presentation record part A

**To be completed by the candidate**

This page records your presentation and its preparation.

|  |
| --- |
| Planned format of my presentation (eg timing, audience, use of visual aids, slides, use of notes, etc.)  Click here to enter text. |
| Planned content of my presentation  Click here to enter text. |
| Modifications I have made as a result of rehearsal and/or discussion with my supervisor  Click here to enter text. |

|  |  |  |
| --- | --- | --- |
|  | Date | Click here to enter a date. |
|  |  |

Presentation record part B

**To be completed by the supervisor**

Record and comment below on the delivery of the presentation

|  |  |
| --- | --- |
|  | Supervisor’s record/comments |
| The nature of the audience (include numbers of staff, students and others present) | Click here to enter text. |
| The nature of the presentation (include use of notes, use of display items, and use of presentation software) | Click here to enter text. |
| Comment on the content and delivery of the presentation (for example clarity of ideas, structure of presentation, pace, engagement with audience) | Click here to enter text. |
| Comment on the response of the candidate to questions that demonstrated understanding and grasp of the project and/or its production. **Give examples of questions asked and answers given.** | Click here to enter text. |

|  |  |  |
| --- | --- | --- |
| Supervisor signature. | Date | Click here to enter a date. |
|  |  |

Summary and reflection

**To be completed by the candidate**

This page records your summary, reflection and evaluation when you have completed your project product and given your presentation.

|  |
| --- |
| Some questions you may wish to answer in this section include, what have I learned from completing this project? What new knowledge or expertise have I enjoyed or found valuable? What are the strengths and weaknesses of my project (including planning and organisation)? What skills have I improved? What changes would I make if I undertook such work again? What advice would I give to others undertaking such a project?  Click here to enter text. |