

CANDIDATE  
NAME

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CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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**INFORMATION TECHNOLOGY**

**9626/31**

Paper 3 Advanced Theory

**May/June 2018**

**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** questions.

**Calculators are not allowed on this paper.**

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 **16** printed pages.



2 JavaScript defines a number of primitive data types.

(a) Explain the term 'primitive' when used in this context.

.....  
.....  
.....  
.....  
.....[2]

(b) Describe **three** primitive data types used in JavaScript.

1 .....  
.....  
.....  
.....  
2 .....  
.....  
.....  
.....  
3 .....  
.....  
.....[3]



















- 11 An automatic washing machine has a number of wash cycles controlled by an embedded computer system. The system can accept inputs to vary the temperature and spin speed. It also has 'start' and 'stop/cancel' buttons.

When the 'start' button is pressed the system checks, in this order:

- that the door is properly closed
- the temperature has been set by the user
- the spin speed has been set by the user
- if the load is either a 'full load' or 'half load' of washing.

The washing cycle will automatically stop if the set time has been reached or the 'stop/cancel' cycle button is pressed.

A section of the control sequence is shown in the flowchart in Fig. 4. Some flowchart labels are missing.

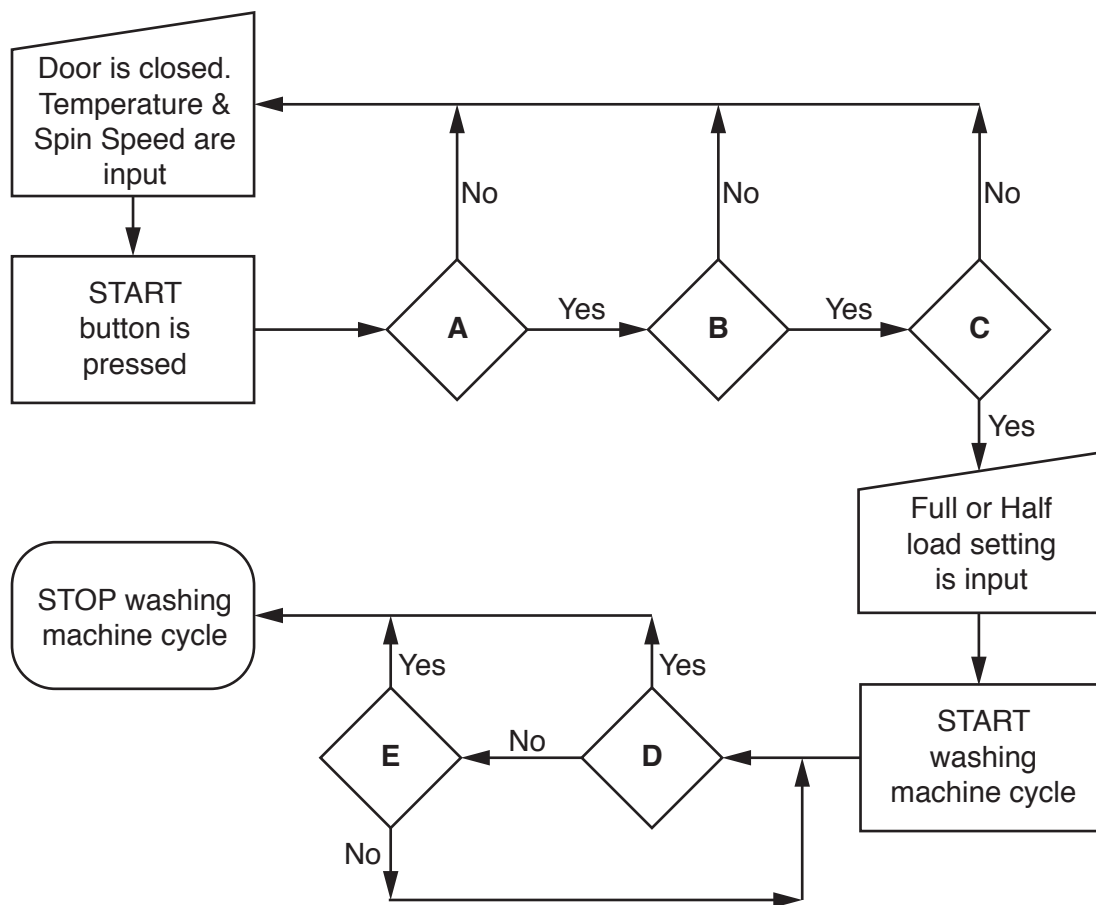


Fig. 4

Complete the table below to describe how the embedded computer system controls the washing machine at **A**, **B**, **C**, **D** and **E**.

<b>Position in flowchart</b>	<b>What is happening at the position</b>
<b>A</b>	
<b>B</b>	
<b>C</b>	
<b>D</b>	
<b>E</b>	

[5]





