



Cambridge International AS & A Level

CANDIDATE
NAME

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CENTRE
NUMBER

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INFORMATION TECHNOLOGY

9626/33

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.

1 An Information Technology (IT) Manager is considering storing company data in the cloud.

(a) Explain what is meant by storing data in the cloud.

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(b) Explain why the IT Manager could be worried about storing data in the cloud.

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3 Discuss the advantages and disadvantages of web-based project management software.

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[8]

4 Fig. 4.1 shows a Gantt chart.

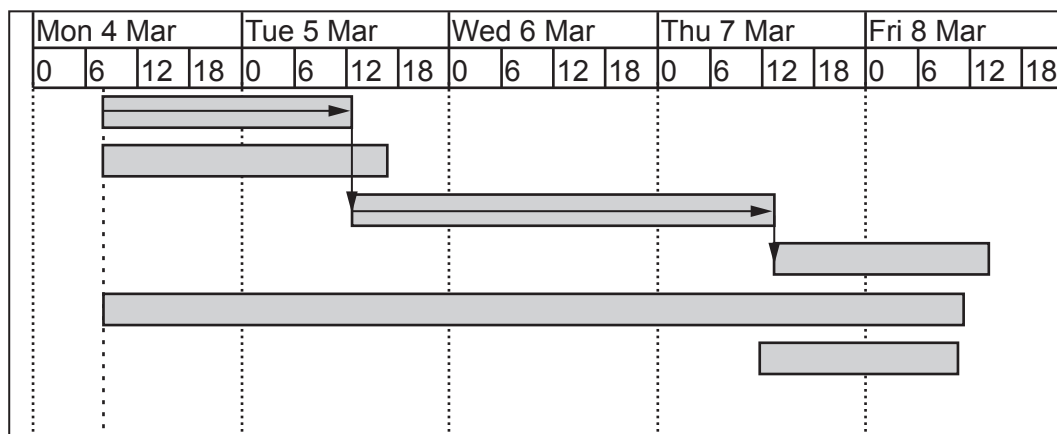


Fig. 4.1

(a) Describe **four** components of this Gantt chart.

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(b) Describe how a Gantt chart could show overdue tasks.

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6 The introduction of 5G cellular communication systems will provide increased bandwidth for users.

(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.

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(b) Describe **two** drawbacks of the introduction of 5G cellular communication systems.

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9 A software company uses Rapid Application Development (RAD) to create its products.

(a) Describe the stages involved in the RAD process.

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(b) Describe reasons why the company is using RAD instead of a more traditional waterfall method of software development.

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[4]

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.

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[6]

- 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.

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