



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Examination Answer Books

12 Pages

Instructions to Candidates

1. Please give the information requested in the boxes below.
2. Enter your name in the space provided to the right, fold over and seal down (using the label provided) to hide your name.
3. The answers must be legibly written. The Examiners can either reject illegible script or have it typed and the expense of typing charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. **Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

**Complete, fold and seal
(see note 2 below)**

SURNAME: CHAMFIELD

FORENAME(S): SHANNAN

1	Student Number	P149078
2	Title of Examination Paper	EMERGING WEB TECHNOLOGIES
3	Module Code	M6X0096
4	Date and Time of Examination	15/05/19 9:00 am
5	Examination Venue	1Q310
6	Seat Number	G034
7	Number of Answer Books handed in	1

List the numbers of the questions you have attempted	Office Use
1	2.5
2	12
3	~~17.8~~ ~~15.5~~
Total	~~40%~~

42%

(Gweler yr ochr arall am y fersiwn Cymraeg)

1 A) Function is created.

0

1 B) One solution for this problem is a server side proxy. Should be hard coded with limited access.
coded

1

1 C) one benefit of using Hadoop is that it makes use of COP. ~~Another benefit is that~~

1.5

2 1/2

poor answer

wifa

2 a) ~~The P~~ Volume is the quantity of data ^{terabytes etc}. The second is Variety, the variety of data that ~~is~~ will possibly be created whether it is structured - text, tweets or photos or Unstructured - Voicemail, audio-recordings, emails. The third is Velocity, the speed of data - Real time or near real-time, and Finally Veracity, the trustworthiness of the data, can the data be verified?

8 8

b) map function $\rightarrow$ ~~reduces data, to be less duplication~~ displays data, Shuffle and Sort, sort and categorised things together. reduce function, reduces the ~~data~~ based on the sort and shuffle, less duplication.

2

c) big data refers to the volume of data that cannot be stored or processed using traditional approaches within a given time. it's about low complexity and scalability.

2

12

agreed

3) a) Representational State Transfer uses four main principles.
 It uses HTTP methods such as PUT, POST, DELETE and GET. It is stateless. It exposes directory structure i.e. URI, it transfers XML, JSON or both. It asks the developer to use HTTP methods that are consistent with protocol definitions. Additionally, REST creates a one to one connection between CRUD (create, read, update, delete) operations and HTTP methods. To create a resource the POST method is used, to delete a resource the delete method is used, to update a resource the update method is used and finally to retrieve a resource a GET method is used.

b) Pull → web browser request data from the web server known as pulling because data is often getting pulled from web browsers.

Push → web server sends new data.

~~Asynchronous~~