

Cambridge
International
AS & A Level

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Cambridge International Advanced Subsidiary and Advanced Level

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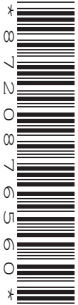
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CENTRE
NUMBER

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INFORMATION TECHNOLOGY

9626/32

Paper 3 Advanced Theory

February/March 2017

1 hour 45 minutes

Candidates answer on the Question Paper.

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Answer **all** the questions.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

Any businesses described in this paper are entirely fictitious.

This document consists of **14** printed pages and **2** blank pages.

3 Fig. 1 shows a sequence of tasks that are required to complete a project.

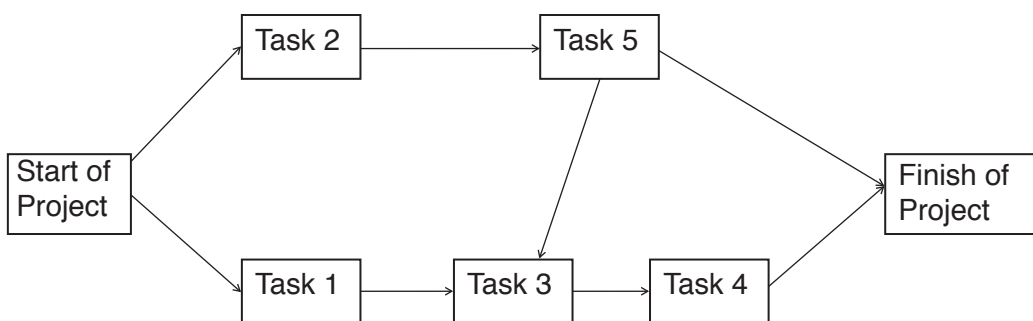


Fig. 1

The duration of each task is shown in this table:

Task	1	2	3	4	5
Duration (days)	3	5	7	2	4

There are three paths through this set of tasks.

(a) Use the information given in Fig. 1 and in the table to determine the critical path through the sequence of tasks.

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[6]

- (b) Each task can have an extra amount of time allowed over its stated duration before it causes the project to be delayed. This is the 'float'.

Explain how you would calculate the float for each of the tasks in the project.

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[4]

7 Electronic data exchange is often called electronic data interchange. An online retailer and its trading partners use electronic data interchange (EDI).

(a) Define EDI.

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(b) The retailer has prepared an order that has to go to a supplier. When the supplier has received the order, an invoice asking for payment for the goods has to go back to the retailer.

Explain how you would use EDI for these transactions.

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(b) Jonas has added some lines to the JavaScript code:

```
/*  
The code below stores the list of cities.  
*/  
var city = ["London", "Cambridge", "Oxford", "Manchester"];
```

Explain why Jonas would have added the new code to the script.

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.....[2]

(c) Jonas wants to extract 'Oxford' from the list in the code below to display it on the web page.

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var city = ["London", "Cambridge", "Oxford", "Manchester"];
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Write a line of JavaScript code to access the list and store the city name.

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(d) Write a loop in JavaScript code to extract and display the first three city names.

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10 A new computer system is to be developed for a factory. You have been asked to gather information from the managers, assembly-line workers and clerical staff about the current system. The managers can be available at any time, the assembly-line workers must not be interrupted at any time and do not like taking work home, and the clerical staff are very busy during their working hours and do not like being watched.

Describe, with reasons, the method of research you would use to gather information from each group.

(i) Managers:

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(ii) Assembly-line workers:

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(iii) Clerical staff:

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