

<p style="text-align: center;">Answer ONE question only.</p> <p>1 Built Environment and Construction</p> <p>A farmer wishes to establish a roadside farm shop to sell fresh produce.</p> <p>A permanent structure suitable for selling fresh fruit and vegetables is required.</p> <p>The structure must:</p> <ul style="list-style-type: none"> • have a maximum floor area of 25 m²; • reflect a rural image. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>3 Food focus</p> <p>The market for food products reflecting sustainable design is expanding.</p> <p>A product that uses seasonal ingredients is required.</p> <p>The product must:</p> <ul style="list-style-type: none"> • be packaged within a themed display of one of the four seasons; • be able to be produced as a batch of 2000. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p>2 Engineering focus</p> <p>Many different sets of sports equipment are used in schools.</p> <p>A product for storing and transporting sets of sports equipment in schools is required.</p> <p>The product must:</p> <ul style="list-style-type: none"> • be easily moved around the school site; • be able to be manufactured in batches of 500. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>4 Graphic Products focus</p> <p>A supermarket wishes to promote a local delivery service for a weekly supply of organic vegetables.</p> <p>A dual-purpose display/delivery container for vegetables to last a household for one week is required.</p> <p>The product must:</p> <ul style="list-style-type: none"> • reflect an organic/sustainable image; • be suitable for manufacture in batches of 1000. <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 Manufacturing focus</p> <p>It is often difficult to move large and heavy items around in the garden.</p> <p>A product for moving large and heavy items in the garden is required.</p> <p>The product must:</p> <ul style="list-style-type: none"> • be easy to store when not in use; • be able to be produced in batches of 5000. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>7 Systems and Control focus</p> <p>A company wishes to develop a new lighting unit for cyclists to improve on the limitations of existing cycle lamps.</p> <p>An innovative bicycle light with multiple functions is required.</p> <p>The bicycle light must:</p> <ul style="list-style-type: none"> • offer more functions than a conventional bicycle light; • be able to be produced as a batch of 10,000. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p>6 Resistant materials focus</p> <p>Many elderly people find getting up from a seated position difficult.</p> <p>A product that reduces the physical effort needed to get up from a seated position is required.</p> <p>The product must:</p> <ul style="list-style-type: none"> • be suitable for use with existing seating; • be suitable for manufacture in batches of 500. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>8 Textile focus</p> <p>A local clothing boutique wants to promote sustainable design.</p> <p>A product that will show sustainable design in baby wear is required.</p> <p>The product must:</p> <ul style="list-style-type: none"> • be suitable for both genders; • be able to be produced as a batch of 20. <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
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Circle the question number you are answering

1 2 3 4 5 6 7 8

A3 SHEET 1 OF 4

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

1 _____

2 _____

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

3 _____

[6]

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S	R	D	E	F	C	Total

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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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(b) Ideas with development (continued)

A3 SHEET 3 OF 4

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R	
D	
E	

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CANDIDATE NUMBER

CENTRE NUMBER

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(c) Final Developed Outcome

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

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F	
C	

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