

Cambridge International AS & A Level

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

674776044

INFORMATION TECHNOLOGY

9626/31

Paper 3 Advanced Theory

May/June 2021

1 hour 45 minutes

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Answer all questions.
- Use a black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do not use an erasable pen or correction fluid.
- Do not write on any bar codes.
- You may use an HB pencil for any diagrams, graphs or rough working.
- Calculators must not be used in this paper.

INFORMATION

- The total mark for this paper is 90.
- The number of marks for each question or part question is shown in brackets [].

This document has 16 pages. Any blank pages are indicated.

(a)	Explain what is meant by storing data in the cloud.
h\	
,D)	Explain why the IT Manager could be worried about storing data in the cloud.

Describe	how satellite c	ommunicat	ion system	ns provide	internet ac	cess to us	ers.	
				•••••				

	tages and d	.9	- pj		

4 Fig. 4.1 shows a Gantt chart.

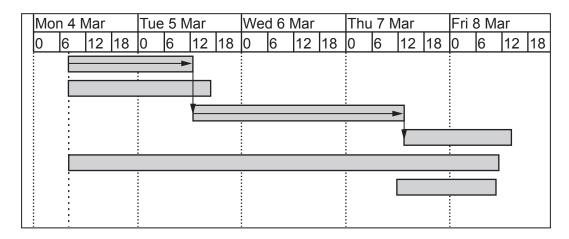


Fig. 4.1

(a)	Describe rour components of this Gantt chart.
	[4
(b)	Describe how a Gantt chart could show overdue tasks.
	Γ1

Evaluate, by gathering info			and dis	advantages,	the use	of ques	tionnaires for
•••••	 •••••	•••••					
	 •••••	•••••	•••••				
	 	•••••					
	 						[8]

The	e introduction of 5G cellular communication systems will provide increased bandwidth for use	ers.
(a)	5G cellular communication systems will enable video delivery to users to be more reliable.	
	Describe two other improvements that 5G will be able to provide.	
		[2]
(b)	Describe two drawbacks of the introduction of 5G cellular communication systems.	

٩na	lyse the effe	ctiveness of	the phased	d impleme	entation n	nethod to	install the r	new DBMS	
	,								
•									
•									
• • •									
									[8]

Describe how a blog enables social networking to take place.
[6]

(a)	Describe the stages involved in the RAD process.
	[6]
(b)	Describe reasons why the company is using RAD instead of a more traditional waterfall method of software development.

10	Jasmine is using JavaScript on her web pages to provide interactivity. She has encountered some runtime errors during the testing of her JavaScript code.
	She has written some code including window.onerror = function (msg, url, line)
	The onerror() event handler will trap errors.
	Describe how this can help Jasmine locate the mistakes in the rest of her code.
	[6]

11	Hubs and switches are networking devices.
	Compare and contrast how these devices carry out their roles in a network.
	91

12	The directors of a company are trying to protect the company's data.
	Explain the measures that could be taken by the company to help protect the network from a data breach.
	[8]

13	John wants to know how a Global Positioning System (GPS) works. He currently thinks that a GPS satellite calculates the position of a car and sends a signal telling the car what its position is.
	John discovers that this is incorrect.
	Explain how a GPS actually works.
	751

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