Tasmanian Certificate of Education

External Assessment 2020

PLACE YOUR CANDIDATE

LABEL HERE

INFORMATION SYSTEMS AND DIGITAL TECHNOLOGIES

(ITS315118)

Recommended time for this paper:

- Working time recommended: 3 hours

- **Plus** reading time recommended: 15 minutes

Pages:	12
Questions:	8

Candidate Instructions

1. You **MUST** make sure that your responses to the questions in this examination paper will show your achievement in the criteria being assessed.

2. There are **TWO** sections to this paper. Each section contains **ONE** case study.

3. You must answer **EIGHT** questions in total.

- **ALL** questions from **Section A**.
- **ALL** questions from **Section B**.

4. The recommended time to be spent on a section is given in the instructions in that section.

5. Time allocation against each question is to be used as a guide only.

6. All written responses must be in English.

On the basis of your performance in this examination, the examiners will provide results on each of the following criteria taken from the course document:

Criterion 1 Identify, analyse and solve real-world information problems.
Criterion 2 Describe, explain and analyse the components of an information system, and the inter-relationships between these components.
Criterion 3 Describe, explain and analyse social, legal and ethical issues associated with information systems.
Criterion 5 Use and evaluate an information system.
Criterion 8 Communicate ideas and information in a variety of forms.

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Additional Instructions for Candidates

You must complete all your answers using an appropriate software program.

You are required to save your response to both sections in **ONE** file on the USB memory stick provided to you.

When you have completed the exam you **must also save the final version of your file in pdf format** on the provided USB memory stick.

The file title **MUST** be your TASC ID, e.g. 12W12572. Your TASC ID must also be shown in the footer of your document.

You should save your file regularly whilst working. (Check the date and time stamp of your saved file prior to completion).

If the file is not saved correctly, and **cannot** be accessed on the USB drive, it **cannot** be assessed and TASC takes **no** responsibility for the inability to assess your work.

In this exam:

- you may use the internet to assist in answering Section A
- you are expected to use the internet when researching your answers for Section B.

Any source of information **MUST** be referenced **after your answer to that question** by supplying URL(s) of the source(s), and by identifying any other communications made, such as email or instant messaging. If you have communicated with anybody via email you **MUST** also include a pdf copy of all emails and their contents as part of the files saved on the USB memory stick.

You **MUST NOT** collaborate with any other candidate undertaking this exam or teacher of this subject, either verbally or electronically. To do so will be in breach of the TASC External Assessment Rules. Penalties will apply.

SECTION A

Answer **ALL** questions in this section.

It is recommended that you spend **10 minutes** reading the information contained in this section and a further **60 minutes** answering the questions.

Time allocation against each question is to be used as a guide only.

This section assesses **Criteria 1, 2, 3, 5** and **8**.

Section A: Case Study

The Tasmanian Music Festival (TMF) is a live music event that has been running for two years. Both mainland and local musicians play at the event and last year, over 1000 adults and children attended. Marley and Stella are the event organisers and they have been surprised at the popularity of their event. Approximately 30% of ticket sales come from the mainland and international visitors. The three day festival allows patrons to camp overnight in appointed sites where those wishing for a quieter experience are allocated sites further away from the main festival events.

Tickets go on sale two months prior to the event. Currently, ticketing occurs via a simple website that the owner developed on a free online website builder. Customers select the number of tickets per adult/child and the location they would like to camp in. They are then redirected to a payment gateway that manages payment of the total number of tickets.

Once all tickets are sold (they generally sell out within the first week of going on sale), the owner downloads the ticket information from the website. This is a flat database consisting of name, address, ticket type, camping preference and cost.

ID	Purchaser	Address	Tickets_Adult	Tickets_Child	Camping_Pref
1	Mike Flintstone	63 Miles Road	3	3	Family Camping
2	Tony Freeman	32 Sixes Street	2	0	Main Area
3	Karen Sinclair	99 Long Avenue	4	2	Family Camping

Marley and Stella use a spreadsheet to process the data and allocate camping sites. They manually allocate the camping site by numbering each cell that matches the site number on a map of the festival grounds. Tickets are then generated via a mail merge using word processing software, printed and physically mailed out to the purchaser.

Section A continues.

