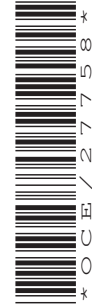


Friday 25 June 2010
Morning
DURATION: 1 hour 30 minutes



Candidates answer on the Question Paper
OCR SUPPLIED MATERIALS:
None
OTHER MATERIALS REQUIRED:
• A Calculator may be used

Candidate	Forename	Candidate Surname


Centre Number	Candidate Number

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

INSTRUCTIONS TO CANDIDATES

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
 - Use black ink. Pencil may be used for graphs and diagrams only.
 - THIS PAPER IS TO BE TAKEN WITH F524/01 IN THE SAME EXAMINATION SESSION OF 2 HOURS 30 MINUTES.
 - This paper (F524/02) contains EIGHT Design theme based questions.
 - Answer ONE question only.
 - Read each question carefully and make sure that you know what you have to do before starting your answer.
- INFORMATION FOR CANDIDATES**
- The number of marks is given in brackets [] at the end of each question or part question.
 - The total number of marks for this paper is 54.
 - All dimensions are in mm.
 - Where appropriate, calculations should be shown.
 - Follow the instructions given on the four A3 answer sheets.
 - HAND IN THE FOUR A3 ANSWER SHEETS INSIDE THIS FOLDER AT THE END OF THE EXAMINATION.
 - This folder is for F524/02 ONLY.

A calculator may be used for this paper



Examiners Use Only:			
1			
2			
3			
4			
5			
6			
7			
8			
Total			

DO NOT USE THIS SIDE

<p style="text-align: center;">Answer <u>ONE</u> question only.</p> <p>1 <u>BUILT ENVIRONMENT AND CONSTRUCTION FOCUS</u></p> <p>A new secondary school has a coach park where students are dropped off and picked up.</p> <p><u>A SHELTER TO PROTECT STUDENTS FROM THE WEATHER IS REQUIRED.</u></p> <p>The shelter must:</p> <ul style="list-style-type: none"> • be a permanent structure; • accommodate up to 20 students. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>3 <u>FOOD FOCUS</u></p> <p>A leading supermarket wants to extend its range of children's party foods.</p> <p><u>A NEW RANGE OF PRODUCTS THAT WILL BE SUITABLE FOR CHILDREN'S PARTIES IS REQUIRED.</u></p> <p>The range must:</p> <ul style="list-style-type: none"> • include sweet and savoury products; • meet the criteria of current healthy eating guidelines. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p>2 <u>ENGINEERING FOCUS</u></p> <p>An engineering fabrication company is to introduce a range of security grids for use on windows in domestic properties.</p> <p><u>AN ADJUSTABLE SECURITY GRID IS REQUIRED.</u></p> <p>The grid must:</p> <ul style="list-style-type: none"> • be adjusted to size and fitted using normal hand tools; • be fitted to windows on the inside of the building. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>4 <u>GRAPHIC PRODUCTS FOCUS</u></p> <p>The Greenfields Community Centre needs to provide information of current and forthcoming events and contact details to visitors.</p> <p><u>A COLOURFUL EXTERNAL DISPLAY, SHOWING THE RELEVANT INFORMATION IS REQUIRED.</u></p> <p>The product must:</p> <ul style="list-style-type: none"> • be produced as a one-off; • include a logo for the Greenfields Community Centre. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p style="text-align: center;">F524/02 PRODUCT DESIGN</p>	

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<p>5 <u>MANUFACTURING FOCUS</u></p> <p>A manufacturing company is to produce a range of camping equipment.</p> <p><u>A SEAT THAT CAN BE FOLDED FOR EASE OF CARRYING IS REQUIRED.</u></p> <p>The seat must:</p> <ul style="list-style-type: none"> • be suitable for use by adults; • be produced in a batch of 5,000. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>7 <u>SYSTEMS AND CONTROL FOCUS</u></p> <p>Many athletes need to develop and improve their arm and upper body strength.</p> <p><u>AN EXERCISE MACHINE THAT WILL DEVELOP AND IMPROVE THESE AREAS IS REQUIRED.</u></p> <p>The product must:</p> <ul style="list-style-type: none"> • promote a positive benefit to exercise and encourage athletes to use it regularly; • enable the user to monitor progress. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p>6 <u>RESISTANT MATERIALS FOCUS</u></p> <p>A new Community Centre has very limited wall space to enable visitors to hang up outdoor clothing and accessories.</p> <p><u>A FREE-STANDING PRODUCT THAT WILL ACCOMMODATE OUTDOOR CLOTHING AND ACCESSORIES IS REQUIRED.</u></p> <p>The product must:</p> <ul style="list-style-type: none"> • accommodate the outdoor clothing and accessories of up to 10 adults; • be produced as a one-off. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>8 <u>TEXTILES FOCUS</u></p> <p>People are being encouraged to refuse plastics bags when shopping.</p> <p><u>A RE-USEABLE COMPACT BAG IS REQUIRED.</u></p> <p>The bag must:</p> <ul style="list-style-type: none"> • hold a range of shopping items up to a weight of 5 kg; • appeal to young adults. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p>F524/02 PRODUCT DESIGN</p>	<p>CANDIDATE NAME</p>
<p>CANDIDATE NUMBER</p>	<p>CENTRE NUMBER</p>

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CIRCLE THE QUESTION NUMBER YOU ARE ANSWERING

1 2 3 4 5 6 7 8

(a) Give **THREE** justified specification points.

1 _____

2 _____

3 _____

_____ [6]

Instruction to candidates

ALLOCATION OF MARKS FOR PAPER F524/02

- (a) specification points [6]
 - (b) range of developed ideas [33]
 - (c) final developed outcome [9]
 - (d) communication [6]
- [Total: 54]

All dimensions are in millimetres

Where necessary, calculators may be used

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S	R	D	E	F	C	Total

F524/02 PRODUCT DESIGN

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(b) Ideas with development

- A range of ideas [15]
- Consider manufacturing/construction detail [12]
- Evaluate ideas with reference to specification and volume production [6]

[Total: 33]

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R	
D	
E	

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(c) Final Developed Outcome

Sketch a final developed outcome. Justify key design features. [9]

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F	
C	

F524/02 PRODUCT DESIGN

CANDIDATE NAME

CANDIDATE NUMBER

CENTRE NUMBER

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