Answer the following with reference to the case study.

Question 1 (20 minutes)

*This question assesses **Criteria 2, 5** and **8**.*

(a) Describe the components of the **current** information system (data, equipment, people and procedures) using a table.

(b) List the strengths and weaknesses of the **current** information system.

(c) Identify and detail possible improvements that could be made to the **current** information system as described in the case study.

Question 2 (20 minutes)

*This question assesses **Criteria 1** and **8**.*

This year the event organisers would like to make changes to the current system to manage more effectively the increase in people attending, the ticketing process and the allocation of camping sites.

Marley and Stella have asked you to project manage the development of a new information system for them.

(a) Describe in detail what tasks would be undertaken by your project team as part of the Initiation phase of the Project Life Cycle (PLC).

(b) What would you consider to be some of the pitfalls that the project team might encounter during the Development phase of the Systems Development Life Cycle (SDLC) and what actions would you recommend they take to overcome them?

Section A continues.

Section A (continued).

Question 3 (20 minutes)

*This question assesses **Criteria 3** and **8**.*

(a)   What are some of the legal considerations that Tasmanian Music Festival (TMF) needs to be aware of regarding data collection of potential ticket buyers and the communication with ticket holders leading up to the event both through broadcast and personalised messages?

(b)   As there is a proportion of tickets purchased by international customers, what should the project team be considering regarding social issues of the current website design?

SECTION B

Answer **ALL** questions in this section.

You may need to refer to the **Section A: Case Study** when answering the questions in this section.

It is recommended that you spend **20 minutes** researching and then a further **90 minutes** answering the questions.

Time allocation against each question is to be used as a guide only.

This section assesses **Criteria 1, 2, 3, 5 and 8.**

Section B: Case Study

Marley and Stella have seen how other music festivals held in Tasmania have grown to become major events and they would like to see their festival follow a similar path. The venue has the capacity to hold up to 5000 guests, but they realise that the logistics and co-ordination required for such numbers would increase dramatically.

Marley and Stella are also keen to attract international performers to the festival and they realise that they will need to promote their brand in order to attract artists of the calibre that they are seeking.

While some of the information regarding ticket sales is captured electronically, Marley and Stella are wanting to use technology more effectively to streamline their ticketing and event management processes.

Marley and Stella would also like to better use the data captured to make more informed decisions about the future of the event, and how they can best cater to their current and future customers.

Research examples of **TWO** unique ticketing systems that will allow Tasmanian Music Festival (TMF) to scale up their business and manage their event effectively.

Question 4 (20 minutes)

*This question assesses **Criteria 5** and **8**.*

(a) List **TWO** URLs of available ticketing systems that will allow for efficiencies in the purchasing of tickets and the back-end management of data and reporting.

(b) By discussing the various parts of an information system (**equipment, people, data and procedures**) found in **EACH** of the two systems you have researched, make a comparison/analysis of the suitability of each to meet the needs of Tasmanian Music Festival (TMF).

Section B continues.

Section B (continued).

Question 5 (15 minutes)

*This question assesses **Criteria 5** and **8**.*

Consider your two researched systems and the needs of Tasmanian Music Festival (TMF) organisers:

(a) List **TWO** benefits of each system.

(b) List **TWO** disadvantages of each system.

(c) Make a judgement as to which one would be most suited to the needs of the Tasmanian Music Festival (TMF) organisers.

Question 6 (30 minutes)

*This question assesses **Criteria 2** and **8**.*

Describe a unique and feasible information system using the information you have researched in Question 4. You should also draw on your own ideas and suggestions to add more detail.

•   Address all parts of the information system (data, equipment, people and procedures).

•   Explain the functionality, navigation and user interface of your proposed system.

•   Use graphics and diagrams to further support your explanation.

Question 7 (10 minutes)

*This question assesses **Criteria 1** and **8**.*

Describe **TWO** crucial test criteria you would use to test the new system prior to handover to the client.

Section B (continued).

Question 8 (15 minutes)

*This question assesses **Criteria 3** and **8**.*

Marley and Stella chose a system that uses a third party provider to manage the collection of payment for the tickets. Discuss the social, legal and ethical issues that may arise in the event of cancellation of the festival two weeks prior to its date.

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